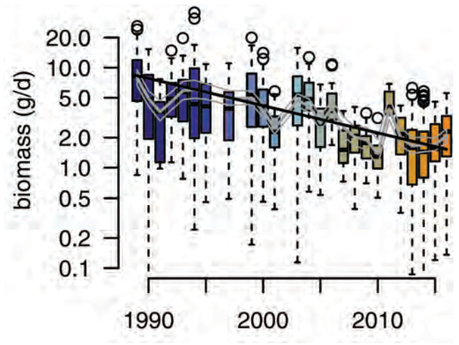
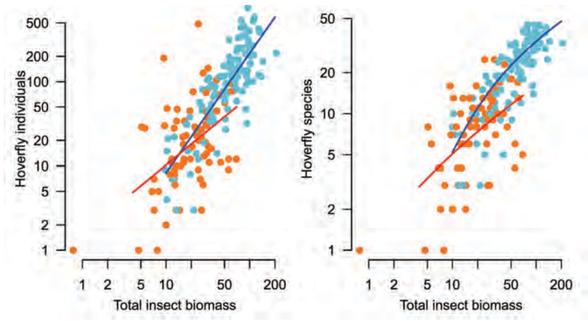
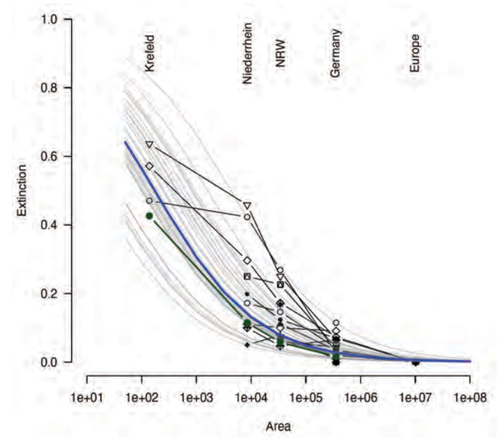
Rückgänge der Insektenbiomassen über Dekaden



- korreliert mit der Reduktion von Abundanz und Artendiversität



- assoziiert mit räumlichen Skalen regionaler Aussterbeprozesse



Biodiversitätsverluste in FFH-Lebensraumtypen des Offenlandes

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2022

Entomologischer Verein Krefeld * 1905 *

Entomologischer Verein Krefeld

Biodiversitätsverluste in FFH-Lebensraumtypen des Offenlandes

Dokumentation zu den Ergebnissen eines Forschungsprojektes

2022

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Malaisefalle als integrierte Montage, FFH-Gebiet DE4051-301 Lieberoser End-moräne und Staakower Läuche, © M. Sorg.
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Oben: Fig. 2: Hallmann C.A., Sorg M., Jongejans, E., Siepel, H., Hofland, N., Schwan, H.,Stenmans, W., Müller. A, Sumser, H., Hörren, T., Goulson, D. & H. de Kroon (2017): More than 75 percent decline over 27 years in total flying insect biomass in protected areas. PLoS ONE 12(10): e0185809, © C.A. Hallmann.
Mitte: Fig. 3: Hallmann, C.A., Ssymank, A., Sorg, M., Kroon de, H. & E. Jongejans (2021): Insect biomass decline scaled to species diversity: General patterns derived from a hoverfly community. - Proceedings national academy of science PNAS, 118 No 2, © C.A. Hallmann.
Unten: Fig. 4: Hallmann, C. A., Hörren, T., Ssymank, A., Sumser, H., Schwan, H., Stenmans, W., Vischer-Leopold, M., Schäffler, L. & M. Sorg (2022): Spatial, temporal and taxonomic patterns of insect extinction in Germany.- bioRxiv preprint, © C.A. Hallmann.

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Der 1905 gegründete Entomologische Verein Krefeld e.V. befasst sich in langjähriger Tradition und auf breiter Basis mit den Arbeitsgebieten der wissenschaftlich orientierten Insektenkunde (Entomologie).
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Inhalt

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Biodiversitätsverluste in FFH-Lebensraumtypen des Offenlandes - Ergebnisse und Perspektiven eines F&E-Projektes

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Axel Ssymank[2], Mareike Vischer-Leopold[2] & Martin Sorg[1]

Kurzfassung

Aus den Ergebnissen dieses Forschungs- und Entwicklungsprojekts des Entomologischen Vereins Krefeld (EVK) sind u.a. gravierende Veränderungen der Insektenzönosen an vielen Standorten in Schutzgebieten Deutschlands als eingetretene Biodiversitätsschäden ableitbar. Dies betrifft auch unterschiedliche Biotope innerhalb der Schutzgebietskulisse Natura 2000 sowie charakteristische Arten der geschützten Lebensraumtypen gemäß Anhang I FFH-Richtlinie. Die Sachlage verdeutlicht die dringende Notwendigkeit, lokale taxonomische und funktionale Diversität der Insekten, welche in der Summe der Arten zu mehr als 90% von flugaktiven Insekten geprägt wird, durch evaluierte Methodik mit hoher Datenvergleichbarkeit zu erfassen, zu analysieren und in der Veränderung zu bewerten.

Hierzu wurden methodische Grundlagen zum Anwendungsspektrum von Malaisefallen, die Veränderungen in den lokalen Zönosen mit einem ausreichend großen Blickwinkel auf die Artendiversität der Insekten ermöglichen, weiter entwickelt, evaluiert und in Anteilen bereits publiziert. Während in der Vergangenheit Messwerte zu Insektenbiomassen kaum durchgeführt wurden, ist diese Vorgehensweise durch die Veröffentlichung Hallmann, Sorg et al. (2017) heute ein anerkanntes Verfahren in der standardisierten Anwendung von Malaisefallen (Ssymank, Sorg et al. 2018). Die Relation zwischen gemessenen Gesamtbiomassen der Insekten und dem Rückgang der Artendiversität und Abundanz konnte exemplarisch geklärt werden (Hallmann, Ssymank et al. 2021). Entwickelt wurden in vorgenannten Publikationen geeignete statistische Methoden zur Bewertung derart komplexer Ergebnisse sowie erfasster Metadaten. Ferner wurden Verfahren zur Gewinnung von Metadaten weiter evaluiert. Dies betrifft u.a. die Datengewinnung zur Vegetation und anderen Habitatmerkmalen, u.a. mittels Kameradrohnen (Ssymank, Sorg et al. 2018).

Das Projekt erweiterte maßgeblich den beim Entomologischen Verein Krefeld (EVK) verfügbaren Datenpool über Recherchen sowie Ergebnisse und Originalproben von exemplarischen Standortuntersuchungen in ausgewählten Natura 2000-Lebensraumtypen.

Das Projekt ergänzt auch durch zusätzliche Untersuchungen mittels Malaisefallen innerhalb der Jahre 2016-2019 in 22 Naturschutz- und Natura 2000-Gebieten die Kenntnisse zu standort- und habitatspezifischen Biodiversitätsdaten. Hierbei werden auch Zeitreihen über Wiederholungsuntersuchungen ergänzt und über sukzessive Auswertungen der Gesamtdatenpool beim EVK erweitert. Hiermit werden die Ziele weiter verfolgt, über zusätzliche Daten zu den Insektenbiomassen und zu auswählten Taxa gesicherte Vergleiche und zunehmend valide Bewertungen über den Rückgang auf Artniveau auf dem Wege der klassischen, morphologischen Determination zu erhalten. Aus diesem Proben- und Datenvolumen sind weitere Publikationen vorgesehen. Bis heute gelang mittels mikroskopischer Artbestimmung in weltweit keinem Forschungsvorhaben eine vollständige Auswertung aller Insektentaxa aus den Proben eines Jahreseinsatzes auch nur einer Malaisefalle. Dies verdeutlicht die immense Bedeutung der weiteren Entwicklung, Evaluation und Standardisierung von genetischen Methoden, insbesondere auch des DNA-Metabarcoding, um eine neue Basis für die vollständigere Analyse lokaler Insektenzönosen, u.a. der streng geschützten Lebensraumtypen zu gewinnen.

Hierzu wurde basierend auf Konzepten und Erfahrungen aus diesem Projekt die Größenklassentrennung von Insektenmischproben weiter evaluiert, neue Geräte zur Bildung von Subsamples entwickelt (Hörren, Sorg et al. 2022b) sowie erste Werkzeuge für Auswertungen der Daten zur Lebensweise (traits) für alle höheren Insektentaxa realisiert (Hörren, Sorg et al. 2022a). Ergebnisse und Erfahrungen aus diesem Projekt beeinflussten maßgeblich die Konzeption methodischer Entwicklungen zu bestimmten Verfahren im Metabarcoding (z.B. Elbrecht et al. 2021, Zizka et al. 2022) sowie als Ideen das weitere Auswertungspotential von Malaisefallen bzgl. chemischer Belastung der Insekten (Brühl et al. 2021) und Analysen der von Insekten eingetragenen Pflanzenpartikel wie z.B. Pollen (Swenson et al. 2022).

Hinsichtlich der Analyse von Ursachen bereits eingetretener Biodiversitätsschäden verdeutlichten exemplarische Bewertungen der untersuchten Schutzgebietsflächen sowie eine Bewertung der Rahmenbedingungen einen hohen Handlungsbedarf und eine angemessenere Priorisierung (Sorg, Ssymank et al. 2019). Dies betrifft primär eine notwendige Anpassung gesetzlicher und planerischer Grundlagen, hinsichtlich innerer und lateral angrenzender Belastungsfaktoren, die Etablierung von Datentransparenz, Risikoanalysen und Risikomanagement und eine deutliche Verbesserung sowie Evaluation des naturschutzbezogenen Managements (Sorg, Ssymank et al. 2019).

Das Projekt beeinflusste international über die vorgenannten Publikationen und konzeptionellen Grundlagen in einem hohen, kaum noch überschaubaren Ausmaß die Biodiversitätsforschung und anzuwendende Methodik, die öffentliche Wahrnehmung zu Biodiversitätsschäden und aktives, umweltpolitisches Handeln.

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Eine im Rahmen des Projektes durchgeführte Analyse zum Kenntnisstand der Gefährdungsbewertung der Insekten in Deutschland, sowie exemplarisch der raumbezogenen und teils irreversiblen, regionalen Extinktionsprozesse (Hallmann, Hörren et al. 2022) verdeutlicht sowohl deren Dimension als auch den weiteren, dringenden Forschungsbedarf. Nur auf dem Wege ausreichender Kenntnisse kann angemessenen priorisiert und auf Fachplanungen basierend zielorientiert und nachhaltig wirksam gehandelt werden, um weitere irreversible Biodiversitätsschäden zu vermeiden.

Abstract

From the results of this R&D project of the Entomological Society Krefeld (EVK), among other things, serious changes in the insect cenoses at many sites within protected areas in Germany can be deduced as biodiversity damage that has occurred. This affects different habitats within the Natura 2000 protected area network as well as characteristic species of the protected habitat types according to Annex 1 of the Habitats Directive. This highlights the urgent need to record, analyze and evaluate changes of local taxonomic and functional diversity of insects, more than 90% of which are flight-active insects, using evaluated methods with high data comparability.

For this purpose, methodological principles for the application of malaise traps, which allow research with a sufficiently large perspective on the species diversity of insects, were further developed, evaluated and already in parts published. While measurements of insect biomasses were rarely conducted in the past, this approach is today an accepted procedure of standardized malaise traps application via the Hallmann, Sorg et al. (2017) publication. The relation between measured total insect biomasses and the decline in species diversity and abundance could be clarified exemplarily (Hallmann, Ssymank et al. 2021). Appropriate statistical methods for evaluating such complex results and their metadata were developed in aforementioned publications. Furthermore, methods for obtaining metadata were further evaluated. This concerns, among other things, data acquisition on vegetation and other habitat features, including by means of camera drones (Ssymank, Sorg et al. 2018).

The project significantly expanded the data pool available at the Entomological Society Krefeld through research as well as results and original samples from exemplary site investigations within selected Natura 2000 habitat types.

The project supplements the knowledge of site-specific biodiversity data through additional surveys using malaise traps within the years 2016-2019 in 22 nature conservation and Natura 2000 areas. In this context, time series are also completed by repeat surveys and the overall data pool at EVK is expanded by successive evaluations. Hereby, the goals are further pursued to obtain reliable comparisons and increasingly valid assessments of the decline at species level by means of additional data on insect biomasses and on selected taxa by way of classical, morphological determination. Further publications are planned from this sample and data volume.

To date, no research project has succeeded in a complete evaluation of all insect taxa from the samples of one year‘s use of even one Malaise trap by means of microscopic species determination. This illustrates the immense importance of further development, evaluation and standardization of genetic methods, especially DNA metabarcoding, in order to gain a new basis for a more complete analysis of local insect cenoses, including those of strictly protected habitat types.

Based on concepts and experiences from this project, size-class separation of insect composite samples was further evaluated, new devices for subsampling were developed (Hörren, Sorg et al. 2022b), and initial tools for analyses of trait data for all higher insect taxa were realized (Hörren, Sorg et al. 2022a). Results and experiences from this project significantly influenced the conception of methodological developments for certain procedures in metabarcoding (e.g. Elbrecht et al. 2021, Zizka et al. 2022) and as ideas the further evaluation potential of malaise traps regarding chemical load of insects (Brühl et al. 2021) and analyses of plant particles carried by insects such as pollen (Swenson et al. 2022).

With regard to the analysis of the causes of biodiversity damage that has occurred, exemplary evaluations of the protected area areas were studied and an assessment of the framework conditions highlighted high necessity for action and more appropriate prioritization (Sorg, Ssymank et al. 2019). This primarily concerns a necessary adaptation of legal and planning foundations, with regard to internal and laterally adjacent stress factors, the establishment of data transparency, risk analyses and risk management, and a significant improvement as well as evaluation of conservation-related management (Sorg, Ssymank et al. 2019).

Through the aforementioned publications and conceptual foundations, the project influenced internationally biodiversity research and applicable methodology, public perception on biodiversity damage, and active, environmental policy action to an unusually high degree.

An analysis carried out within the framework of the project on the state of knowledge of the endangerment assessment of insects in Germany, as well as exemplarily of the spatially related and partly irreversible, regional extinction processes (Hallmann, Hörren et al. 2022) illustrates both their dimension as well as the further, urgent need for research. Only through sufficient increase of knowledge appropriate prioritization and action based on specialized planning can be taken in a targeted and sustainably effective manner in order to avoid further irreversible damage to biodiversity.

Einleitung

Das F&E Projekt „Biodiversitätsverluste in FFH-Lebensraumtypen des Offenlandes“ dient der Ergänzung der Untersuchungen des Entomologischen Vereins Krefeld (EVK) zum Rückgang der Biodiversität von FFH-Lebensraumtypen des Offenlandes und den dort vorliegenden Bestandstrends in den Insektenzönosen.

Das Vorhaben ergänzt den beim EVK verfügbaren Datenpool und die Grundlagen für die Bewertung der charakteristischen Arten der Lebensraumtypen in FFH-Gebieten als ein zentrales Element der Erhaltungszustandsbewertung im Parameter „Struktur und Funktionen“. Änderungen in den Insektenzönosen haben massgebliche Auswirkungen auf den Naturhaushalt bis hin zur Nahrungsverfügbarkeit für insektivore Wirbeltierarten und damit auch Vogelarten der FFH-Richtlinie und auch des Anhangs I der Vogelschutz-RL.

Zusätzlich werden grundlegende Erkenntnisse über den Gefährdungsstatus der Artengruppen für künftige Fassungen der bundesdeutschen Roten Listen erfasst sowie um Arten und Qualitätsparameter, insbesondere zu Biotopen, ergänzt.

Die weitere fachwissenschaftlich breite Absicherung der bisherigen Erkenntnisse über Umfang, räumliche Ausdehnung und betroffene Artengruppen der Biodiversitätsrückgänge ist gemäß dem derzeitigen Kenntnisstand dringend erforderlich.

Insbesondere hinsichtlich der Ursachenanalyse des Rückgangs von charakteristischen Arten in FFH-Lebensraumtypen der Kulisse von Natura 2000 sind weiterführende Untersuchungen erforderlich, um daraus dringend notwendige Erhaltungs- und Entwicklungsmaßnahmen abzuleiten, aber auch um bundesweite Empfehlungen geben zu können. Da die überwiegende Zahl dieser Lebensraumtypen von extensiver Nutzung bzw. Pflege abhängig sind, kommen sowohl Bewirtschaftungseinflüsse als auch „diffuse“ Stoffeinträge als Wirkfaktoren, neben weiteren möglichen Ursachen in Betracht.

Datengrundlage ist einmaliges, nach einheitlichen Standardisierungen über mehrere Jahrzehnte gesammeltes Insektenmaterial des EVK von teils bereits wiederholt untersuchten Standorten in Schutzgebieten.

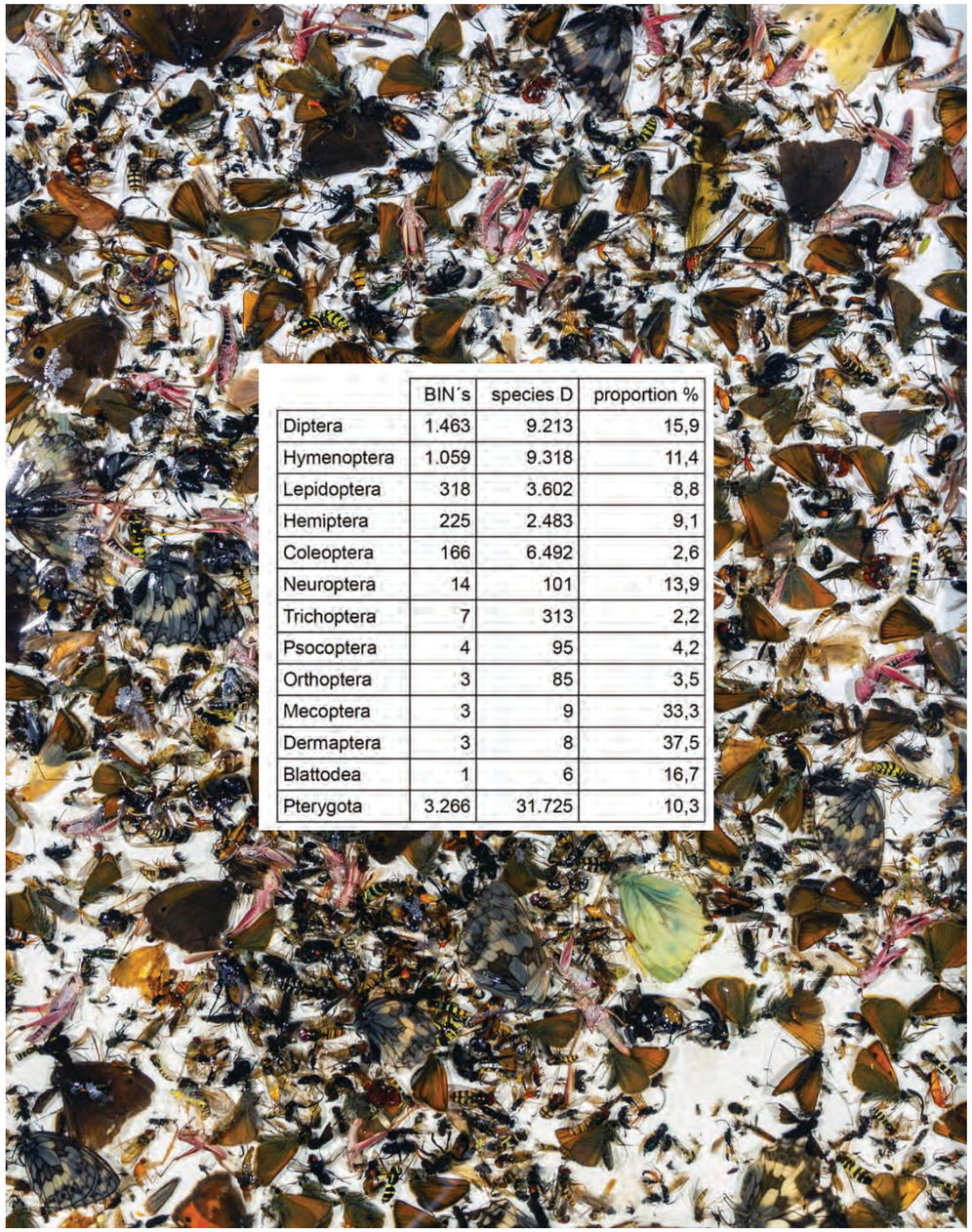
Die wissenschaftliche Forschung bedarf zur Bewertung der artenreichsten Tiergruppe der Insekten geeigneter Grundlagen. Das Projekt umfasst daher im Rahmen des weiteren Aufbaus eines Datenpools auch neue Datenauswertungen sowie ergänzende Wiederholungsaufnahmen und Datenanalysen. Ferner die weitere Entwicklung von methodischen Grundlagen für spezifisch entomologische Untersuchungen zur Bewertung von Einflussfaktoren sowie das Insektenmonitoring.

Ergebnisse des Projektes wurden im Rahmen von Workshops diskutiert und auch in zahlreichen Fachvorträgen im In- und Ausland präsentiert.

Zur Anwendung von Malaisefallen beim EVK

Der Entomologische Verein Krefeld (EVK) standardisierte den Freilandeinsatz von Malaisefallen in den Jahren 1982-1984 und erfasst seit 1985 überwiegend in Schutzgebieten mit standardisierter Methodik Insekten mittels Malaisefallen (Schwan et al. 1993). Dazu gibt es eine umfangreiche Begleitdokumentation und alle Proben werden zur weiteren Nachbearbeitung und Überprüfung dauerhaft archiviert. Auch das Forschungs- und Entwicklungsprojekt „Biodiversitätsverluste in FFH-Lebensraumtypen des Offenlandes“ baut auf diesen älteren Untersuchungen auf, vervollständigt Zeitreihen durch ergänzende Untersuchun-

Abbildung 1. Beispiel einer installierten Malaisefalle sowie einer daneben stattfindenden pflanzensoziologischen Aufnahme. (© M. Sorg/EVK).



	BIN´s	species D	proportion %
Diptera	1.463	9.213	15,9
Hymenoptera	1.059	9.318	11,4
Lepidoptera	318	3.602	8,8
Hemiptera	225	2.483	9,1
Coleoptera	166	6.492	2,6
Neuroptera	14	101	13,9
Trichoptera	7	313	2,2
Psocoptera	4	95	4,2
Orthoptera	3	85	3,5
Mecoptera	3	9	33,3
Dermaptera	3	8	37,5
Blattodea	1	6	16,7
Pterygota	3.266	31.725	10,3

Abbildung 2. Insektenmischprobe aus dem Fangintervall einer Malaisefalle des Entomologischen Vereins Krefeld sowie Übersichtstabelle zur von Geiger et al. (2016) ermittelten Artendiversität einer Malaisefalle in einer Expositionszeit von ca. 12 Monaten im Vergleich zur Gesamtartendiversität der Pterygota (Fluginsekten) für D nach Klausnitzer et al. (2003). (Foto © M. Sorg/EVK).

gen und erweitert den Proben und Datenbestand des EVK. Die Freilandmethodik zu Malaisefallen wurde aktualisiert mit Anwendungshinweisen publiziert (Ssymank, Sorg et al. 2018).

Aus dem Projekt ergeben sich verschiedene Anforderungen an eine methodische Standardisierung und das Vorgehen bei einem Insektenmonitoring oder spezifischen, entomologischen Untersuchungen, die im Folgenden dargestellt werden.

Anforderungsprofil für ein Insektenmonitoring

Untersuchungen zu Insektenzönosen von Naturschutzgebieten und innerhalb der Kulisse von Natura 2000 fokussierten in der Vergangenheit und heute noch überwiegend auf bestimmte Insektengruppen, deren Anteil an der lokalen Artendiversität relativ klein ist. Solche „klassischen" Artengruppen sind z.B. Heuschrecken, Tagfalter, Libellen und Laufkäfer. Diese populären vier Gruppen stellen jedoch nur ca. 2,8% der 33.466 aus Deutschland bekannten Insektenarten (vgl. Klausnitzer 2003). Auch wenn insgesamt für ca. 14.940 Arten und damit mehr als 40% der in Deutschland vorkommenden Insektenarten Daten zur bundesweiten Bestandssituation und den Bestandstrends vorliegen (Hallmann, Hörren et al. 2022), bleibt ein großer Anteil der einheimischen Artenvielfalt der Insekten bislang unberücksichtigt. Bei allem Informationsgewinn, den auch ein selektiver Untersuchungsrahmen zulässt, bedeutet dies eine Limitierung des Blickwinkels, da nicht die gesamte lokale Artendiversität der Insekten erfasst wird. Eine, in dieser Hinsicht unvollständige Datengrundlage erlaubt keine Bewertung vollständiger Insektenzönosen, deren Schutz aber Ziel bei der Bewahrung lebensraumtypischer Artengemeinschaften bestimmter, streng geschützter Lebensraumtypen ist.

Die Entwicklung und Anwendung von Methoden zum Monitoring der Biodiversität von Insekten sollte daher, zumindest an Standorten von hoher Bedeutung für die Erhaltung der regionalen und lokalen Biodiversität sowie zur Erfüllung rechtlicher Verpflichtungen (z. B. Richtlinie 92/43/EWG, Fauna-Flora-Habitat-Richtlinie) und vertraglicher Bindungen (z. B. Convention on Biological Diversity, CBD), einen ausreichenden Einblick in die Gesamtdiversität der Insekten bieten und etwaige Veränderungen der Zusammensetzung und Abundanz der Insektenarten erfassen. Es ist eine der zentralen Aufgaben für die Schutzgebietskulisse, die Populationen stark gefährdeter oder vom Aussterben bedrohter Insektenarten vor dem endgültigen Verschwinden zu bewahren. Regionale Verluste dieser Arten können als – in absehbaren Zeitspannen – irreversible Biodiversitätsschäden bewertet werden.

Aufgrund der vorliegenden, negativen Trends und unseres sehr geringen Kenntnisstandes zur gesamten Insektendiversität besteht daher die Notwendigkeit, umfassende Bestandsaufnahmen eines möglichst großen Anteils der Insektendiversität im Rahmen eines Monitorings im Schutzgebietsnetz und in Natura 2000-Gebieten zu etablieren. Ziel sollte es sein, zu einer vollständigeren Kenntnis der gebiets- und lebensraumtypischen Biodiversität und deren Veränderung über die Zeit zu gelangen.

Die dabei zur Anwendung kommenden (semi)quantitativen Methoden sollten geeignet sein, selektiv und methodenspezifisch lokale Abundanzspektren und deren jahreszeitliche Entwicklung zu erfassen. Ferner sollten die angewandten Methoden die Grundlage dafür bieten, auch die Zusammensetzung und jahreszeitliche Verteilung vollständiger Biozönosen von Untersuchungsflächen zu erfassen. Die Datenerfassung zur lokalen Diversität der Insekten sollte von einer möglichst umfassenden Dokumentation der Vegetation, der Habitatstrukturen und potenziell einwirkender Stressoren auf die Biodiversität der Untersuchungsflächen und deren Umfeld begleitet werden.

Eignung von Malaisefallen zur Erfassung von Insekten und dem Schließen von Kenntnislücken

Das Forschungs- und Entwicklungsprojekt befasst sich mit Auswertungen der seit 1985 in standardisiertem Sampling Design vom EVK angewandten Malaisefallen (Malaise 1937, Townes 1972, Ssymank et al. 2018) (vgl. Abb. 1). Diese sind bei längerem Einsatz über eine Vegetationsperiode geeignet, sehr hohe Artenzahlen tag- und nachtaktiver, überwiegend flugfähiger Insekten – und damit einen wichtigen Anteil der lokalen Artendiversität – zu erfassen (Van Zuijlen et al. 1996, Geiger et al. 2016). Malaisefallen fangen Insekten gemäß verschiedener, artspezifischer Verhaltensmuster. Aktivitätsradien und Migrationsverhalten, Flughöhen im Nahbereich und bei Distanzflügen, aber auch Reaktionen beim Auftreffen auf ein Hindernis und insbesondere die Ausweichbewegung zum Licht bzw. weißem Dach der Falle beeinflussen die Wahrscheinlichkeit von Artnachweisen und die Zusammensetzung der Fangergebnisse. Vergleichbar zur Anwendung anderer Methoden bedürfen daher auch Bewertungen der Ergebnisse von Malaisefallen einer methoden- und taxaspezifischen Interpretation (Ssymank et al. 2018).

Flugfähige Insekten stellen den weitaus größten Anteil der einheimischen Insektenarten. Für die in unserer Faunenregion artenreichsten Insektenordnungen der Zweiflügler (Diptera) und der Hautflügler (Hymenoptera), die in Deutschland zusammen mehr als 19.000 Arten (Dathe, Blank 2004, Schumann 2010) ausmachen, sind Malaisefallen eine ausgesprochen effiziente Nachweismethode. Eine Eignung für Untersuchungen zur Biodiversität besteht für zahlreiche weitere höhere Taxa flugaktiver Insekten (Eymann, Degreef et al. 2010). Darüber werden Malaisefallen als alternative Methode zu anderen Fallentypen auch für wenig flugaktive Arten angewandt, sogar für flügellose Arthropodengruppen wie z. B. Webspinnen, die beim Kontakt mit Hindernissen positiv phototaktisch an den Fangnetzen emporklettern (vgl. Oxbrough, Gittings et al. 2010).

Alle uns derzeit vorliegenden Ergebnisse belegen die hohe Eignung der Malaisefallen für Aussagen zur Artenzusammensetzung und Abundanz sowie zu mittel- bis langfristigen Trends. Dies betrifft sowohl Erfassungen an einem Standort als auch vergleichenden Analysen mehrerer Standorte. Für die Vergleichbarkeit ist ein hohes Maß der Standardisierung vonnöten, das die Nutzung baugleicher Fallensysteme und ein normiertes Vorgehen im Freilandeinsatz

Abbildung 3. Aufnahmen mit Kameradrohnen zum direkten Umfeld der Standorte von Malaisefallen.
Oben: Im NSG/FFH Gebiet Latumer Bruch mit Buersbach, Stadtgräben und Wasserwerk, Stadt Krefeld, Natura 2000-Gebiet Nr. DE-4605-301.
Unten: Im NSG/FFH Gebiet Kaninchenberge, Kreis Wesel, Natura 2000-Gebiet Nr. DE-4306-303.
(© M. Sorg/EVK).

einschließt (vgl. Ssymank et al. 2018). Viele Untersuchungen mit Malaisefallen erfüllen dieses Anspruchsprofil leider nur defizitär (vgl. z. B. Karlsson et al. 2015, Deharveng et al. 2015, Villemant et al. 2015).

Zur Notwendigkeit der vergleichbaren Erfassung von standortkennzeichnenden Metadaten

Neben der Gewährleistung des Einsatzes identischer Erfassungsmethodik bedarf es der Erfassung ausreichender begleitender Daten der Vegetation in Artenlisten und pflanzensoziologischer Aufnahmen (vgl. Beispiele im Anhang 2). Ferner einer Aufnahme von Vegetation und weiteren Merkmalen der Habitate. Luftbilder und Satellitenbilder aus großer Höhe liefern hierzu eine großräumige Dokumentation, die jedoch nicht in Detailschärfe das nähere Umfeld der Untersuchungsstandorte abbildet. Heute verfügbare Kameradrohnen sind bei Aufnahmen aus verschiedenen Flughöhen geeignet, diese Detailinformationen zu liefern. Dies erhöht das Auswertungspotential sowohl in spezifischen Untersuchungen als auch im Monitoring in erheblichem Umfang. Die Abbildungen im Anhang 1 verdeutlichen die Potentiale solcher, schnell herstellbaren Vertikalaufnahmen aus verschiedenen Flughöhen der Kameradrohnen. Ebenso wie die o.g. Vegetationsdaten werden diese Fotografien beim EVK konsequent archiviert, um auch für vergleichende Analysen in der Zukunft verfügbar zu sein. Aufgrund der gesammelten Erfahrungen empfiehlt der EVK pro Fallenstandort eine Aufnahmeserie in verschiedenen Flughöhen, um eine Serie von Abbildungen zu erhalten, die Flächen von ca. 100m^2 bis ca. 1,5ha dokumentieren (vgl. Beispiele im Anhang 1). Sowohl eine standardisierte Erfassung der Vegetation zumindest unmittelbar neben den Einsatzorten von effizienten Insektenfallen, als auch die o.g. Anwendung von Kameradrohnen sollte nach der publizierten Etablierung durch den EVK zum Minimaldatensatz in der Erhebnung von Metadaten zählen (vgl. Beispiele im Anhang 2).

Biomassen von Insektenmischproben

Um zusätzlich ein Gesamtmaß pro Fangintervall abzubilden, kann gemäß dem entwickelten Messprotokoll des EVK die alkoholfeuchte Biomasse bestimmt werden (Hallmann et al. 2017, Ssymank et al. 2018). Betriebszeiten der Malaisefallen über jeweils ganze Vegetationsperioden ermöglichen die Integration der Bewertung der Wirkung des Verlaufs von Witterung und Phänologie sowie z. B. der Termine von Nutzungs- und Pflegemaßnahmen im Bereich der Untersuchungsstandorte.

Das über Jahrzehnte bewahrte und ständig ergänzte Volumen an Metadaten, Messwerten und Originalproben hat, auf der Grundlage von Messungen der Biomasse der Insekten, in der Analyse im Projekt zu Belegen starker Insektenrückgänge von ca. 76% in 27 Jahren auch in Kernflächen des Naturschutzes auch innerhalb von FFH-Gebieten geführt (vgl. Hallmann et al. 2017). Bei den Untersuchungsstandorten handelt es sich um Offenlandbiotope, überwiegend im Flachland unter dem Einfluss umliegender Agrarnutzung.

Dieses, im Rahmen des Projekts erzielte Ergebnis ist besonders deshalb von Bedeutung, weil es gemäß der eingesetzten Methodik insbesondere auch die artenreichsten Ordnungen der Insekten betrifft, die bei Erfassungen von Ziel- und Indikatorarten des Naturschutzes unterrepräsentiert sind und die zugleich eine wichtige Rolle in Nahrungsnetzen spielen.

Besonders wichtig ist dies im Hinblick auf die bei naturschutzfachlichen Bewertungen oftmals nicht bemerkten Verluste lebensraumtypischer Tierarten europaweit geschützter FFH-Lebensraumtypen.

Der Ermittlung von Insektenbiomassen aus Fallenergebnissen wurde vor der o.g. Publikation (Hallmann et al. 2017) kaum Beachtung geschenkt. Nicht zuletzt aufgrund des Impacts dieser Ergebnisse zählen Ermittlungen der Gesamtmasse erfasster Insekten heute zum Messprogramm vieler entomologischer Untersuchungen.

Im Rahmen der Auswertung der o.g. Biomassedaten wurde ein geeignetes Modell für die vergleichende Bewertung derart komplexer Datensätze entwickelt. Ferner wurden potentielle Einflussfaktoren (Wetter, Biotopverteilung im Umfeld, Vegetation und ihre Zeigerwerte) untersucht, ohne den Haupttreiber für den Rückgang identifizieren zu können.

Aspekte zum Landnutzungswandel, wie Änderungen der Bewirtschaftung benachbarter Ackerflächen, u.a. Pestizideinsätzen, sowie Details zu Veränderungen im Pflegemanagement und dessen Auswirkungen konnten in diese Analysen mangels verfügbarer Daten nicht integriert werden.

Aus diesem Tatbestand resultieren Empfehlungen zu einer verstärkten Risikoanalyse von Landnutzungsfaktoren inkl. des Pestizideinsatzes und Saatgutbeizen sowohl innerhalb, als auch im Einzugsbereich von geschützten Habitaten. Insbesondere sollten Daten zu potentiell degradierenden Faktoren für die Biodiversitätsforschung zugänglich gemacht werden, um relevante Biodiversitätsdaten mit diesen potentiellen Einflussfaktoren korrelieren zu können.

Bezüge zwischen Biomassenrückgängen und Artenvielfalt sowie Abundanz

Es ist bekannt, das sich die Ergebnisse von Untersuchungen mit Malaisefallen neben der Erfassung von Insektenarten auch zur vergleichenden Analyse der Abundanzspektren eignen (Bosch et al. 1994, Mohr et al. 1992, Sorg & Wolf 1991, Sorg et al. 1993, 1995, Ssymank & Doczkal 2017).

Der festgestellte, standortidentische Rückgang der Biomasse steht in den bisher untersuchten Fallbeispielen in direkter Beziehung zu einem gravierenden Rückgang der Individuenzahlen sowie der Artendiversität im Fangergebnis.

Expemplarisch vertiefend untersucht wurde dies anhand von Malaisefallen Ergebnissen für die Schwebfliegen (Syrphidae) (Hallmann et al. 2021). Unter Berücksichtigung der Expositionszeit der Fallen, wurde 82% weniger Insektenbiomasse 2014 gefangen als 1989, und es wurden 89% weniger Individuen der Schwebfliegen festgestellt. Der Gesamtartenreichtum der Schwebfliegen sowie ihr Akkumulationsmuster mit zunehmender Expositionszeit zeigten 2014 eine geringere Artendiversität als 1989.

Es wurde ein Rückgang der Artenvielfalt um 23% zwischen den beiden untersuchten Jahren über einen Zeitraum von 25 Jahren ermittelt. Ähnliche Verluste in der Artenvielfalt wurden kürzlich für verschiedene Insektenordnungen in anderen Zeitvergleichen ermittelt (Wagner et al. 2021, Seibold et al. 2019).

Obwohl die Schwebfliegen weniger als 5% der gesamten Insektenbiomasse in den Proben ausmachen, wurde festgestellt, dass die Gesamtschwebfliegen-Abundanz signifikant mit der Gesamtbiomasse der Fluginsekten im Zeitvergleich korreliert war, wobei die Abundanz linear mit niedrigerer Biomasse abnimmt.

Der Rückgang der Gesamtbiomasse der Insekten auf der Tagesebene zeigt vergleichbare Rückgänge in der Abundanz und im Artenreichtum. Allerdings hängt die Stärke der Korrelation zwischen der Gesamtbiomasse der Fluginsekten und der Artenzahl von der zeitlichen Betrachtung ab, wobei die Artenzahl auf Tagesbasis viel stärker abnimmt (-82%) als der Rückgang der Gesamtartenzahl aus den saisonal akkumulierten Proben (-23%). Diese Ergebnisse haben Konsequenzen für die Funktionalität des Ökosystems, für die wohl die tägliche Aktivität und Anwesenheit von funktionstragenden Insekten relevant ist.

Notwendigkeit der zunehmenden Integration genetischer Bestimmungsmethoden

Die konsequent archivierten Originalproben aller Untersuchungsergebnisse beim EVK erlauben nachträglich eine Artbestimmung und Analyse standort- bzw. habitatspezifischer Trends der Artendiversität und Abundanz. Diese „konventionellen“ Artbestimmungen führten beim EVK zu einem ständig und erheblich wachsenden, wertvollen Datenpool als Basis für weiterführende Auswertungen und Publikationen.

Entsprechend der extrem hohen, insgesamt an einem kleinräumigen Punkt in der Natur vorliegenden Insektendiversität können über die Fängigkeit der Malaisefallen pro Saison und Standort mehr als 2.000 Arten verteilt auf über 100.000 Individuen nachgewiesen werden (Geiger et al. 2016, Van Zuijlen et al. 1996).

Der verfügbare Forschungsetat sowie der systematisch-taxonomische Kenntnisstand und die eingeschränkte Verfügbarkeit qualifizierter Taxonomen sind limitierende Faktoren für die Auswertung derart umfangreicher Proben. Letztlich betrifft dies als Limitierung alle effizienten Methoden für die Erfassung lokaler Artendiversität der Insekten sowie deren anschließende Bewertung.

Neben der konventionellen morphologischen Artbestimmung sollten daher zunehmend auch DNA-basierte Methoden in der Probenauswertung, wie das DNA-Metabarcoding, eingesetzt werden. Dies betrifft sowohl destruktive, als auch morphologisch nicht destruktive Extraktionen der DNA (z.B. durch Lyse) aus den Mischproben der Fanginervalle unter weitgehender Erhaltung der Individuen (Wang et al. 2018, Yu et al. 2012).

Entwicklung von Werkzeugen für eine Fraktionierung und standardisierte Teilung von Insektenmischproben

Um die Auswertungspotentiale von Malaisefallen-Proben sowohl für konventionelle als auch genetische Identifizierungsmethoden zu verbessern, wurden im Rahmen des Projektes sowohl Labormethoden der Größenklassenfraktionierung als auch der Generierung von Teilproben entwickelt.

Weder ist die gesamte Insektenvielfalt taxonomisch beschrieben, noch sind bei Anwendung genetischer Methoden die Barcodes aller Arten bekannt. Insbesondere zum Zweck des Metabarcodierungs mittels Homogenisierung bedeutet diese Zerkleinerung aller Insekten ganzer Mischproben den Verlust von Informationen sowie Konservierungsmöglichkeiten für eine Vielzahl von Zwecken.

Es ist daher vorteilhaft, Teilproben für eine Vielzahl von Zwecken herzustellen zu können, um nicht immer komplette Proben für bestimmte Laborverfahren zur Klärung spezifischer Fragestellungen zu verwenden.

Nach ersten erfolgreichen Probenteilungsversuchen im Jahr 2018 mit Probenteilern aus Kunststoffen, war die Entwicklung von zwei weiteren Edelstahl-Prototypen im Jahr 2019 notwendig, um das bei Hörren et al. 2022b beschriebene Modell zu realisieren.

Hierbei handelt es sich nach unserer Kenntnis um das erste Gerät, das eine standardisierte Probenfraktionierung von Insektenmischproben, z.B. aus den Ergebnissen von Biodiversitätsstudien mit effizienten Fallen wie z.B. Malaisefallen ermöglicht.

Durch die komplette Fertigung aus Edelstahl ist das Gerät durch Chemikalien oder Erhitzen sterilisierbar und somit für DNA-basierte Methoden verwendbar.

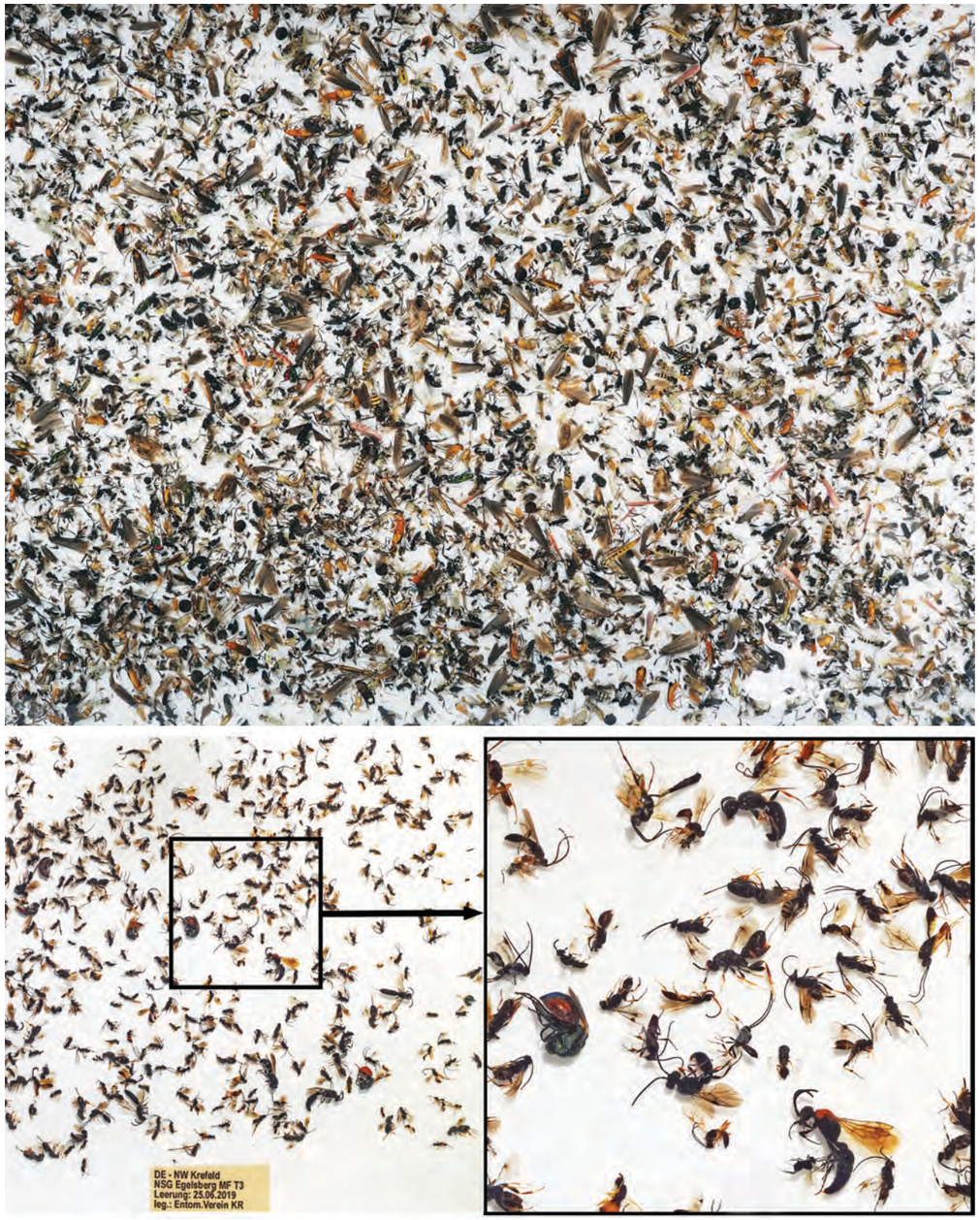


Abbildung 4. Insektenmischproben aus Malaisefallen.
Oben: Größenfraktionierte, gesiebte Mischprobe kleinerer Insekten.
Unten: Vorsortierte Mischprobe (Hymenoptera) mit Detailvergrößerung eines Bildausschnittes.
(© M. Sorg/EVK).

Dieses neu entwickelte Instrument kann für eine Vielzahl von Fragestellungen in der Biodiversitätsforschung eingesetzt werden. Die konstruktiven Merkmale erlauben die Aufspaltung einer Insektenmischprobe in annähernd gleiche Teile, deren Massenähnlichkeit durch die Bestimmung der feuchten Biomasse der Teilproben überprüft werden kann.

Natürlich können Arten die vor der Fraktionierung auf nur ein oder wenige Individuen verteilt sind nur in einer der Teilproben vorhanden sein. Diese Muster entsprechen jedoch dem natürlichen Verteilungsmuster in Mischproben.

Im Falle von z.B. Malaisefallen gibt es jedoch höhere Individuenzahlen für Arten, die in einem Lebensraum mit entsprechender Aktivitätsdichte vertreten sind.

Wenn Fragen einer vollständigeren Erfassung von Arten mit geringen Abundanzen im Vordergrund einer Untersuchung stehen, dann sollte entschieden werden, welche Stichprobengrößen erforderlich sind, um auch mit solchen Probenteilungen eine gewünschte Auflösungsschärfe für Arten mit sehr niedriger Aktivitätsdichte zu erreichen.

Entwicklung von Datenbanktools für ökologische Auswertungen von Fangergebnissen für alle Insektentaxa

Für die Gesamtauswertungen von Biodiversitätsdaten zu Insekten für alle Familientaxa fehlte bisher eine taxaübergreifende Datenbank mit Informationen über die Lebensweise der meisten Arten oder Familien.

Um interspezifische Interaktionen wie z. B. Nahrungsgrundlagen insgesamt in einem Habitat zu verstehen, ist es notwendig, alle ermittelten Familien und Arten zu integrieren und Bewertungen nicht nur auf einzelne Taxa zu beschränken. Solche hochskalierten Merkmalsdatensätze sind von entscheidender Bedeutung für die Interpretation aller Forschungsdaten und dem Monitoring mit breitem Blickwinkel auf die gesamte Insektendiversität wie sie z.B. mit Malaise-Fallen erfasst wird.

Retrospektive und prospektive Bewertungen von Veränderungen in der funktionalen Zusammensetzung der Insektenzönosen bedürfen dieser Grundlagen.

Das im Rahmen dieses Projektes entwickelte Werkzeug (ITT - Insect Trait Tool, Hörren et al. 2022a) ermöglicht die Analyse von Insektengemeinschaften auf Familienebene über das Verhältnis der absoluten Artenzahlen innerhalb einer Familie mit dem Befund in einem Probensatz.

Der ITT-Ansatz kompensiert somit unvollständige Verbindungen zwischen Informationen auf der Artebene oder genetischen Barcodes und wissenschaftlichen Artnamen sowie das Vorhandensein von noch unbeschriebenen Arten. Dieser neue methodische Ansatz ermöglicht somit die Behandlung komplexer Ergebnisse, wie sie sich aus z.B. Malaisefallen und DNA basierten Biodiversitätsbewertungen ergeben und hilft, die Zusammensetzung von Insektengemeinschaften anhand der Larvalbiologie zu verstehen und zu analysieren.

Im Sachstand der Version 1.0 (Hörren et al. 2022a) sind Merkmalsinformationen zu 34.085 Arten aus allen 586 in Deutschland vorkommenden Insektenfamilien integriert. Die Merkmale konzentrieren sich bisher auf die autökologischen Nahrungspräferenzen der Larvenstadien, da diese den zur Fortpflanzung genutzten Lebensraum oft zuverlässig charakterisieren und funktionale Beziehungen im Gesamtaufbau der Zönosen zeigen.

Die Datenbanken der Referenzbibliothek „German Barcode Barcode des Lebens“ (GBOL: https://bolgermany.de) dienten als Referenz für die Gesamtartenzahl und die Global Biodiversity Information Facility (GBIF: https://www.gbif.org) für Einzelabfragen im Rahmen der Entwicklung des ITT.

Die Verwendung des ITT ermöglicht eine faktorbasierte Klassifizierung von Insektengemeinschaften in aquatischen und terrestrischen Lebensräumen. Im zentralen Anwendungsgebiet können die Ernährungstypen der Larven auf die gleiche Weise zugeordnet werden. Untergeordnete Kategorien dienen der weiteren Spezifizierung des Ernährungsverhaltens. Die Werte der einzelnen Merkmale können als Faktoren für die aufgelösten Familien verwendet werden, entweder direkt zur Gewichtung der Ergebnisse oder bezogen auf die Gesamtartenzahl der Familientaxa in Deutschland.

Die Publikation díeses neu entwickelten Werkzeuges (Hörren et al. 2022a) enthält auch ein Auswertungsbeispiel für alle Insektenfamilien aus dem Standortergebnis einer Malaisefalle.

Räumliche, zeitliche und taxonomische Muster von Aussterbeereignissen

Rote Listen sind ein wichtiges Instrument zur Bewertung des Rückgangs von Arten in Raum und Zeit, zur Verbesserung der Entscheidungsfindung und für die Naturschutzplanung. Allerdings ist auch in Deutschland nur ein Teil der Arten in Roten Listen bisher bewertet worden.

Solch große Wissenslücken behindern die Erhaltungsplanung und gefährden letztlich die Aufrechterhaltung der Ökosystemfunktionen.

Angesichts der Erkenntnisse über den starken Rückgang der Insekten ist es heute mehr denn je von großer Bedeutung, ein zuverlässiges vollständiges Bild über die Gefährdungssituation der Insektenarten zu gewinnen.

Die im Rahmen des Projektes erfolgte Analyse der Aussterberaten und des Anteils der bedrohten Arten für die gesamte Insektengemeinschaft ermittelt sowohl räumliche als auch zeitlich skalierte Aussterbe- und Gefährdungsraten (Hallmann et al. 2022). Die Ergebnisse zeigen eine regionale Aussterberate von 4,5% (1773-1937 Arten) für Deutschland auf der Grundlage des derzeitigen Wissensstandes.

Unter den Insektenarten sind 6% als vom Aussterben bedroht eingestuft (1856-2024 Arten).

Es wurde ein sehr unausgewogenes Verteilungsmuster für bestimmte Merkmalsgruppen gemäß dem ITT-Werkzeug zur Analyse der traits zur Larvalbiologie in den Roten Listen festgestellt.

Höhere trophische Ebenen sind unverhältnismäßig stark von diesen Wissenslücken betroffen. Dies betrifft insbesondere Parasitoide, die Taxa von regulatorischer Bedeutung sind und aufgrund ihrer trophischen Position ein höheres Aussterberisiko aufweisen können.

Exemplarische Untersuchungen der räumlichen Skalierung der Rote-Liste-Kategorien zeigen eine weit höhere Aussterberate und -risiko und beispielhaft eine über zehnmal höhere regionale Aussterberate, wenn das Referenzgebiet schrittweise verkleinert wird.

Dies verdeutlicht die tatsächliche Situation hinsichtlich des Ausmaßes des regionalen Artensterbens und des Aussterberisikos, das wir für bestimmte Teile des Referenzgebiets annehmen müssen.

Für eine Region stellt der Verlust des Genpools von speziell angepassten Populationen in der Regel einen irreversiblen Verlust an biologischer Vielfalt dar.

Um weitere irreparable Schäden zu vermeiden, müssen die vom Aussterben bedrohten Arten mit höchster Priorität erhalten werden. Es besteht also ein erheblicher Forschungsbedarf, um den Erhaltungszustand von mehr als 56% der heimischen Insektenarten zu ermitteln und die Roten Listen zu vervollständigen.

Unsere Ergebnisse (Hallmann et al. 2022) zeigen die bestmögliche aktuelle Annäherung an die Realität des Verlustes an biologischer Vielfalt im Referenzgebiet und beispielhaften Teilgebieten.

Die Erhaltung stabiler Metapopulationen der vom Aussterben bedrohten Arten sollte daher ein vorrangiges Ziel in höchster Priorität sein.

Insektenarten der Kategorie „vom Aussterben bedroht“ haben in der Regel ein Anforderungsprofil, das in der „Normallandschaft“ in Deutschland nicht mehr erfüllt wird. Bundesweit sind ihre Populationen in Schutzgebieten angesiedelt, die meisten davon gehören zum Natura 2000-Netz der Europäischen Union.

Naturschutzmaßnahmen in der Normallandschaft können diese Arten nur indirekt fördern, wenn sie den Habitatverbund zwischen Schutzgebieten als primäre Lebensräume verbessern oder als Pufferzonen Schutzfunktionen gegenüber Lateraleinflüssen ausüben.

Ein optimal geplantes und funktionierendes Schutzgebietsmanagement ist daher das wichtigste Instrument zur Verlangsamung der fortschreitenden, irreversiblen Schädigung der biologischen Vielfalt. Solange jedoch der Schutz der lokalen biologischen Vielfalt innerhalb von Schutzgebieten der Gebietskulisse Natura 2000 durch nationale Gesetze und Landschaftsplanung nicht uneingeschränkte Priorität eingeräumt wird, kann dieses Ziel nicht erreicht werden. Nachhaltiger Schutz der biologischen Vielfalt bleibt dann auch für diese „Schutz“-Gebiete ein benannter Wunsch ohne ausreichenden Bezug zur Realität.

Für ein besseres Verständnis der regionalen und nationalen biologischen Vielfalt ist eine umfassende Bewertung der Bedrohung für möglichst viele Arten erforderlich. Auf diese Weise sollten die Arten mit den am stärksten identifizierten Wissensdefiziten vorrangig behandelt werden. Bei den Insekten betrifft dies besonders die artenreichen Familien mit parasitoider Lebensweise sowie weitere Taxa aus den artenreichsten Insektenordnungen der Hymenoptera und Diptera. Nach dem Wissensstand sind Malaisefallen besonders geeignet, sukzessive diese Kenntnislücken zu schließen, da die betroffenen Insektengruppen über diese Methodik besonders effizient erfasst werden. Für diese beiden Ordnungen allein sehen wir eine Wissenslücke von deutlich mehr als 14.500 Arten, für die bisher eine Integration in den Roten Listen mit Angaben zur Gefährdungsbewertung nicht erfolgt ist.

Die Hoffnung, diese gravierenden Wissenslücken in absehbaren Zeiträumen zu schließen, liegt zusätzlich in der Anwendung genetischer Methoden zur Artbestimmung (Metabarcoding) auf die Mischproben solcher, effizienter Nachweisverfahren.

Handlungsbedarf und Ursachenanalysen

Aussagen zu Ursachen der Entwicklung lokaler Insektenzönosen an bestimmten Standorten im Schutzgebietsnetz Natura 2000 sind abhängig vom Umfang und der ausreichend präzisen Erfassung möglicher Einflussfaktoren auf Insekten. Dies betrifft neben der zeitgleichen Erhebung von Daten zur Vegetation, u.a. in pflanzensoziologischen Aufnahmen (vgl. Anhang 2), auch die quantitative Aufnahme von Habitatelementen und Landnutzungsfaktoren sowie deren räumlicher Verteilung im Umfeld der Untersuchungsstandorte. Die fotografische Dokumentation von Standorten sollte hierbei als Standard auch Luftbildaufnahmen mit Kameradrohnen umfassen (Ssymank et al. 2018). Bei der Auswertung dieser aus variablen – auch geringen Höhen – aufgenommenen Luftbilder können neben der Vegetation viele weitere Habitatelemente quantitativ bewertet werden (vgl. Anhang 1).

Neben Faktoren der Landnutzung sollten künftig auch lokale, ökotoxikologische Daten obligatorisch erfasst werden. Grundsätzlich muss unterschieden werden zwischen spezifischen Untersuchungen, die darauf abzielen, einen ausgewählten Einflussfaktor zu erfassen und zu bewerten, und einem Monitoring, das im Ergebnis die Auswirkungen aller auf eine Insektenzönose einwirkenden Faktoren gleichzeitig abbildet, indem die Veränderungen der Insektenzönose über die Zeit erfasst werden. Letztlich sind beide Verfahren erforderlich, um Veränderungen und potenzielle Biodiversitätsschäden zu bewerten und die Größenordnung der Wirkung einzelner Stressoren zu ermitteln. Bezogen auf das vom EVK im F&E Projekt bisher untersuchte Repertoire von Messstellen werden standortspezifisch zahlreiche Defizite erkennbar, die eindeutige Hinweise auf einen gravierenden Handlungsbedarf geben. Dies betrifft die Behebung von Kenntnisdefiziten sowie die derzeit angewandte Planungspraxis im Naturschutz, den Datentransfer und die Risikoanalyse und das Risikomanagement zu Faktoren der Landnutzung sowie auch die Ausführung praktischer Naturschutzmaßnahmen.

Beispiele für Einzelstandorte aus dem im Projekt bearbeiteten Datensatz des EVK belegen hierbei auch innerhalb von Schutzgebieten:

- eine zunehmende Arealdezimierung wertgebender Of-

fenlandbiotope durch ungehinderte Sukzession von Gehölzen bzw. nicht ausreichende Pflege- und Entwicklungsmodelle in der Naturschutzpraxis,

- eine Zunahme der Deckungsgrade und des Blattschlusses der Vegetation,
- eine Degradierung von Grünlandflächen, die Homogenisierung von Randstrukturen und Säumen von mosaikartigen in monotone, lineare Strukturen,
- Rückgänge in der Diversität der Pflanzengesellschaften und Abnahme von Magerzeigern in der Vegetation,
- eine Zunahme von Neophyten sowie einen Wechsel im Artenbestand der Vegetation,
- eine Zunahme von Neozoen sowie einen hierdurch verursachten Wechsel im Artenbestand der Arthropodengesellschaften.

Planungen im Landschaftsmaßstab thematisieren aus unserer Sicht unzureichend die erforderlichen Maßnahmen im Biotopverbund zwischen Schutzgebieten sowie die Pufferzonen der Schutzgebiete.

Planungsmodelle zu Biotopverbundkorridoren beachten bisher nicht ausreichend die notwendige Integration verschiedenster Habitate und ein Risikomanagement zur umliegenden bzw. in die Korridore integrierten Landnutzung.

In besonderem Maße auffällig sind die hier erkannten Defizite bei der Berücksichtigung der Agrarnutzung in den Pufferzonen sowie auch innerhalb der Schutzgebietskulisse:

- Die Ackernutzung als weit verbreiteter Nutzungstyp wird in der Pflege- und Entwicklungsplanung unzureichend oder gar nicht berücksichtigt.
- Es existiert keinerlei Datentransfer zwischen Personen, die Chemikalien in der Ackernutzung (Insektizide, Fungizide, Herbizide etc.) applizieren und den Naturschutzbehörden – auch wenn diese Applikationen innerhalb der Schutzgebietsfläche oder in der unmittelbar angrenzenden Pufferzone erfolgen.
- Die Anwendung von Pflanzenschutzmitteln wird in den Verordnungen der Naturschutzgebiete teils gleichrangig zur Anwendung außerhalb der Schutzgebietskulisse gestattet, teils unzureichend geregelt.
- Es existieren keine ausreichenden Risikoanalysen und kein hieraus abgeleitetes Risikomanagement für den Einsatz bestimmter Chemikalien wie z. B. Pestiziden in Schutzgebieten, auf Flächen mit Vorkommen streng geschützter Lebensraumtypen oder auf angrenzenden Flächen (Pufferzonen) von Schutzgebieten.
- Die Regelungen nach dem Pflanzenschutzrecht sind, insbesondere für die Schutzgebietskulisse, unbefriedigend. So wird beispielsweise gemäß §4 der Pflanzenschutzmittelanwendungsverordnung die Anwendung von Pestiziden der Anhangsliste in Schutzgebieten zwar untersagt, ein Verstoß gegen diesen Paragraphen wird allerdings gemäß § 8 derselben Verordnung nicht als Ordnungswidrigkeit mit Bußgeldern geahndet.

Aufgrund massiver Kenntnisdefizite sowie fehlender Transparenz über durchgeführte Anwendungen solcher Substanzen können direkte und indirekte Einwirkungen derzeit nicht angemessen bewertet werden. Dies betrifft auch den Ferntransport über den Luft- oder Wasserweg und zu wenig beachtete, weitere Eintragswege.

Hierunter fällt z. B. der Eintrag von Pestiziden und anderen insektentoxisch wirksamen Substanzen als Begleitstoffe von Gülle oder Stallmist über die Düngung von Acker- und Grünlandflächen in Schutzgebieten.

Anthropogene Degradierungen zeigen auch für das Schutzgebietsnetz Natura 2000 nach unserem Kenntnisstand besorgniserregende Ausmaße mit Hinweisen auf eine zunehmende Reduktion der lokalen Artendiversität und ebenso auf eine Abnahme der Größenordnungen der Populationsstärken. Dies betrifft auch ungefährdete, als weniger anspruchsvoll geltende Insektenarten. Hiermit verbunden sind zweifellos unzureichend bekannte Verluste im Umfang der von diesen Arten ausgeübten Funktionen in den lokalen Biozönosen sowie von Ökosystemleistungen wie z. B. der Bestäubung oder Bodenbildung.

Gleiches gilt für hiermit verbundene Kaskadeneffekte, die aufgrund der unzureichenden Kenntnis der vorliegenden Netzwerke interagierender Arten nicht ausreichend erkannt bzw. aufgeklärt werden können. Dies betont die Notwendigkeit, diese Prozesse für die Gesamtheit der in den Biozönosen agierenden Arten mit geeigneter Methodik zu erfassen und zu bewerten.

Die aus den Untersuchungen des EVK gewonnenen Erkenntnisse belegen in besonderem Maße die Notwendigkeit einer umfassenderen, über weite Zeitspannen der Vegetationsperiode reichenden Untersuchung und Analyse der lokalen Biodiversität der Insekten sowie der Struktur der Biozönosen von Schutzgebietskulissen auf qualitativer und quantitativer Ebene. Sie zeigen darüber hinaus die Notwendigkeit und die Vorteile einer Standardisierung der Methodik sowie einer Verbesserung der Aufnahmequalität begleitender Standortdaten und belegen Planungs- und Umsetzungsdefizite sowie einen erheblichen Handlungsbedarf.

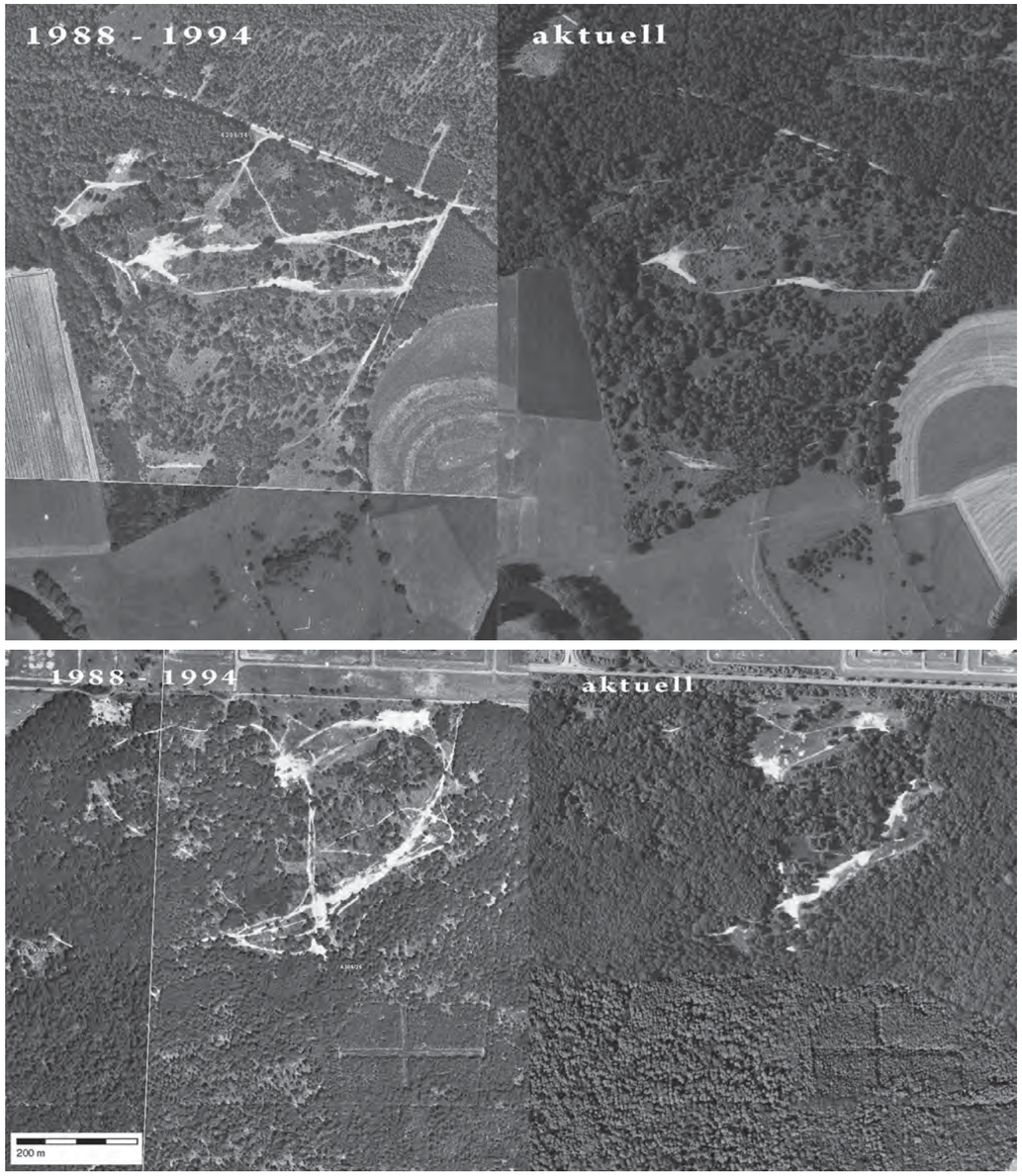


Abbildung 5. Gehölzsukzession von Offenlandflächen, mit Silikatmagerrasen im Zeitvergleich nach Luftbildern.
Oben: Im NSG Pliesterbergsche Sohlen, Kreis Wesel, Natura 2000-Nr. DE-4306-302.
Unten: Im NSG Kaninchenberge, Kreis Wesel, Natura 2000-Gebiet Nr. DE-4306-303.
(© TIM-online NRW, https://www.tim-online.nrw.de, entnommen: 19.10.2019).

Einfluss der bisherigen Arbeitsergebnisse auf die aktuelle Forschung Dritter und Perspektiven

Weiter etabliert und als Basisstrategie in Publikationen, Workshops und Vorträgen vermittelt wurde die möglichst weitgehende Standardisierung aller angewandten Methoden, um die Datenvergleichbarkeit weiter zu maximieren. Beim EVK erfolgt zusätzlich und obligatorisch eine vollständige Archivierung aller Originalproben sowie Metadaten und Präparate aller bisher determinierter Insektentaxa. Dies führt letztlich dazu, das bei möglichst jedem Einsatz von Malaisefallen des EVK weitestgehend Sekundärnutzungen und Synergien in Gegenwart und Zukunft nachhaltig realisiert werden. Für die hierbei entstehenden musealen Sammlungen und den Datenpool immenser Größenordnung soll die Zugänglichkeit auch durch Dritte künftig weiter optimiert werden.

Die Nutzbarkeit des o.g. Datenpools bezieht sich auf die Sekundärverwendung im Insektenmonitoring, zu spezifischen Fragestellungen, u.a. im Datenbeitrag zur Gefährdungsbewertung der Arten sowie der vollständigeren Kenntnis der nachweislich charakteristischen Insektenarten der geschützten Lebensraumtypen gemäß FFH-Richtlinie Anhang I.

Über die Publikation der Rückgänge von Insektenbiomassen aus standardisiertem Malaisefallenbetrieb (Hallmann et al. 2017) wurde die Bedeutung der Biomassen als additivem Messwert weitgehend in der Biodiversitätsforschung auch durch Dritte erkannt und etabliert.

Für die Bearbeitung komplexer Datensätze aus Malaisefallen sowie ermittelter Metadaten im Standort- und Zeitreihenvergleich wurden statistische Module entwickelt, publiziert und im Quellcode für die Nutzung durch Dritte zugänglich gemacht (Hallmann et al. 2017, 2021).

Die Methodenbeschreibung und deren notwendige Standardisierung, insbesondere in der Anwendung im Insektenmonitoring wurde ergänzt und publiziert (Ssymank et al 2018). Diese Grundmodell für die standardisierte Anwendung von Malaisefallen hat sich unmittelbar etabliert im aktuellen Insektenmonitoring, u.a. der Bundesländer Nordrhein-Westfalen, Baden-Württemberg und dem Saarland.

Zusammenhänge zwischen den ermittelten Biomassenverlusten im Zeitvergleich über Dekaden und dem Rückgang der Abundanz und Artendiversität wurden exemplarisch ausgewertet und publiziert (Hallmann et al. 2021). In aktuell laufenden Forschungsprojekten werden diese Module angewendet.

Arbeitsergebnisse aus dem F&E-Projekt führten zu Anregungen des EVK in laufenden Forschungsprojekten eine dringend notwendige Verbesserung und Standardisierung der Arbeitsprozesse genetischer Artenanalysen (Metabarcoding) umzusetzen.

Eine vollständigere Berücksichtigung der gesamten Insektendiversität bedeutet die notwendige Entwicklung geeigneter Werkzeuge um auch die Traits in Auswertungsprozesse für alle Insektentaxa zu integrieren. Das im Rahmen des F&E Projektes entwickelte „Insect Trait Tool“ liefert hierfür bereits in der Version 1.0 (Hörren et al. 2022a) eine unmittelbar einsetzbare Grundlage für alle in Deutschland vorkommenden Insektenfamilien. Dieses Werkzeug wird bereits in der aktuellen Forschung eingesetzt.

Die Größenordnung der Kenntnislücken zum Gesamtartenbestand der Insekten in Deutschland, deren Lebensraumansprüche, Funktionen, Habitatbindung etc. unterstreichen die unabdingbare Notwendigkeit der Anwendung genetischer Methoden. Um für die Evaluation genetischer Methoden und auch andere Zwecke eine standardisierte Probenteilung zu realisieren wurde hierzu ein mechanisches Gerät entwickelt (Hörren et al. 2022b). Dieser Probenteiler wird bereits in der aktuellen Forschung Dritter verwendet.

Die zu bearbeitende Fragestellung der Bewertung der Bestandsrückgänge der Insekten nach den aktuell verfügbaren Roten Listen sowie deren taxonomische, zeitliche und räumliche Muster (Hallmann et al. 2022) verdeutlicht im parallelen Einsatz des o.g. Trait Tools deren unausgewogenen Inhalt und damit zu setzende Prioritäten in der zukünftigen Wissensgewinnung. Zudem wurde nach unserer Kenntnis erstmals eine für die künftige Forschung nutzbare, in der Struktur vereinheitlichte Datenbank erstellt, die alle Gefährdungsbewertungen für Deutschland zusammenfasst.

Arbeitsergebnisse aus diesem F&E-Projekt beeinflussten in einem ungewöhnlich hohen Umfang sowohl die umweltpolitische als auch öffentliche Wahrnehmung der Biodiversitätsverluste als auch die aktuelle, entomologische Forschung.

Ein ebenso hoher Wert liegt aus unserer Sicht in der perspektivischen Anwendung der im Rahmen des Projektes weiter evaluierten methodischen Grundlagen, entwickelten „Werkzeuge“ und Anregungen, die auch in Forschungsprojekten Dritter aktuell bereits realisiert werden.

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Verzeichnis und Glossar der verwendeten Abkürzungen:

AMTC: Automated Malaise Trap Changer, automatischer Fangflaschenwechsler an Malaisefallen

ATBI: All Taxa Biodiveristy Inventory, Forschungsprojekte zur Erfassung der gesamten Artenvielfalt eines Gebietes

BArtSchV: Bundesartenschutzverordnung

BfB: Barcoding Fauna Bavarica

BfN: Bundesamt für Naturschutz

BIN: Barcode Index Number, eindeutige Kennnummer für einen DNA-Barcode, wird z. B. dann benutzt, wenn die zugehörige Art (noch) nicht bekannt oder beschrieben ist

DLIA: Discover Life of America, Gesellschaft die sich die Erfassung der Artenvielfalt v.a. von Nationalparken in Amerika zur Aufgabe gemacht hat, und zum Monitoring und Management in den Schutzgebieten beiträgt

DNA: Desoxyribonukleinsäure (deoxyribonucleic acid), Polnukleotid, bestehend aus einer Kette von Nukleinsäuren, in der genetische Informationen gespeichert sind

EVK: Entomologischer Verein Krefeld

F&E: Forschungs- und Entwicklungsprojekte, von Bundesseite (Bundesumweltministerium/Bundesamt für Naturschutz) betreute und finanzierte angewandte Forschungsprojekte im Natur- und Umweltschutz

FFH: Richtlinie 92/43/EWG (Fauna-Flora-Habitat-Richtlinie)

GBOL: German Barcoding of Life, Deutsches Projekt zur Erfassung der DNA-Barcodes aller in Deutschland vorkommenden Arten unter Leitung des Zoologischen Forschungsmuseums Alexander Koenig in Bonn

ITT: Insect Trait Tool

MEK: Methyl-Ethyl-Keton, Vergällungsmittel für Alkohol

MOTU: Molecular Operational Taxonomic Unit, aussagefähiger Teilbereich der DNA, der im Regelfall eine Artansprache ermöglicht, DNA-Barcodes sind ein Beispiel für MOTU‘s.

NGS: Next Generation Sequencing

STI: (Swedish Taxonomy Initiative), ein faunistisches Grundinventar des Landes Schweden

Anhang 1.1 Beispiele zur Dokumentation räumlicher Muster der Habitatmerkmale im Umfeld von Malaisefallen in unterschiedlichen Flughöhen und damit Aufnahmeflächen. Oben: 240 m². Unten: 1,3 ha.
(© M. Sorg/EVK).

Anhang 1.2 Beispiele zur Dokumentation räumlicher Muster der Habitatmerkmale im Umfeld von Malaisefallen in unterschiedlichen Flughöhen und damit Aufnahmeflächen. Oben: 150 m². Unten: 0,3 ha.
(© M. Sorg/EVK).

Anhang 1.3 Beispiele zur Dokumentation räumlicher Muster der Habitatmerkmale im Umfeld von Malaisefallen in unterschiedlichen Flughöhen und damit Aufnahmeflächen. Oben: 120 m². Unten: 1,0 ha. Dokumentiert werden hier gleichzeitig die Standorte der pflanzensoziologischen Aufnahmen. (© M. Sorg/EVK).

Anhang 1.4 Beispiele zur Dokumentation räumlicher Muster der Habitatmerkmale im Umfeld von Malaisefallen in unterschiedlichen Flughöhen und damit Aufnahmeflächen. Oben: 520 m². Unten: 0,8 ha. Dokumentiert werden hier gleichzeitig die Standorte der pflanzensoziologischen Aufnahmen. (© M. Sorg/EVK).

Vegetationserfassung (EVK)

Datum: 29.7.2019 (Ergänzung)
Lokalität: NSG Egelsberg bei Krefeld. Natura 2000-Nr. DE-4605-302.
Standort: Malaisefalle Nr. 2 (EGE2) steht im Heide-Offenland, das sich hier ca. 400 m zwischen dem grasflächigen Flugplatz und einem ca. 150 m entfernten Acker erstreckt. Die Vegetationsaufnahme wurde im Westen der Malaisefalle in einer Lücke des Besenheide-Bestandes erfasst.

Teil 1
Vegetationsaufnahme nach Braun-Blanquet/Barkman
Biotoptyp: 40.03.01 Heiden auf sandigen oder Silikatböden, Pionier- bis Altersphase (RL D 1-2)
FFH-Lebensraumtyp: 2310: Sandheiden mit Besenheide und Ginster auf Binnendünen, 4030: Trockene Heiden
Pflanzengesellschaft: Genisto pilosae-Callunetum – Haarginster-Heidekraut-Gestrüpp (RL D 2), Galium saxatile-Nardus stricta-Gesellschaft – Harzerlabkraut-Borstgras-Rasen (RL D 3)
Zustand der Gesellschaft: typische Ausprägung
Geolog. Untergrund: Diluvialer Sander, kiesig
Nutzung: NSG-Beweidung mit Schafen
Geländeform, Neigung, Exposition: Eben, von Kaninchengrabungen unterbrochen, ohne Neigung, unbeschattet
Größe der Aufnahmefläche: 3,50 x 3,50 m
Deckung innerhalb der Aufnahmefläche: 65 %
Artenliste mit Artmächtigkeit (Deckung) und Zeigerwerten für F, R, N und RL-Status (D/NW):

Egelsberg MF Nr. 2		Deckung	ZW F	ZW R	ZW N	RL D/NW
Wissenschaftlicher Name	Deutscher Name					
Polytrichum piliferum	Glashaar-Widertonmoos	3	2	2	x	
Galium saxatile	Harzer Labkraut	2b	5	2	3	
Avenella flexuosa	Draht-Schmiele	2a	x	2	3	
Calluna vulgaris	Besenheide, Jungwuchs	2a	x	1	1	
Calluna vulgaris	Besenheide, abgestorben	2a	x	1	1	
Festuca filiformis	Haar-Schwingel	2a	4	3	2	
Agrostis capillaris	Rotes Straußgras	2m	x	4	4	
Brachythecium albicans	Weißes Kurzbüchsenmoos	2m	2	x	x	
Ceratodon purpureus	Purpurstieliges Hornzahnmoos	2m	2	x	x	
Rumex acetosella	Kleiner Sauerampfer	2m	3	2	1	
Cladonia arbuscula	Wald-Rentierflechte	1	x	x	1	3/3

Durchschnittlicher ökologischer Zeigerwert:
F Ø = 3,1
R Ø = 1,9
N Ø = 2,0

Teil 2
Weitere Arten im Umkreis von ca. 50 m und RL-Status (D/NRW)
Betula pendula - Hänge-Birke, Jungwuchs, Calluna vulgaris – Besenheide, adult, Carex pilulifera – Pillen-Segge, Cerastium holosteoides – Spurre-Hornkraut, Festuca guestfalica – Westfälischer Schwingel, Nardus stricta – Borstgras (V/3), Quercus petraea - Trauben-Eiche, Rumex crispus – Krauser Ampfer, Teucrium scorodonia - Salbei-Gamander, Veronica officinalis – Echter Ehrenpreis

Anhang 2.1 Beispiel zur Standortdokumentation im Umfeld von Malaisefallen durch Vegetationsaufnahmen, pflanzensoziologische Aufnahmen sowie Bestimmung der Biotoptypen, Lebensraumtypen gemäß FFH-Richtlinie und Pflanzengesellschaften neben dem Fallenstandort.

Vegetationsaufnahme (EVK)

Datum: 21.7.2017 (Ergänzung)
Lokalität: NSG Kaninchenberge. Natura 2000-Nr. DE-4306-303
Standort: Die Malaisefalle (KAN1) steht in einer flachen Senke auf einem Untergrund von festgelegten Binnendünen in einem Dünentälchen. Hier im Zentrum ist die Bedeckung der Sandflächen noch spärlich, nimmt nach außen aber sehr schnell zu. Die Besiedlung in der Aufnahmefläche besteht aus Pioniermoosen und -pflanzen. Nach allen Seiten kommen dann zunehmend Calluna-Herden, die größere Flächen abdecken. Birken, Traubeneichen und Späte Traubenkirschen folgen in der Sukzession nach außen bis hin zu Waldbeständen.

Teil 1
Vegetationsaufnahme (VA) nach Braun-Blanquet/Barkman
Biotoptyp: 34.04.03 Silbergrasrasen (RL D 1-2)
FFH-Lebensraumtyp: 2330 Offene Grasflächen mit Silbergras und Straußgras auf Binnendünen
Pflanzengesellschaft: Spergulo-Corynephoretum - Frühlingsspergel-Silbergras-Rasen
Zustand der Gesellschaft: Typische Ausprägung
Nutzung: NSG Pflege
Geol. Untergrund: Binnendünen-Feinsand
Geländeform, Neigung, Exposition: Flach, eben, unbeschattet
Größe der Aufnahmefläche: 3,50 x 3,50 m
Deckung innerhalb der Aufnahmefläche: 40 %
Artenliste mit Artmächtigkeit (Deckung), Zeigerwerte für F, R, N und RL-Status (D/NRW):

Kaninchenberge MF Nr. 1		Deckung	ZW F	ZW R	ZW N	RL D/NRW
Wissenschaftlicher Name	Deutscher Name					
Racomitrium lanuginosum	Wollhaarige Zackenmütze	2b	3	3	x	
Ceratodon purpureus	Purpurstieliges Hornzahnmoos	2a	2	x	x	
Polytrichum piliferum	Glashaar-Widertonmoos	2a	2	2	x	
Cladonia ciliata	Zarte Rentierflechte	2m	x	2	x	2/3
Cladonia portentosa	Ebenästige Rentierflechte	2m	x	x	1	3/*
Carex arenaria	Sand-Segge	1	3	2	2	*/3
Corynephorus canescens	Silbergras	1	2	3	2	*/3
Rumex acetosella	Kleiner Sauerampfer	1	3	2	1	
Calluna vulgaris	Besenheide, Jungwuchs	+	x	1	1	
Festuca filiformis	Haar-Schwingel	+	4	3	2	
Spergula morisonii	Frühlings-Spergel	+	3	x	2	V/3

Durchschnittlicher ökologischer Zeigerwert:
F Ø = 2,6
R Ø = 2,5
N Ø = 1,5

Teil 2
Weitere Arten im Umkreis von ca. 50 m und RL-Status (D/NRW):
Calluna vulgaris - Besenheide, Cytisus scoparius – Besenginster, Quercus petraea – Traubeneiche, Betula pendula – Hängebirke, Prunus serotina – Späte Traubenkirsche, Pinus sylvestris – Wald-Kiefer.

Anhang 2.2 Beispiel zur Standortdokumentation im Umfeld von Malaisefallen durch Vegetationsaufnahmen, pflanzensoziologische Aufnahmen sowie Bestimmung der Biotoptypen, Lebensraumtypen gemäß FFH-Richtlinie und Pflanzengesellschaften neben dem Fallenstandort.

Vegetationserfassung (EVK)

Datum: 13.6.2019
Lokalität: NSG Latumer Bruch. Natura 2000-Nr. DE-4605-301
Standort: MF Nr. 1 (LAT1). In einem ± trocken gefallenen Altrheinarm. Sumpfige Tümpel unterschiedlicher Ausdehnung mit episodischer Wasserführung, aber dichter Vegetation. Dazwischen liegen weniger nasse Bereiche. An den ansteigenden Rändern wird das Gebiet durch Weichholzgebüsche begrenzt. Die Vegetationsaufnahme wurde im Osten der MF erfasst.

Teil 1
Vegetationsaufnahme nach Braun-Blanquet/Barkman
Biotoptyp: 38.05 Wasserschwadenröhricht, 39.04 Krautige Ufersäume oder -fluren an Gewässern (RL D 2-3)
FFH-Lebensraumtyp: 6430 Feuchte Hochstaudenfluren
Pflanzengesellschaft: Calthion-Basalgesellschaft – Sumpfdotterblumen-Basalgesellschaft, Glycerietum maximae – Wasserschwaden-Röhricht
Zustand der Gesellschaft: Nasse Röhricht – Hochstauden- Mischgesellschhaften
Nutzung: Episodische Mahd
Geländeform, Neigung, Exposition: Durch horstige Polykormone bultig, ohne Neigung, unbeschattet
Größe der Aufnahmefläche: 3,50 x 3,50 m
Deckung innerhalb der Aufnahmefläche: 100 %
Artenliste mit Artmächtigkeit (Deckung) und Zeigerwerten für F, R, N und RL-Status (D/NRW):

Latumer Bruch MF Nr. 1		Deckung	ZW	ZW	ZW	RL D/NRW
Wissenschaftlicher Name	Deutscher Name		F	R	N	
Scirpus sylvaticus	Wald-Simse	3	8	4	4	
Glyceria maxima	Wasser-Schwaden	2b	10	8	9	
Euphorbia palustris	Sumpf-Wolfsmilch	2a	8	8	x	3/2
Holcus lanatus	Wolliges Honiggras	2a	6	x	5	
Symphytum officinale	Gewöhnlicher Beinwell	2a	7	x	8	
Urtica dioica	Große Brennnessel	2a	6	7	9	
Alopecurus pratensis	Wiesen-Fuchschwanz	2m	6	6	7	
Anthoxanthum odoratum	Gewöhnliches Ruchgras	2m	x	5	x	
Arrhenaterum elatius	Glatthafer	2m	x	7	7	
Carex vesicaria	Blasen-Segge	1	9	6	5	*/3
Galium aparine	Kletten-Labkraut	1	x	6	8	
Iris pseudacorus	Gelbe Schwertlilie	1	9	x	7	
Juncus effusus	Flatter-Binse	1	7	3	4	
Lythrum salicaria	Blutweiderich	1	8	6	x	
Phalaris arundinacea	Rohr-Glanzgras	1	8	7	7	
Angelica sylvestris	Wilde Engelwurz	r	8	x	4	

Durchschnittlicher ökologischer Zeigerwert:
F Ø = 7,9
R Ø = 5,9
N Ø = 6,3

Teil 2
Weitere Arten im Umkreis von ca. 50 m und RL-Status (D/NRW):
Agrostis stolonifera – Weißes Straußgras, Alnus glutinosa - Schwarz-Erle, Alnus incana – Grau-Erle, Bromus inermis – Unbewehrte Trespe, Callitriche stagnalis – Teich-Wasserstern, Calystegia sepium - Zaun-Winde, Carex acuta – Schlank-Segge, Cirsium arvense – Acker-Kratzdistel, Cirsium palustre – Sumpf-Kratzdistel, Dactylis glomerata – Gewöhnliches Knaulgras, Festuca arundinacea - Rohr-Schwingel, Humulus lupulus – Hopfen, Lemna minor – Kleine Wasserlinse, Lemna minuta – Zierliche Wasserlinse, Lycopus europaeus – Wolfstrapp, Ranunculus repens – Kriechender Hahnenfuß, Rumex obtusifolius – Stumpfblättriger Ampfer, Salix aurita – Ohr-Weide, Salix caprea - Sal-Weide, Salix cinerea – Grau-Weide, Salix multinervis – Starknervige Weide, Salix reichardtii – Reichardts Bastardweide, Scrophularia nodosa – Knoten-Braunwurz, Scutellaria galericulata – Sumpf-Helmkraut, Valeriana excelsa – Kriech-Baldrian

Anhang 2.3 Beispiel zur Standortdokumentation im Umfeld von Malaisefallen durch Vegetationsaufnahmen, pflanzensoziologische Aufnahmen sowie Bestimmung der Biotoptypen, Lebensraumtypen gemäß FFH-Richtlinie und Pflanzengesellschaften neben dem Fallenstandort.

Vegetationserfassung (EVK)

Datum: 28.5.2019 (Ergänzung)
Lokalität: NSG Koppelstein. Natura 2000-Nr. DE-5711-301 Rheinhänge zwischen Lahnstein und Kaub
Standort: Die Fläche der Vegetationsaufnahme liegt südöstlich anschließend an den Fallenstandort (KOP1) in ca. 5 m Entfernung. Die Falle selbst stand am oberen Rand einer hängigen Weide (Brometum - Trespen-Halbtrockenrasen, RL D 2). Oberhalb des Standorts geht diese Weide an einem etwas steileren, flachgründigeren Hang in eine Xerobrometum-Fläche (Trespen-Trockenrasen, RL D 3) über. Darüber befindet sich ein lichter, nicht forstlich entstandener, sondern natürlicher Traubeneichenwald mit ursprünglichen, meist krummwüchsigen Traubeneichen mit langen Blattstielen und eingestreut Bereiche mit Elsbeere, Mehlbeere und Amelanchier embergeri des Aceri monspessulani-Quercetum petraeae (Maßholder-Traubeneichenwald RL D 3). Diese Gesellschaft strahlt mit Jungwuchs und Gehölzgruppen in die Fläche des Mesobrometum (Trespen-Halbtrockenrasen i.e.S.). Am Rand der Gehölzgruppen findet man die Saumgesellschaft Geranio sanguinei-Peucedanetum cervariae (Blutstorchschnabel-Hirschwurz-Gesellschaft RLLL D 3) mit Geranium sanguineum, Polygonatum odoratum, Vincetoxicum hirundinaria, Peucedanum cervaria u.a.. Nach Westen geht das Mesobrometum in eine acidophile Gesellschaft auf felsigem Untergrund über.

Teil 1
Vegetationsaufnahme (VA) nach Braun-Blanquet/Barkman
Biotoptyp: 34.02.01.01.02 Submediterraner Halbtrockenrasen auf karbonatischem oder sonstigem basenreichen Boden, beweidet (RL D 1-2)
FFH-Lebensraumtyp: 6210 (*) Kalk-(Halb-)Trockenrasen und ihre Verbuschungs-stadien (* orchideenreiche Bestände)
Pflanzengesellschaft: Brometum – Trespen-Halbtrockentrasen (RL D 2)
Zustand der Gesellschaft: Artenreich
Nutzung: Episodische Beweidung mit Ziegen und Rindern
Geländeform, Neigung, Exposition: Leicht buckelig, 20 % Neigung Richtung Süden, unbeschattet
Größe der Aufnahmefläche: 3,50 x 3,50 m
Deckung innerhalb der Aufnahmefläche: 98 %
Artenliste mit Artmächtigkeit (Deckung) und Zeigerwerte für F, R, N und RL-Status (D/RP):

Koppelstein MF Nr. 1		Deckung	ZW	ZW	ZW	RL D/RP
Wissenschaftlicher Name	Deutscher Name		F	R	N	
Bromus erectus	Aufrechte Trespe	4	3	8	3	
Eryngium campestre	Feld-Mannstreu	2a	3	8	3	V/*
Sanguisorba minor subsp. minor	Kleiner Wiesenknopf	2a	3	8	2	
Euphorbia cyparissias	Zypressen-Wolfsmilch	1	3	x	3	
Lathyrus pratensis	Wiesen-Platterbse	1	6	7	6	
Leontodon hispidus	Behaarter Löwenzahn	1	5	7	6	
Lotus corniculatus	Gewöhnlicher Hornklee	1	4	7	3	
Onobrychis viciifolia	Saat-Esparsette	1	3	8	3	3/*
Origanum vulgare	Gewöhnlicher Dost	1	3	8	3	
Plantago lanceolata	Spitz-Wegerich	1	x	x	x	
Vincetoxicum hirundinaria	Weiße Schwalbenwurz	1	3	7	3	
Centaurea jacea	Wiesen-Flockenblume	+	5	6	3	
Centaurea scabiosa	Skabiosen-Flockenblume	+	3	8	4	
Crataegus monogyna	Eingriffliger Weißdorn, Jw.	+	4	8	4	
Galium album subsp. album	Weißes Wiesen-Labkraut	+	5	7	5	
Prunus mahaleb	Weichsel-Kirsche, Jungw.	+	3	8	2	
Rosa rubiginosa	Wein-Rose	r	3	8	3	
Orchis militaris	Helm-Knabenkraut	r	3	9	3	3/3

Durchschnittlicher ökologischer Zeigerwert:
F Ø = 3,2
R Ø = 7,8
N Ø = 3,1

Anhang 2.4 Beispiel zur Standortdokumentation im Umfeld von Malaisefallen durch Vegetationsaufnahmen, pflanzensoziologische Aufnahmen sowie Bestimmung der Biotoptypen, Lebensraumtypen gemäß FFH-Richtlinie und Pflanzengesellschaften neben dem Fallenstandort.

PLOS ONE

RESEARCH ARTICLE

More than 75 percent decline over 27 years in total flying insect biomass in protected areas

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Abstract

Global declines in insects have sparked wide interest among scientists, politicians, and the general public. Loss of insect diversity and abundance is expected to provoke cascading effects on food webs and to jeopardize ecosystem services. Our understanding of the extent and underlying causes of this decline is based on the abundance of single species or taxonomic groups only, rather than changes in insect biomass which is more relevant for ecological functioning. Here, we used a standardized protocol to measure total insect biomass using Malaise traps, deployed over 27 years in 63 nature protection areas in Germany (96 unique location-year combinations) to infer on the status and trend of local entomofauna. Our analysis estimates a seasonal decline of 76%, and mid-summer decline of 82% in flying insect biomass over the 27 years of study. We show that this decline is apparent regardless of habitat type, while changes in weather, land use, and habitat characteristics cannot explain this overall decline. This yet unrecognized loss of insect biomass must be taken into account in evaluating declines in abundance of species depending on insects as a food source, and ecosystem functioning in the European landscape.

Introduction

Loss of insects is certain to have adverse effects on ecosystem functioning, as insects play a central role in a variety of processes, including pollination [1, 2], herbivory and detrivory [3, 4], nutrient cycling [4] and providing a food source for higher trophic levels such as birds, mammals and amphibians. For example, 80% of wild plants are estimated to depend on insects for pollination [2], while 60% of birds rely on insects as a food source [5]. The ecosystem services provided by wild insects have been estimated at $57 billion annually in the USA [6]. Clearly, preserving insect abundance and diversity should constitute a prime conservation priority.

Current data suggest an overall pattern of decline in insect diversity and abundance. For example, populations of European grassland butterflies are estimated to have declined by 50% in abundance between 1990 and 2011 [7]. Data for other well-studied taxa such as bees [8–14]

listed below: Bezirksregierungen Düsseldorf & Köln, BfN - Bundesamt für Naturschutz, Land Nordrhein-Westfalen - Europäische Gemeinschaft ELER, Landesamt für Agrarordnung Nordrhein-Westfalen, Landesamt für Natur, Umwelt und Verbraucherschutz Nordrhein-Westfalen, Landesamt für Umwelt Brandenburg, Landesamt für Umwelt Rheinland-Pfalz, LVR - Landschaftsverband Rheinland, Naturschutzbund Deutschland, Nordrhein-Westfalen Stiftung, RBN Bergischer Naturschutzverein, RVR - Regionalverband Ruhr, SGD Nord Rheinland-Pfalz, Universitäten Bonn, Duisburg-Essen & Köln, Untere Landschaftsbehörden: Kreis Düren, Kreis Heinsberg, Kreis Kleve, Kreis Viersen, Kreis Wesel & AGLW, Stadt Düsseldorf, Stadt Köln, Stadt Krefeld, Rheinisch Bergischer Kreis, Rhein Kreis Neuss & Rhein-Sieg-Kreis. Members of the Entomological Society Krefeld and cooperating botanists and entomologists that were involved in the empirical investigations are greatly acknowledged: U.W. Abts, F. Bahr, A. Bäumler, D. & H. Beutler, P. Birnbrich, U. Bosch, J. Buchner, F. Cassese, K. Cölln, A.W. Ebmer, R. Eckelboom, B. Franzen, M. Grigo, J. Günneberg, J. Gusenleitner, K. Hamacher, F. Hartfeld, M. Hellenthal, J. Hembach, A. Hemmersbach, W. Hock, V. Huisman-Fiegen, J. Illmer, E. Jansen, U. Jäckel, F. Koch, M. Kreuels, P. Leideritz, I. Loksa, F. B. Ludescher, F. J. Mehring, G. Milbert, N. Mohr, P. Randazzo, K. Reissmann, S. Risch, B. Robert, J. de Rond, U. Sandmann, S. Scharf, P. Scherz, J. Schiffer, C. Schmidt, O. & W. Schmitz, B. P. & W. Schnell, J. L. Schönfeld, E. Schraetz, M. Schwarz, R. Seliger, H. W. Siebeneicher, F. & H. Sonnenburg W. J. S. & P. Sorg, A. Ssymank, H. Sticht, M. Weithmann, W. Wichard and H. Wolf.

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and moths [15–18] suggest the same trend. Climate change, habitat loss and fragmentation, and deterioration of habitat quality have been proposed as some of the prime suspects responsible for the decline [9–11, 13, 18–22]. However, the number of studies on insect trends with sufficient replication and spatial coverage are limited [10, 23–25] and restricted to certain well-studied taxa. Declines of individual species or taxa (e.g. [7, 26]) may not reflect the general state of local entomofauna [27]. The total insect biomass would then be a better metric for the status of insects as a group and its contribution to ecosystem functioning, but very few studies have monitored insect biomass over an extensive period of time [28]. Hence, to what extent total insect biomass has declined, and the relative contribution of each proposed factor to the decline, remain unresolved yet highly relevant questions for ecosystem ecology and conservation.

Here, we investigate total aerial insect biomass between 1989 and 2016 across 96 unique location-year combinations in Germany, representative of Western European low-altitude nature protection areas embedded in a human-dominated landscape (S1 Fig). In all years we sampled insects throughout the season (March through October), based on a standardized sampling scheme using Malaise traps. We investigated rate of decline in insect biomass, and examined how factors such as weather, habitat and land use variables influenced the declines. Knowledge on the state of insect biomass, and it's direction over time, are of broad importance to ecology and conservation, but historical data on insect biomass have been lacking. Our study makes a first step into filling this gap, and provides information that is vital for the assessment of biodiversity conservation and ecosystem health in agricultural landscapes.

Materials and methods

Data

Biomass data. Biomass data were collected and archived using a standardized protocol across 63 unique locations between 1989 and 2016 (resulting in 96 unique location-year combinations) by the Entomological Society Krefeld. The standardized protocol of collection has been originally designed with the idea of integrating quantitative aspects of insects in the status assessment of the protected areas, and to construct a long-term archive in order to preserve (identified and not-identified) specimens of local diversity for future studies. In the present study, we consider the total biomass of flying insects to assess the state of local entomofauna as a group.

All trap locations were situated in protected areas, but with varying protection status: 37 locations are within Natura2000 sites, seven locations within designated Nature reserves, nine locations within Protected Landscape Areas (with funded conservation measures), six locations within Water Protection Zones, and four locations of protected habitat managed by Regional Associations. For all location permits have been obtained by the relevant authorities, as listed in the S1 Appendix. In our data, traps located in nutrient-poor heathlands, sandy grasslands, and dune habitats provide lower quantities of biomass as compared to nutrient nutrient-rich grasslands, margins and wastelands. As we were interested in whether the declines interact with local productivity, traps locations were pooled into 3 distinct habitat clusters, namely: nutrient-poor heathlands, sandy grassland, and dunes (habitat cluster 1, n = 19 locations, Fig 1A), nutrient-rich grasslands, margins and wasteland (habitat cluster 2, n = 41 locations, Fig 1B) and a third habitat cluster that included pioneer and shrub communities (n = 3 locations).

Most locations (59%, n = 37) were sampled in only one year, 20 locations in two years, five locations in three years, and one in four years, yielding in total 96 unique location-year combinations of measurements of seasonal total flying insect biomass. Our data do not represent

Fig 1. Examples of operating malaise traps in protected areas in western Germany, in habitat cluster 1 (A) and cluster 2 (B) (see Materials and methods).

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Table 1. Overview of malaise-trap samples sizes. For each year, the number of locations sampled, the number of location re-sampled, total number of samples, as well as mean and standard deviation of exposure time at the trap locations (in days) are presented.

Year	Number of locations	Number of locations sampled previously	Number of Samples	Mean exposure time	St. Dev exposure time
1989	8	0	162	146.62	12.81
1990	2	0	62	228.50	34.65
1991	1	0	10	146.00	
1992	4	0	54	118.75	15.50
1993	4	0	39	109.50	59.74
1994	4	0	60	170.75	72.83
1995	2	0	41	144.00	93.34
1997	1	0	20	162.00	
1999	2	0	56	196.00	0.00
2000	2	1	47	174.00	11.31
2001	3	2	81	190.00	0.00
2003	3	1	80	201.00	7.81
2004	2	0	48	200.00	5.66
2005	4	0	70	198.75	30.53
2006	2	0	26	188.00	0.00
2007	2	0	15	192.00	0.00
2008	2	0	24	162.00	0.00
2009	4	0	23	120.50	2.89
2010	2	0	12	85.00	0.00
2011	1	0	4	68.00	
2012	2	0	23	158.50	4.95
2013	8	2	126	175.50	21.71
2014	23	19	348	212.74	11.21
2015	1	1	10	224.00	
2016	7	7	62	190.86	12.56

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longitudinal records at single sites, suitable to derive location specific trends (e.g. [28]). Prolonged trapping across years is in the present context (protected areas) deemed undesirable, as the sampling process itself can negatively impact local insect stocks. However, the data do permit an analysis at a higher spatial level, i.e. by treating seasonal insect biomass profiles as random samples of the state of entomofauna in protected areas in western Germany.

Malaise traps were deployed through the spring, summer and early autumn. They operated continuously (day and night), and catches were emptied at regular intervals, on average every 11.2 days (sd = 6.3). We collected in total 1503 trap samples, with an average of 16 (4–35) successive catches per location-year combination (Table 1). Between 1989 and 2016, a total of 53.54kg of invertebrates have been collected and stored, over a total trap exposure period of 16908 days, within an average of 176 exposure days per location-year combination. Malaise traps are known to collect a much wider diversity of insect species (e.g. [29–31]) as compared to suction traps (e.g. [28]) and are therefore considered superior as a method of collecting flying insects. On the basis of partial assessments, we can assume that the total number of insects included in 53.54 kg biomass represents millions of individuals.

The sampling was standardized in terms of trap construction, size and design (identical parts), colors, type of netting and ground sealing, trap orientation in the field as well as slope at the trap location. Hence none of the traps differed in any of these field aspects. Our trap model was similar to the bi-colored malaise trap model by Henry Townes [32, 33]. The traps,

collecting design, and accompanying methods of biomass measurement as designed and applied by the Entomological Society Krefeld are described elsewhere [34–36] and in S2 Appendix.

Trap catches were stored in 80% ethanol solution, prior to weighing, and total insect biomass of each catch (bottle) was obtained based on a standardized measurement protocol by first subtracting fluid content. In order to optimally preserve samples for future species determination, the insects were weighed in an alcohol-wet state. First, the alcohol concentration in the vessels was stabilized to 80%, while this concentration was controlled with an areometer over a period of at least two days. In order to obtain biomass per sample with sufficient accuracy and comparability, the measuring process was fixed using a standardized protocol [34]. For this purpose the insects of a sample were poured onto a stainless steel sieve (10cm diameter) of 0.8 mm mesh width. This sieve is placed slightly obliquely (30 degrees) over a glass vessel. The skew position accelerates the first runoff of alcohol and thus the whole measuring procedure. The drop sequence is observed with a stopwatch. When the time between two drops has reached 10 seconds for the first time, the weighing process is performed with a laboratory scale. For the determination of the biomass, precision scales and analytical scales from Mettler company were used with an accuracy of at least 0.1g and controlled with calibrated test weights at the beginning of a new weighing series. In a series of 84 weightings of four different samples repeating this measurement procedure, an average deviation from the mean value of the measurement results of 0.4 percent was observed (unpublished results).

Weather data. Climate change is a well-known factor responsible for insect declines [15, 18, 21, 37]. To test if weather variation could explain the observed decline, we included mean daily temperature, precipitation and wind speed in our analysis, integrating data from 169 weather stations [38] located within 100km to the trap locations. We examined temporal trends in each weather variable over the course of the study period to assess changes in climatic conditions, as a plausible explanation for insect decline. Estimates of each weather variable at the trap locations were obtained by interpolation of each variable from the 169 climate stations.

We initially considered mean daily air temperature, precipitation, cloud cover, relative air moisture content, wind speed, and sunshine duration. However, only temperature, precipitation and wind speed were retained for analysis, as the other variables were significantly correlated with the selected variables [R(temperature, cover) = −43.2%, R(temperature, sunshine) = 53.4%, R(precipitation, moisture) = −47.3%] and because we wanted to keep the number of covariates as low as possible. Additionally, we calculated the number of frost days and the sum of precipitation in the months November- February preceding a sampling season. We used spatio-temporal geostatistical models [39, 40] to predict daily values for each weather variable to each trap location. Amongst other methods, the geostatistical approach is considered a superior interpolation method in order to derive weather variables to trap locations [41]. Uncertainty in interpolated variables such as wind speed is usually associated with altitude differences. However, as our trap locations are all situated in lowland areas with little altitude variation, we do not expect a large error in our interpolations at trap locations.

We decomposed the daily values of each weather variable into a long-term average trend (between years), a mean seasonal trend, and a yearly seasonal anomaly component (S2 Fig), modeled using regression splines [42] while controlling for altitude of weather stations. The remaining residual daily values of each station were further modeled using a spatio-temporal covariance structure. For example, temperature T, on given day t, of a given year k at a given trap location s is modeled as:

$$T(t, s, k) = f_k(k) + f_t(t) + r(k, t) + a \quad h + C_{s,t} \tag{1}$$

where $f_k(k)$ is the long-term trend over the years (a thin plate regression spline), $f_t(t)$ the mean seasonal trend within years (a penalized cyclic cubic regression spline), $r(k, t)$ the mean residual seasonal component, which measures annual anomaly in mean daily values across selected stations, and a is the linear coefficient for the altitude h effect. The spatio-temporal covariance structure $C_{s,\,t}$, fitted independently to the residuals of each weather variable model, allowed us to deal with lack of independence between daily weather data within and between stations, as well as to interpolate to trap locations using kriging. Altitude of trap locations was extracted from a digital elevation models at 90m resolution [43].

Land use data. Land use variables (and changes therein) were derived from aerial photographs [44] taken within two distinct time periods (between 1989–1994, and between 2012–2015), and allowed us to characterize land use composition at surroundings of the traps, as well as changes over time. We distinguished cover of forests, agricultural areas, natural grassland, and surface water. For each trap location, aerial photographs were manually processed, polygons extracted and categorized, and their surface area calculated with a radius of 200 meter. Preliminary analysis of the relationship between log biomass and landuse variables, on a subset of the trap locations, indicated that land use elements at 200m radius better predicted insect biomass than elements at 500 and 1000m radius, similar to findings elsewhere for wild bees [45]. Land use variables were measured at a coarse temporal resolution, but fortunately cover the temporal span of insect sampling. To link the cover of a given land use variable to the insect biomass samples in a particular year, we interpolated coverage between the two time points to the year of insect sampling using generalized linear models with a binomial error distribution, a logit link, and an estimated dispersion parameter. Mean distributions of land use at each of the two time points are depicted in S3A & S3B Fig.

Habitat data. Plant inventories were conducted in the immediate surroundings (within 50m) of the trap, in the same season of insect sampling. These data permitted the assessment of plant species richness (numbers of herbs, shrubs and trees) and environmental conditions based on average Ellenberg values [46–48], as well as changes therein over time. Each Ellenberg indicator (we considered nitrogen, pH, light, temperature and moisture) was averaged over all species for each location-year combination. We examined annual trends in each of the above-mentioned variables in order to uncover potential structural changes in habitat characteristics over time. Species richness was analyzed using mixed-effects generalized linear models [49] with a random intercept for trap location and assuming a Poisson distribution for species richness, and a normal distribution for mean Ellenberg indicator values. Although a Poisson distribution fitted tree and shrub species adequately, (residual deviance/ degree of freedom = 0.94 and 1.04 respectively), severe overdispersion was found for herb species richness (residual deviance/ degree of freedom = 2.16). Trend coefficients of richness over time between a Poisson mixed effects model and a negative binomial model were comparable but differed in magnitude (Poisson GLMM: −0.034 (se = 0.003), vs NB GLMM −0.027 (se = 0.006)). Although the fit is not perfect in the case of herb richness, we believe our trend adequately describes direction of change over time. Mean changes in plant species richness are depicted in S3C Fig.

Insect biomass model

The temporal resolution of the trap samples (accumulated over several days) is not directly compatible with the temporal distribution of the weather data (daily values). Additionally, variable exposure intervals between trap samples is expected to induce variation in trapped biomass between samples, and hence induce heteroscedasticity. Furthermore, biomass data can numerically only be positive on the real line, and we require a model to reflect this property of

the data. Because of the unequal exposure intervals however, log-transforming the response would be inappropriate, because we require the sum of daily values after exponentiation, rather that the exponent of the sum of log-daily biomass values. In order to indirectly relate biomass to daily weather variables, to account for the variation in time exposure intervals over which biomass was accumulated in the samples, and to respect the non-negative nature of our data, we modeled the biomass of each catch as the sum of the expected (but unobserved) latent daily biomass. The mass m of each sample j, at site s in year k, is assumed to be distributed normally about the sum of the latent expected daily mass ($z_{t,\,s,\,k}$), with variance σ_j^2:

$$m_{j,s,k} \quad N(\mu_{j,s,k}, \sigma_j^2) \tag{2}$$

subject to $\mu_{j,s,k} = \sum_{t=\tau_1(j)}^{\tau_2(j)} z_{t,s,k}$ where τ_1 and τ_2 mark the exposure interval (in days) of biomass collection of each sample j. The latent daily biomass itself is represented by a log normal distribution, in which coefficients for covariates, random effects and residual variance are all represented on the log scale. In turn, daily biomass is modeled as

$$z_{t,s,k} = e^{y_{t,s,k}} \tag{3}$$

$$y_{t,s,k} = c + log(\lambda)k + \mathbf{X}\beta_x + u_s \tag{4}$$

where c is a global intercept, $\mathbf{X}$ a design matrix of dimensions n×p (number of samples × number of covariates; see Model analysis below), β_x the corresponding vector of coefficients that measure the weather, habitat and land use effects, and $log(\lambda)$ a mean annual population growth rate parameter. The random term (u_s) denotes the location-specific random effect assumed to be distributed normally about zero $u_s \quad N(0, \sigma_{site}^2)$. The exponentiation of the right hand side of Eq (3) ensures expected values to be positive.

The expected residual variance of each sample σ_j^2, is expressed as the sum of variances of daily biomass values ($\sigma_{t,s,k}^2$).

$$\sigma_j^2 = \sum_{t=\tau_1(j)}^{\tau_2(j)} \sigma_{t,s,k}^2 \tag{5}$$

The variances of daily biomass should respect the non-negative nature of the data as well. Additionally, we are interested in being able to compare the residual variance with the random effects variance, and this requires them to be on the same scale. Therefore, we expressed the variance of the daily biomass as a function of the variance of the logarithm of the daily biomass. Using the method of moments:

$$\sigma_{t,s,k}^2 = e^{2y_{t,s,k}+v}(e^v \quad 1) \tag{6}$$

where v represents the residual variance of daily log-biomass.

Analysis

We developed a series of models each consisting of a set of explanatory variables that measure aspects of climate, land use and local habitat characteristics. Significant explanatory variables in these models were combined into a final model, which was then reduced to exclude insignificant effects. An overview of which covariates were included in each model is given in Table 2.

Weather effects explored were daily temperature, precipitation and wind speed, as well as the number of frost days and sum of precipitation in the preceding winter. Habitat effects explored tree and herb species richness, as well as average Ellenberg values for nitrogen, pH,

Table 2. Overview of covariates included in each of the seven models. The year covariate yields the annual trend coefficient.

Covariate class	Covariate name	Null model	Basic	Weather	Habitat	Land use Interactions	Land use+	Final model
Temporal	Intercept	✓	✓	✓	✓	✓	✓	✓
	Day number	✓	✓	✓	✓	✓	✓	✓
	Day number^2	✓	✓	✓	✓	✓	✓	✓
	Year		✓	✓	✓	✓	✓	✓
Climate	Temperature			✓				✓
	Precipitation			✓				✓
	Wind Speed			✓				
	Frost days			✓				✓
	Winter Precipitation			✓				
Habitat	Herb Species				✓			✓
	Tree Species				✓			✓
	Nitrogen				✓			
	pH				✓			
	Moisture				✓			
	Light				✓			✓
	Ellen. Temperature				✓			✓
	Habitat cluster 2	✓	✓	✓	✓	✓	✓	
	Habitat cluster 3	✓	✓	✓	✓	✓	✓	
Landscape	Arable land					✓	✓	✓
	Grassland					✓	✓	✓
	Forest					✓	✓	✓
	Water					✓	✓	✓
Interactions	Year × Day number		✓	✓	✓	✓	✓	✓
	Year × Day number^2		✓	✓	✓	✓	✓	✓
	Year × Agriculture						✓	✓
	Year × Forest						✓	✓
	Year × Water						✓	
	Year × Grassland						✓	✓
Variance	σ_{site}	✓	✓	✓	✓	✓	✓	✓
	v	✓	✓	✓	✓	✓	✓	✓

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light, temperature and moisture, per location-year combination. Land use effects explored the fractions of agricultural area, forest, grass, and surface water in a radius of 200m around the plot location.

Parameter values are obtained by the use of Markov chain Monte Carlo (MCMC) methods by the aid of JAGS (Just Another Gibbs Sampler [50]) invoked through R [51] and the R2Jags package [52]. JAGS model scripts are given in S1 Code, while data are given in S1 and S2 Dataset. For each model, we ran 3 parallel chains each consisting of 24000 iterations (first 4000 discarded), and kept every 10^{th} value as a way to reduce within chain autocorrelation. We used vague priors for all parameters, with uniform distributions for the residual and random effect variance components, and flat normal distributions (with very high variance) for all other parameters. Covariates in $\mathbf{X}$ were standardized prior to model fitting, with the exception of year (values 1–26), and land use variables (proportions within 0–1 range).

For all models, we computed the Deviance Information Criterion [53] (DIC) as well as the squared correlation coefficient (R^2) between observed and mean posterior estimates of biomass on the log scale. Results are given in Table 3. Parameter convergence was assessed by the

Table 3. Results for 7 models ranked by Deviance Information Criterion (DIC). For each model, the number of parameters, the Deviance Information Criterion, the effective number of parameters (pD), calculated R^2 and difference in DIC units between each model and the model with lowest ΔDIC. See Table 2 for covariates included in each model.

model	npar	Deviance	DIC	pD	R^2	ΔDIC
Final	23	12082.48	12177.07	94.59	0.67	0.00
Weather	13	12178.84	12261.52	82.68	0.65	84.45
Land use+ Interactions	16	12336.22	12427.16	90.95	0.62	250.09
Habitat	15	12354.95	12445.93	90.98	0.62	268.86
Land use	12	12377.27	12453.23	75.97	0.61	276.16
Basic	8	12390.26	12465.08	74.82	0.61	288.00
Null	5	13230.65	13307.59	76.94	0.39	1130.52

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potential scale reduction factor [54] (commonly $\hat{R}$), that measures the ratio of posterior distributions between independent MCM chains (in all models, all parameters attained values below 1.02). For all models, we confirmed that the posterior distribution of the trend coefficient did not confound any other variable by plotting the relevant posterior samples and computing pairwise correlation coefficients.

Our basic model included habitat cluster (3 levels), a quadratic effect for day number, an annual trend coefficient measuring the rate of biomass change, and the interactions between the annual trend coefficient and the day number variables. Next we developed 3 models each consisting of either weather variables (S1 Table), land use variables (S2 Table), or habitat variables. Because interactions between the annual rate of change and land use variables seemed plausible, a fourth model was developed to include these interactions (S3 Table). Finally, all significant variables were combined into our final model (Table 4), which included effects of an annual trend coefficient, season (linear and quadratic effect of day number), weather (temperature, precipitation, number of frost days), land use (cover of grassland and water, as well as interaction between grassland cover and trend), and habitat (number of herb and tree species as well as Ellenberg temperature).

Our estimate of decline is based on our basic model, from which we can derive seasonal estimates of daily biomass for any given year. The basic model includes only a temporal (annual and seasonal effects, as well as interactions) and a basic habitat cluster distinction (additive effects only) as well as a random trap location effect. We here report the annual trend coefficient, as well as a weighted estimate of decline that accounts for the within season differences in biomass decline. The weighted insect biomass decline was estimated by projecting the seasonal biomass (1-April to 30-October) for years 1989 and 2016 using coefficients our basic model, and then dividing the summed (over the season) biomass of 2016 by the summed biomass over 1989.

Using our final model, we assessed the relative contribution (i.e. net effect) of the explanatory variables to the observed decline, both combined and independently. To this aim we projected the seasonal daily biomass for the years 1989 and 2016 twice: first we kept covariates at their mean values during the early stages of the study period, and second we allowed covariate values to change according to the observed mean changes (see S2 and S3 Figs). Difference in the total biomass decline between these two projections are interpreted as the relative contribution of the explanatory variables to the decline. The marginal (i.e. independent) effects of each covariate were calculated by projecting biomass increase/decline as result of the observed temporal developments in each variable separately, and expressing it as percentual change.

Our data provide repetitions across years for only a subset of locations (n = 26 out of 63). As such, spatial variation in insect biomass may confound the estimated trend. To verify that

Table 4. Posterior parameter estimates of the final mixed effects model of daily insect biomass. For each included variable, the corresponding coefficient mean, standard deviation and 95% credible intervals are given. P-values were calculated empirically based on posterior distributions of coefficients.

Class	Variable	mean	sd	2.50%	97.50%	P	
Temporal	Intercept	2.450	0.233	1.983	2.891	0.000	***
	log(λ)	-0.080	0.007	-0.094	-0.067	0.000	***
	Day number	-0.100	0.028	-0.155	-0.045	0.001	***
	Day number^2	-0.447	0.029	-0.504	-0.392	0.000	***
Weather	Temperature	0.304	0.022	0.263	0.347	0.000	***
	Precipitation	-0.071	0.034	-0.143	-0.009	0.014	*
	Frost days	-0.021	0.024	-0.067	0.025	0.194	
Land use	Habitat Cluster 2	0.420	0.162	0.080	0.729	0.007	**
	Habitat Cluster 3	0.332	0.237	-0.133	0.806	0.078	.
	Arable land	-1.063	0.184	-1.420	-0.709	0.000	***
	Forest	-0.522	0.216	-0.947	-0.121	0.007	**
	Grassland	0.819	0.233	0.367	1.265	0.000	***
	Water	-0.327	0.170	-0.659	0.005	0.027	*
Habitat	Herb species	-0.054	0.045	-0.137	0.037	0.119	
	Tree Species	0.104	0.032	0.041	0.167	0.000	***
	Ell. Nitrogen	0.181	0.065	0.051	0.311	0.003	**
	Ell. Light	0.162	0.039	0.088	0.236	0.000	***
	Ell. Temperature	-0.071	0.031	-0.131	-0.011	0.010	**
Intercations	Year × Day number	-0.003	0.001	-0.006	-0.000	0.017	*
	Year × Day number^2	0.010	0.001	0.007	0.013	0.000	***
	Year × Arable land	0.047	0.008	0.031	0.064	0.000	***
	Year × Forest	0.035	0.010	0.016	0.055	0.000	***
	Year × Grassland	-0.059	0.014	-0.086	-0.033	0.000	***
Random effects	σ_{site}	0.334	0.037	0.270	0.412		
Residual variation	v	0.870	0.009	0.852	0.889		

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this is not the case, we fitted our basic model (but excluding the day number and year interaction to avoid overparameterization) to the subset of our data that includes only locations that were sampled in more than one year. Seasonal profiles of daily biomass values are depicted in S4 Fig. Finally, we reran our basic model for the two (of the three) habitat clusters (for which sufficient data existed; see Biomass Data) separately in order to compare the rate of decline between them (S5 Fig).

Results

Following corrections for seasonal variation and habitat cluster (basic model, see Materials and methods), the annual trend coefficient of our basic model was significantly negative (annual trend coefficient = −0.063, sd = 0.002, i.e. 6.1% annual decline). Based on this result, we estimate that a major (up to 81.6% [79.7–83.4%]) decline in mid-summer aerial insect biomass has taken place since 1989 (Fig 2A). However, biomass loss was more prominent in mid-summer as compared to the start and end of the season (Fig 3A), indicating that the highest losses occur when biomass is highest during the season (Fig 2B). As such, a seasonally weighted estimate (covering the period 1-April to 30-October; see methods) results in an overall 76.7% [74.8–78.5%] decline over a 27 year period. The pattern of decline is very similar across locations that were sampled more than once (Fig 4), suggesting that the estimated temporal decline based on the entire dataset is not confounded by the sampling procedure. Re-estimation of the

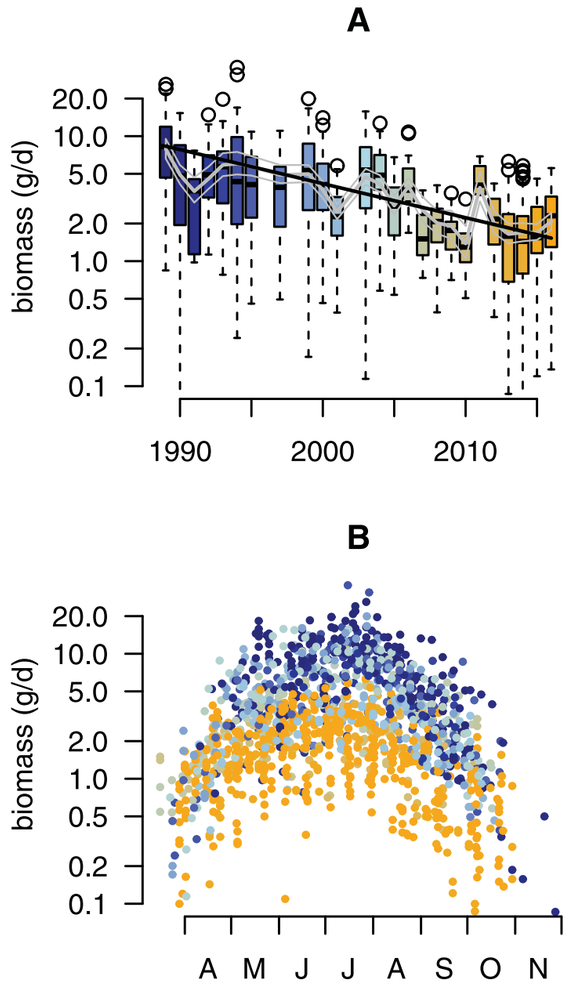

Fig 2. Temporal distribution of insect biomass. (A) Boxplots depict the distribution of insect biomass (gram per day) pooled over all traps and catches in each year (n = 1503). Based on our final model, the grey line depicts the fitted mean (+95% posterior credible intervals) taking into account weather, landscape and habitat effects. The black line depicts the mean estimated trend as estimated with our basic model. (B) Seasonal distribution of insect biomass showing that highest insect biomass catches in mid summer show most severe declines. Color gradient in both panels range from 1989 (blue) to 2016 (orange).

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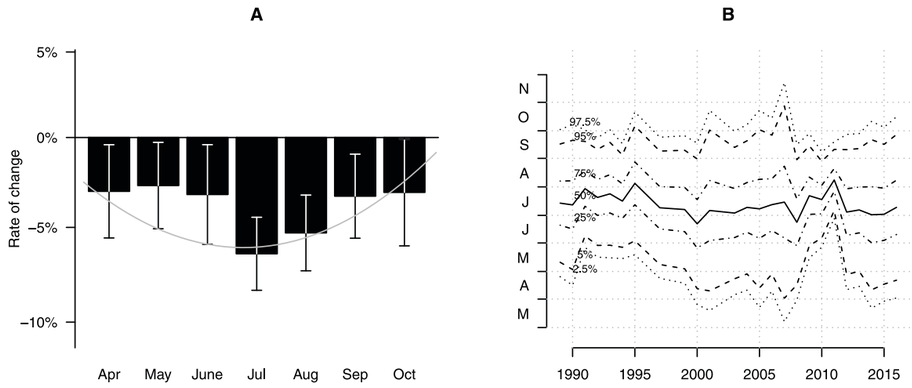

Fig 3. Seasonal decline and phenology. (A) Seasonal decline of mean daily insect biomass as estimated by independent month specific log-linear regressions (black bars), and our basic mixed effects model with interaction between annual rate of change and a quadratic trend for day number in season. (B), Seasonal phenology of insect biomass (seasonal quantiles of biomass at 5% intervals) across all locations revealing substantial annual variation in peak biomass (solid line) but no direction trend, suggesting no phenological changes have occurred with respect to temporal distribution of insect biomass.

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annual decline based on 26 locations that have been sampled in more than one year (S4 Fig), revealed a similar rate of decline (76.2%[73.9–78.3%]).

Insect biomass was positively related to temperature and negatively to precipitation (S1 Table). Including lagged effects of weather revealed no effect of either number of frost days, or winter precipitation, on the biomass in the next season (S1 Table). The overall model fit improved as compared to our basic model (R^2 = 65.4%, Table 3), explaining within and between year variation in insect biomass, but not the overall decline (log(λ) = −0.058, sd = 0.002). Over the course of the study period, some temporal changes occurred in the means of the weather variables (S2 Fig), most notably an increase by 0.5˚C in mean temperature and a decline 0.2 m/sec in mean wind speed. Yet, these changes either do not have an effect on insect biomass (e.g. wind speed) either are expected to positively affected insect biomass (e.g. increased temperature). Furthermore, a phenological shift with peak biomass earlier in the season could have resulted in lower biomass in the mid-season (Fig 3A), but this does not appear to be the case as none of the seasonal distribution quantiles in biomass showed any temporal trend (Fig 3B).

There was substantial variation in trapped insect biomass between habitat clusters (see Materials and methods), with nutrient-rich grasslands, margins and wasteland containing 43% more insect biomass than nutrient-poor heathland, sandy grassland, and dunes. Yet, the annual rate of decline was similar, suggesting that the decline is not specific to certain habitat types (S5 Fig). To further characterize trap locations, we used past (1989–1994) and present (2012–2015) aerial photographs and quantified land use cover within 200m around the trap locations. On average, cover of arable land decreased, coverage of forests increased, while grassland and surface water did not change much in extent over the last three decades (S3 Fig). Overall, adding land use variables alone did not lead to a substantial improvement of the model fit (R^2 = 61.3%, Table 3), nor did it affect the annual trend coefficient (log(λ) = −0.064, sd = 0.002). While presence of surface water appeared to significantly lower insect biomass, none of the other variables were significantly related to biomass. However, including interactions between the annual trend coefficient and land use variables increased the model fit

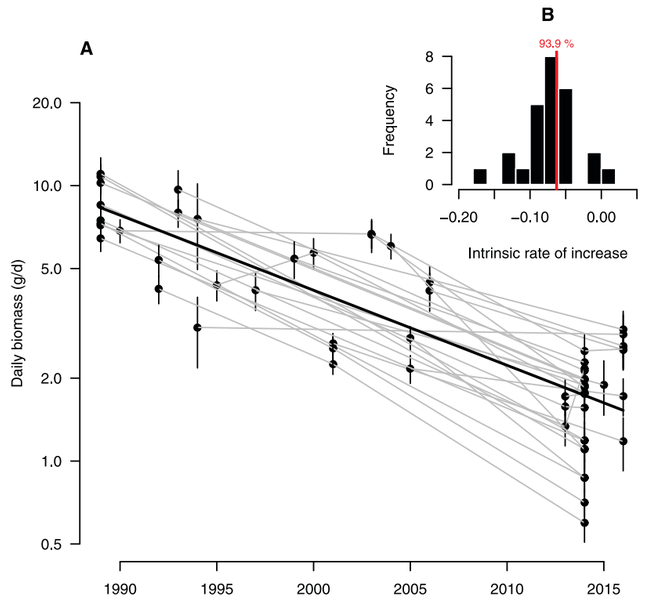

Fig 4. Temporal distribution of insect biomass at selected locations. (A) Daily biomass (mean ±1 se) across 26 locations sampled in multiple years (see S4 Fig for seasonal distributions). (B) Distribution of mean annual rate of decline as estimated based on plot specific log-linear models (annual trend coefficient = −0.053, sd = 0.002, i.e. 5.2% annual decline).

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slightly (Table 3), and revealed significant interactions for all variables except coverage of surface water (S2 Table). These interactions, which were retained in our final model (Table 4), revealed higher rates of decline where coverage of grassland was higher, while lower declines where forest and arable land coverage was higher.

We hypothesized that successional changes in plant community [55] or changes in environmental conditions [9, 18], could have affected the local insect biomass, and hence explain the decline. Plant species inventories that were carried out in the immediate vicinity of the traps and in the same season of trapping, revealed that species richness of trees, shrubs and herbs declined significantly over the course of the study period (S3 Fig). Including species richness in our basic model, i.e. number of tree species and log number of herb species, revealed significant positive and negative effects respectively on insect biomass, but did not affect the annual trend coefficient (S3 Table), explaining some variation between locations rather than the annual trend coefficient. Moreover, and contrary to expectation, trends in herb species richness were weakly negatively correlated with trends in insect biomass, when compared on per plot basis for plots sampled more than once. Ellenberg values of plant species provide a reliable indicator for the environmental conditions such as pH, nitrogen, and moisture [46, 47]. Around trap locations, mean indicators (across all locations) were stable over time, with changes in the order of less than 2% over the course of the study period. Adding these variables to our basic model revealed a significant positive effect of nitrogen and light, and a significant

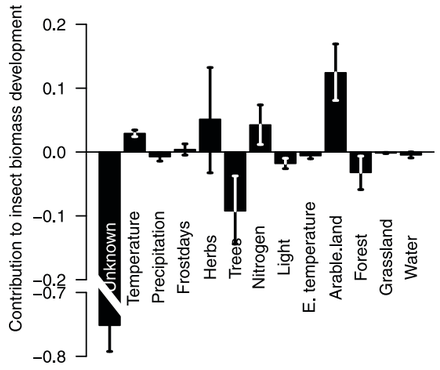

Fig 5. Marginal effects of temporal changes in considered covariates on insect biomass. Each bar represents the rate of change in total insect biomass, as the combined effect of the relevant coefficient (Table 4) and the temporal development of each covariate independently (S2 and S3 Figs).

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negative effect of Ellenberg temperature on insect biomass, explaining a major part of the variation between the habitat types. However, Ellenberg values did not affect the insect biomass trend coefficient ($\log(\lambda) = -0.059$, sd = 0.003, S3 Table) and only marginally improved the model fit ($R^2 = 61.9\%$, Table 3). All habitat variables were considered in our final model (Table 4), with the exception of of pH and moisture.

Our final model, based on including all significant variables from previous models, revealed a higher trend coefficient as compared to our basic model ($\log(\lambda) = -0.081$, sd = 0.006, Table 4), suggesting that temporal developments in the considered explanatory variables counteracted biomass decline to some degree, leading to an even more negative coefficient for the annual trend. The marginal net effect of changes in each covariate over time (see Analysis), showed a positive contribution to biomass growth rate of temporal developments in arable land, herb species richness, and Ellenberg Nitrogen, while negative effects of developments of tree species richness and forest coverage (Fig 5). For example, the negative effect of arable land on biomass (Table 4), in combination with a decrease in coverage of arable land (S3 Fig), have resulted in a net positive effect for biomass (Fig 5). Projections of our final model, while fixing the coefficient for the temporal annual trend $\log(\lambda)$ to zero, suggest insect biomass would have remained stable, or even increased by approximately 8% (mean rate = 1.075, 0.849–1.381) over the course of the study period.

Discussion

Our results document a dramatic decline in average airborne insect biomass of 76% (up to 82% in midsummer) in just 27 years for protected nature areas in Germany. This considerably exceeds the estimated decline of 58% in global abundance of wild vertebrates over a 42-year period to 2012 [56, 57]. Our results demonstrate that recently reported declines in several taxa such as butterflies [7, 25–27, 58], wild bees [8–14] and moths [15–18], are in parallel with a severe loss of total aerial insect biomass, suggesting that it is not only the vulnerable species, but the flying insect community as a whole, that has been decimated over the last few decades. The estimated decline is considerably more severe than the only comparable long term study on flying insect biomass elsewhere [28]. In that study, 12.2m high suction traps were deployed

at four locations in the UK over the time period 1973–2002, and showed a biomass decline at one of the four sites only. However, the sampling designs differ considerably between the two studies. Suction traps mainly target high-flying insects, and in that study the catches were largely comprised of flies belonging to the Bibionidae family. Contrary, malaise traps as used in the present study target insects flying close to the ground surface (up to 1 meter), with a much wider diversity of taxa. Future investigations should look into how biomass is distributed among insect species, and how species trends contribute to the biomass decline.

Although the present dataset spans a relatively large number of years (27) and sites (63), the number of repetitions (i.e. multiple years of seasonal distributions at the same locations) was lower (n = 26). We are however confident that our estimated rate of decline in total biomass resembles the true rate of decline, and is not an artifact of site selection. Firstly, our basic model (including an annual rate of decline) outperformed the null-model (without an annual rate of decline; ΔDIC = 822.62 units; Table 3), while at the same time, between-plot variation (i.s. σ_{site}) and residual variation (v) decreased by 44.3 and 9.7% respectively, after incorporating an annual rate of decline into the models. Secondly, using only data from sites at which malaise traps were operating in at least two years, we estimated a rate of decline similar to using the full dataset (Fig 4), with the pattern of decline being congruent across locations (S4 Fig). Taken together, there does not seem to be evidence that spatial variation (between sites) in this dataset forms a confounding factor to the estimated temporal trend, and conclude that our estimated biomass decline is representative for lowland protected areas in west Germany.

In light of previously suggested driving mechanisms, our analysis renders two of the prime suspects, i.e. landscape [9, 18, 20] and climate change [15, 18, 21, 37], as unlikely explanatory factors for this major decline in aerial insect biomass in the investigated protected areas. Habitat change was evaluated in terms of changes in plant species composition surrounding the standardized trap locations, and in plant species characteristics (Ellenberg values). Land use changes was evaluated in terms of proportional surface changes in aerial photographs, and not for example changes in management regimes. Given the major decline in insect biomass of about 80%, much stronger relationships would have been expected if changes in habitat and land use were the driving forces, even with the somewhat crude parameters that were at our disposal.

The decline in insect biomass, being evident throughout the growing season, and irrespective of habitat type or landscape configuration, suggests large-scale factors must be involved. While some temporal changes in climatic variables in our study area have taken place, these either were not of influence (e.g. wind speed), or changed in a manner that should have increased insect biomass (e.g temperature). However, we have not exhaustively analysed the full range of climatic variables that could potentially impact insect biomass. For example prolonged droughts, or lack of sunshine especially in low temperatures might have had an effect on insect biomass [59–62]. Agricultural intensification [17, 20] (e.g. pesticide usage, year-round tillage, increased use of fertilizers and frequency of agronomic measures) that we could not incorporate in our analyses, may form a plausible cause. The reserves in which the traps were placed are of limited size in this typical fragmented West-European landscape, and almost all locations (94%) are enclosed by agricultural fields. Part of the explanation could therefore be that the protected areas (serving as insect sources) are affected and drained by the agricultural fields in the broader surroundings (serving as sinks or even as ecological traps) [1, 63–65]. Increased agricultural intensification may have aggravated this reduction in insect abundance in the protected areas over the last few decades. Whatever the causal factors responsible for the decline, they have a far more devastating effect on total insect biomass than has been appreciated previously.

The widespread insect biomass decline is alarming, ever more so as all traps were placed in protected areas that are meant to preserve ecosystem functions and biodiversity. While the

gradual decline of rare insect species has been known for quite some time (e.g. specialized butterflies [9, 66]), our results illustrate an ongoing and rapid decline in total amount of airborne insects active in space and time. Agricultural intensification, including the disappearance of field margins and new crop protection methods has been associated with an overall decline of biodiversity in plants, insects, birds and other species in the current landscape [20, 27, 67]. The major and hitherto unrecognized loss of insect biomass that we report here for protected areas, adds a new dimension to this discussion, because it must have cascading effects across trophic levels and numerous other ecosystem effects. There is an urgent need to uncover the causes of this decline, its geographical extent, and to understand the ramifications of the decline for ecosystems and ecosystem services.

Supporting information

S1 Appendix. Malaise trap permissions.
(PDF)

S2 Appendix. Malaise traps.
(PDF)

S1 Code.
(PDF)

S1 Dataset.
(CSV)

S2 Dataset.
(CSV)

S1 Fig. Map of study area. Insect trap locations (yellow points) in Nordrhein-Westfalen (n = 57), Rheinland-Pfalz (n = 1) and Brandenburg (n = 5), as well as weather stations (crosses) used in the present analysis.
(TIFF)

S2 Fig. Temporal variation in weather variables. Annual means (A-C), daily means (D-F), and mean daily residual values (G-I) of temperature, precipitation and wind speed respectively. In all panels, black lines depict data while blue and red lines represent long term and seasonal fitted means of the variables, respectively.
(PDF)

S3 Fig. Land use and plant species richness changes. Mean land use in 1989–1994 (A) and 2012–2014 (B), based on aerial photograph analysis at 63 protected areas show a decrease of arable land and an increase in forested area over the past 25 years. (C) Changes in plants species richness for herbs (black) shrubs (red) and trees (blue). Annual means as well as mean trends are depicted in the corresponding colors. Linear trends are based on generalized linear mixed effects models with a Poisson error distribution and a random intercept effect for location. Note, zero values for tree and shrub species not depicted.
(PDF)

S4 Fig. Seasonal profiles of daily biomass across 26 locations. For each location, different colors represent different years, with time color-coded from green (1989) to red (2016). X-axis represents day number (January 1 = 0).
(PDF)

S5 Fig. Daily biomass of insects over time for two habitat clusters. Boxplots depict the distribution of insect biomass pooled over all traps and catches in each year at trap locations in nutrient-poor heathland, sandy grassland, and dunes (A), and in nutrient-rich grasslands, margins and wasteland (B). Grey lines depict the fitted mean (+95% posterior credible intervals), while the black lines the mean estimated trend. Estimated annual decline amounts to 7.5%(6.6–8.4) for habitat cluster 1, as compared to 5.2% (4.8–5.5) habitat cluster 2. Models fitted independently for each habitat location. Color gradient in all panels range from 1989 (blue) to 2016 (orange).
(PDF)

S1 Table. Posterior parameter estimates of the mixed effects model including weather variables. For each included variable, the corresponding coefficient posterior mean, standard deviation and 95% credible intervals are given. P-values are calculated empirically based on posterior distributions of coefficients.
(PDF)

S2 Table. Posterior parameter estimates of the mixed effects model including land use variables and interactions. For each included variable, the corresponding coefficient posterior mean, standard deviation and 95% credible intervals are given. P-values are calculated empirically based on posterior distributions of coefficients.
(PDF)

S3 Table. Posterior parameter estimates of the mixed effects model including habitat variables. For each included variable, the corresponding coefficient posterior mean, standard deviation and 95% credible intervals are given. P-values are calculated empirically based on posterior distributions of coefficients.
(PDF)

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S1 Appendix. Malaise trap permissions According to the German laws and regulations, permissions are necessary in order to perform investigations with malaise traps, at all locations. Permissions for investigations outside as well as within protected areas for the investigations were given by the following authorities (Höheren & Unteren Landschaftsbehörden). These permits include cover both the entry into protected areas, as well as the trapping of species that have a protected status pursuant to German law (Bundesartenschutzverordnung (BArtSchV)) and Bundesnaturschutzgesetz (BNatSchG)).

Authorities issuing the permissions for the investigations are listed below (location abbreviations in brackets).

- Struktur und Genehmigungsdirektion Nord (SGD), Rheinland-Pfalz (POM1)
- Landesamt für Umwelt (LfU), Brandenburg, Biologische Station Beeskow (BKL1, GRI1, LAN1)
- Untere Landschaftsbehörde, Kreis Kleve (SCH1)
- Untere Landschaftsbehörde, Kreis Viersen (BRA1-4, RAH1-2)
- Untere Landschaftsbehörde, Kreis Wesel (BIR1, BIS1-10, HUK1, KAN1-2, LOO1, PLI1-2, SLL1, XAN1-2)
- Untere Landschaftsbehörde, Kreis Mettmann (PIM1)
- Untere Landschaftsbehörde,Kreis Düren (SOL1-2)
- Untere Landschaftsbehörde, Stadt D"usseldorf (URD1-2)
- Untere Landschaftsbehörde, Stadt Köln (WAN1)
- Untere Landschaftsbehörde, Stadt Krefeld (BOO1, CAR1, GEO1, NIE1, ORB1-2, SPE1)
- Untere Landschaftsbehörde, Oberbergischer Kreis (LIN1-2)
- Untere Landschaftsbehörde, Rhein Kreis Neuss (SPE2)
- Untere Landschaftsbehörde, Rhein-Sieg-Kreis (WAH1-6, WAN3-4)

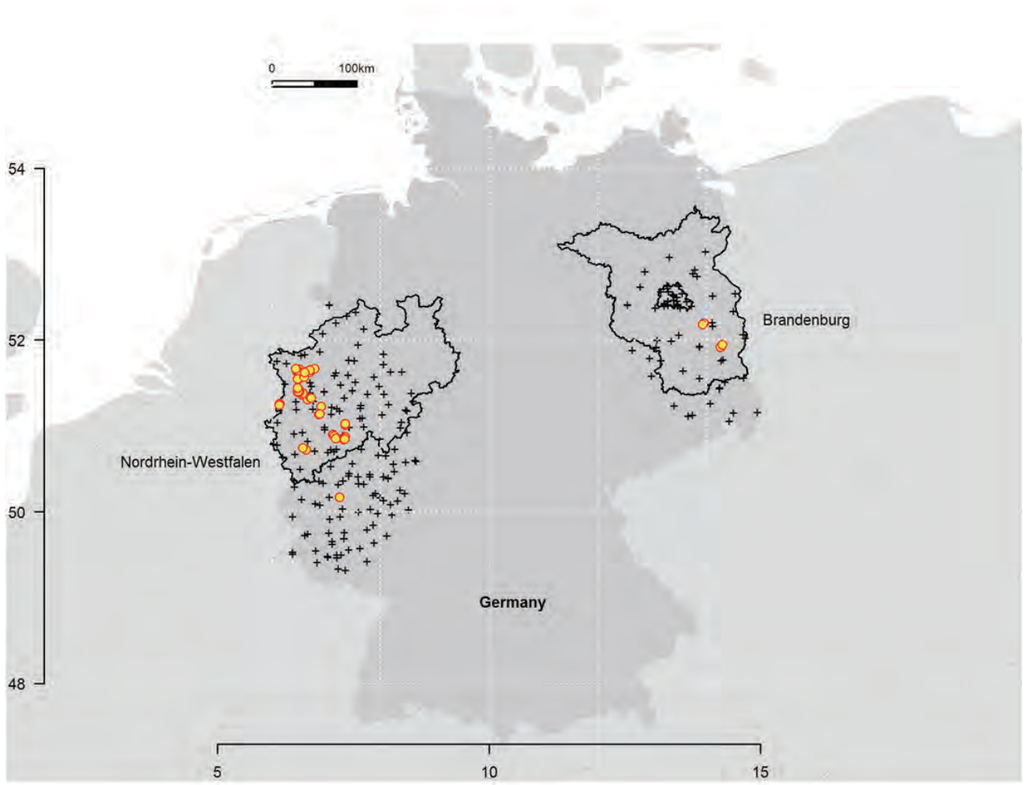
S2 Appendix. Malaise traps. In this appendix we give more details about the malaise traps, collecting design, and accompanying methods of biomass measurement as designed and applied by the Entomological Society Krefeld. These are also described in German publications [29-31].

The traps used for our research were identically built by the Entomological Society Krefeld itself. Since 1982 the Entomological Society Krefeld has produced malaise traps on the basis of a single cut pattern. This cut pattern is preserved in the archive of the Entomological Society Krefeld and has served as a template for the construction of all traps used in this research. Likewise, the connections of the trap with the bottle in which insects were collected were always constructed in exactly the same way based on reproductions of an template produced in 1982. These self-constructed and identical traps were very similar to the bi-coloured Malaise traps first described by Townes (1972) [32]. All aspects of the sampling was therefore standardized: trap construction, size and design (see figures below), colour, netting and stainless steel connections with the collection bottles.

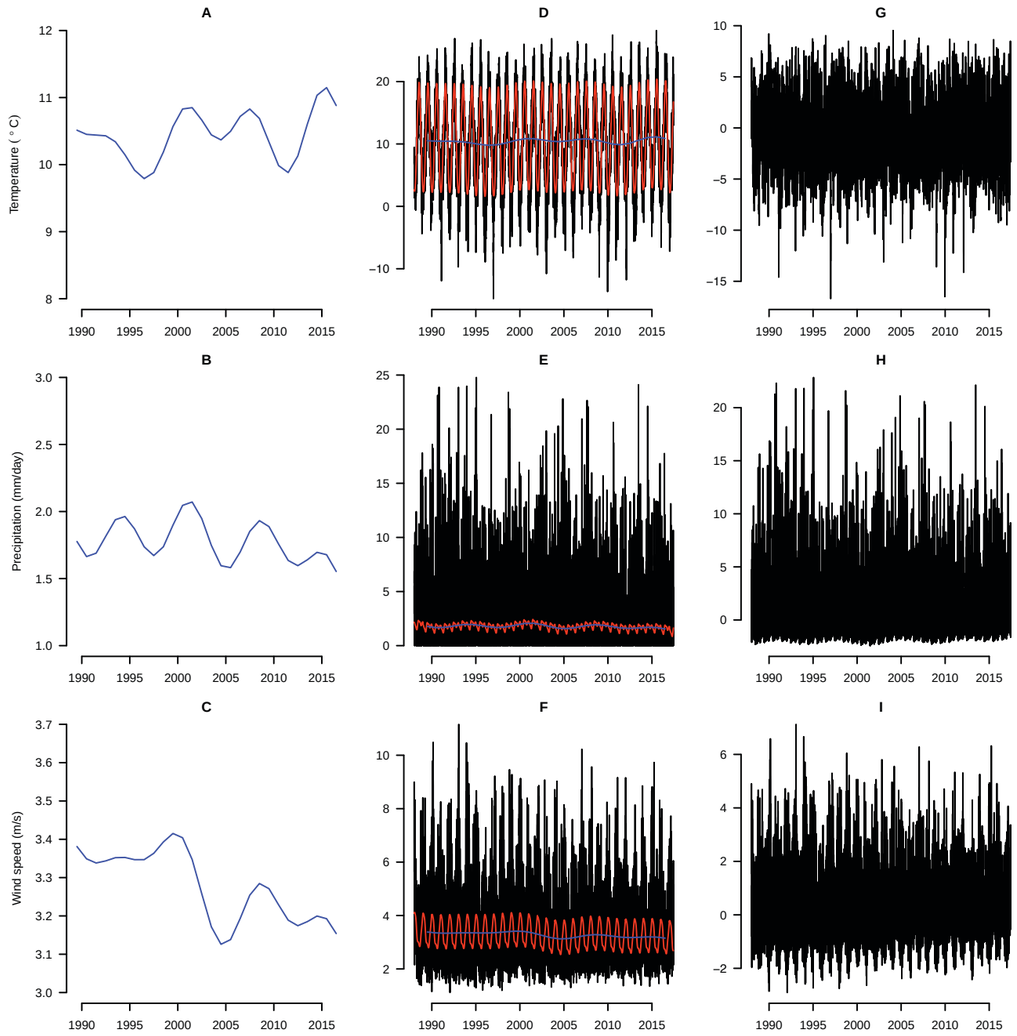
The traps were also applied using a fixed sampling design. Each trap was placed in such a way that there was no shadow on the roof of the trap in order not to influence the sampling. The catch head was aligned to the south by using of a compass to make sure that the entry of the insects into the traps was always from the east and west. At the four corners, wooden poles were placed to adjust the height of the trap and thus the active catch area to the set standard. In all cases, the trap was tightly connected to the ground to ensure that no insects could slip between the ground and the netting.

In summary, the standardization of the sampling design were undertaken with the idea of quantitative analyses of flying insect biomass across years and sites in protected areas.

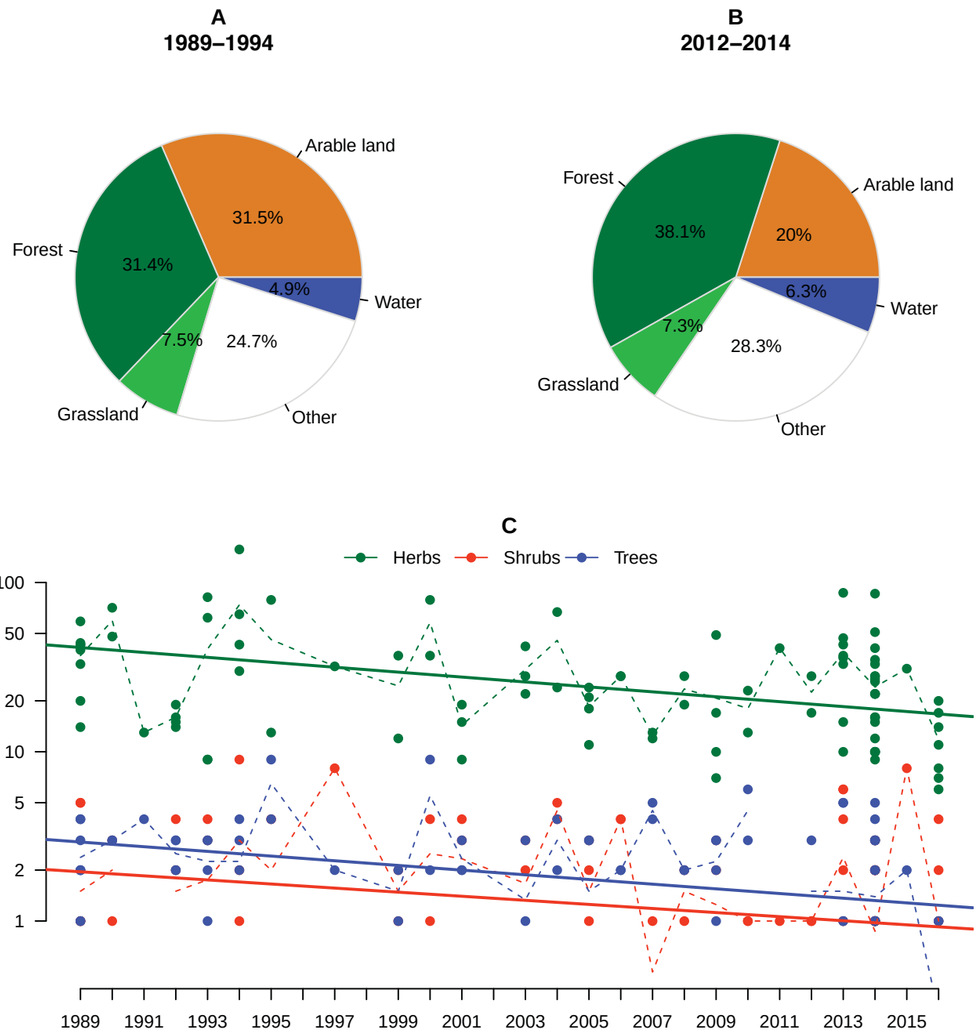
S1 Fig. Map of study area. Insect trap locations (yellow points) in Nordrhein-Westfalen (n = 57), Rheinland-Pfalz (n = 1) and Brandenburg (n = 5), as well as weather stations (crosses) used in the present analysis.



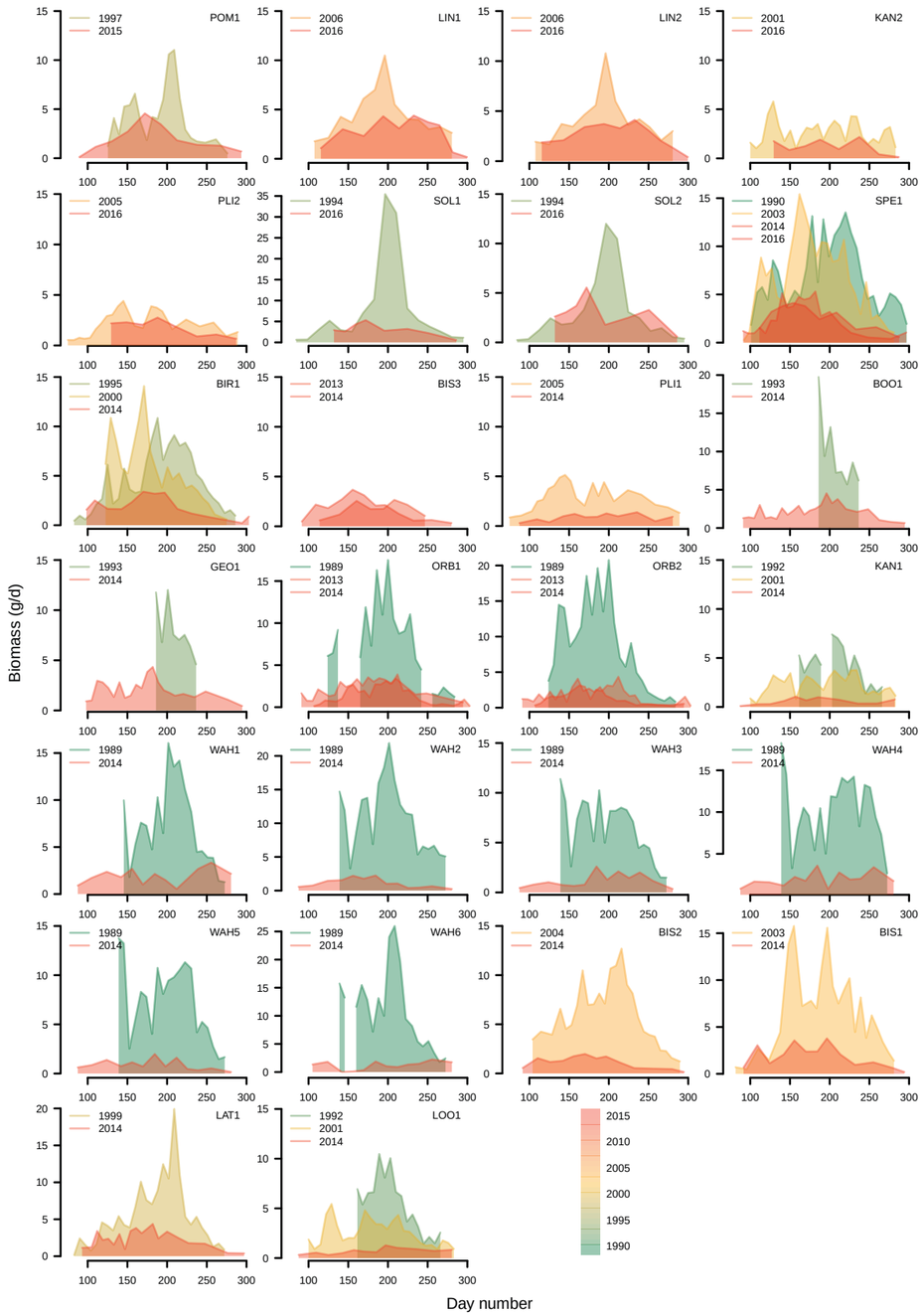
S2 Fig. Temporal variation in weather variables. Annual means (A-C), daily means (D-F), and mean daily residual values (G-I) of temperature, precipitation and wind speed respectively. In all panels, black lines depict data while blue and red lines represent long term and seasonal fitted means of the variables, respectively.



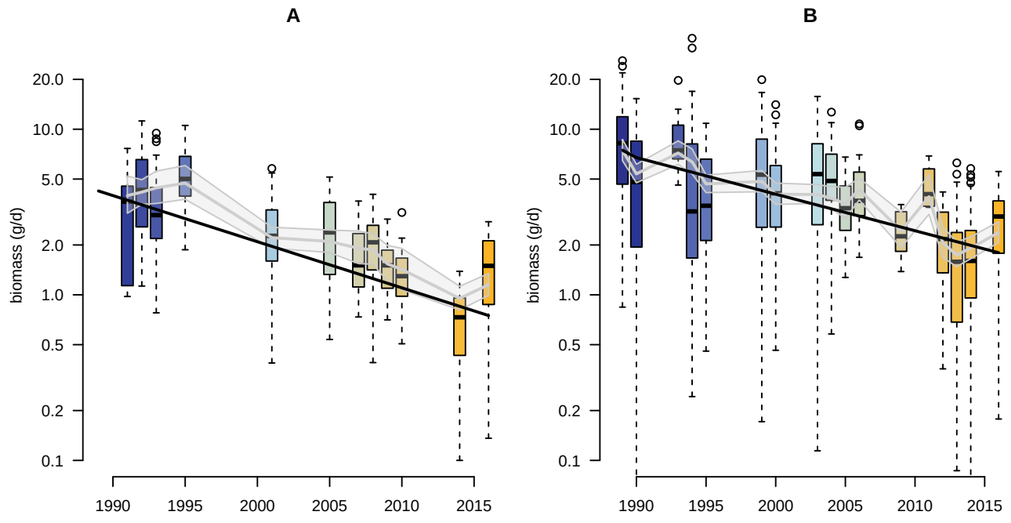
S3 Fig. Land use and plant species richness changes. Mean land use in 1989±1994 (A) and 2012±2014 (B), based on aerial photograph analysis at 63 protected areas show a decrease of arable land and an increase in forested area over the past 25 years. (C) Changes in plants species richness for herbs (black) shrubs (red) and trees (blue). Annual means as well as mean trends are depicted in the corresponding colors. Linear trends are based on generalized linear mixed effects models with a Poisson error distribution and a random intercept effect for location. Note, zero values for tree and shrub species not depicted.



S4 Fig. Seasonal profiles of daily biomass across 26 locations. For each location, different colors represent different years, with time color-coded from green (1989) to red (2016). X-axis represents day number (January 1 = 0).



S5 Fig. Daily biomass of insects over time for two habitat clusters. Boxplots depict the distribution of insect biomass pooled over all traps and catches in each year at trap locations in nutrient-poor heathland, sandy grassland, and dunes (A), and in nutrient-rich grasslands, margins and wasteland (B). Grey lines depict the fitted mean (+95% posterior credible intervals), while the black lines the mean estimated trend. Estimated annual decline amounts to 7.5%(6.6±8.4) for habitat cluster 1, as compared to 5.2% (4.8±5.5) habitat cluster 2. Models fitted independently for each habitat location. Color gradient in all panels range from 1989 (blue) to 2016 (orange).



S1 Table. Posterior parameter estimates of the mixed effects model including weather variables. For each included variable, the corresponding coefficient posterior mean, standard deviation and 95% credible intervals are given. P-values are calculated empirically based on posterior distributions of coefficients.

Variable	mean	sd	2.50%	97.50%	P	
Intercept	1.947	0.086	1.772	2.112	<0.001	***
log(λ)	-0.058	0.002	-0.062	-0.054	<0.001	***
Day number	-0.127	0.029	-0.185	-0.069	<0.001	***
Day number^2	-0.437	0.030	-0.495	-0.378	<0.001	***
Temperature	0.298	0.023	0.251	0.343	<0.001	***
Precipitation	-0.062	0.034	-0.134	0.002	0.030	*
Wind speed	0.005	0.026	-0.046	0.057	0.418	
Frost days	-0.003	0.019	-0.041	0.034	0.430	
Winter Precipitation	0.025	0.019	-0.012	0.062	0.096	.
Habitat Cluster 2	0.298	0.090	0.117	0.479	0.001	***
Habitat Cluster 3	0.264	0.199	-0.121	0.649	0.091	.
Year × Day number	-0.001	0.001	-0.004	0.002	0.202	
Year × Day number^2	0.009	0.001	0.007	0.012	<0.001	***
σ_{site}	0.294	0.032	0.238	0.365		
v	0.884	0.009	0.866	0.902		

S2 Table. Posterior parameter estimates of the mixed effects model including land use variables and interactions. For each included variable, the corresponding coefficient posterior mean, standard deviation and 95% credible intervals are given. P-values are calculated empirically based on posterior distributions of coefficients.

Variable	mean	sd	2.50%	97.50%	P	
Intercept	2.551	0.146	2.248	2.832	<0.001	***
Year	-0.084	0.007	-0.098	-0.068	<0.001	***
Day number	-0.125	0.030	-0.183	-0.066	<0.001	***
Day number^2	-0.631	0.026	-0.681	-0.578	<0.001	***
Arable land	-0.848	0.191	-1.212	-0.467	<0.001	***
Forest	-0.529	0.204	-0.923	-0.125	0.006	**
Grassland	0.809	0.235	0.344	1.267	<0.001	***
Water	-0.475	0.212	-0.890	-0.067	0.011	*
Habitat Cluster 2	0.449	0.102	0.246	0.651	<0.001	***
Habitat Cluster 3	0.415	0.212	-0.005	0.838	0.026	*
Year × Day number	0.001	0.001	-0.002	0.004	0.215	
Year × Day number^2	0.011	0.001	0.009	0.014	<0.001	***
Year × Arable land	0.040	0.009	0.022	0.057	<0.001	***
Year × Forest	0.030	0.011	0.007	0.050	0.005	**
Year × Grassland	-0.062	0.014	-0.090	-0.033	<0.001	***
Year × Water	0.004	0.014	-0.024	0.032	0.399	
σ_{site}	0.306	0.035	0.245	0.380		
v	0.905	0.009	0.888	0.923		

S3 Table. Posterior parameter estimates of the mixed effects model including habitat variables. For each included variable, the corresponding coefficient posterior mean, standard deviation and 95% credible intervals are given. P-values are calculated empirically based on posterior distributions of coefficients.

Variable	mean	sd	2.50%	97.50%	P	
Intercept	2.385	0.188	1.999	2.768	<0.001	***
Year	-0.059	0.003	-0.065	-0.054	<0.001	***
Day number	-0.107	0.030	-0.167	-0.048	<0.001	***
Day number^2	-0.633	0.025	-0.681	-0.583	<0.001	***
Herb species	-0.087	0.049	-0.181	0.009	0.036	*
Tree species	0.105	0.033	0.043	0.170	0.001	***
Nitrogen	0.234	0.071	0.101	0.375	<0.001	***
pH	-0.051	0.061	-0.173	0.066	0.203	
Moisture	0.039	0.051	-0.061	0.139	0.220	
Light	0.185	0.041	0.106	0.267	<0.001	***
Ell. Temperature	-0.071	0.029	-0.128	-0.013	0.007	**
Habitat Cluster 2	0.350	0.159	0.036	0.654	0.014	*
Habitat Cluster 3	0.291	0.248	-0.203	0.781	0.120	
Year × Day number	0.001	0.002	-0.002	0.004	0.325	
Year × Day number^2	0.012	0.001	0.009	0.014	<0.001	***
σ_{site}	0.315	0.036	0.251	0.395		
v	0.909	0.009	0.891	0.927		

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Praktische Hinweise und Empfehlungen zur Anwendung von Malaisefallen für Insekten in der Biodiversitätserfassung und im Monitoring

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Kurzfassung

Malaisefallen sind die beste derzeit bekannte Methode zur Erfassung eines breiten Artenspektrums flugfähiger Insekten und sie kommen daher u.a. in Biodiversitätsprojekten und im Insekten-Monitoring zum Einsatz. Im vorliegenden Beitrag wird der aktuelle Kenntnisstand zu den Einsatzgebieten, zur Funktionsweise und zum erfassten Artenspektrum aus den Erfahrungen großer Forschungsprojekte zusammengetragen. Für die Anwendung werden praktische Hinweise zur Standardisierung der Fallen, zum Aufbau, zur Dokumentation der Fallenstandorte, zur Probenaufbewahrung und zu den wichtigsten ersten Auswertungsschritten von der Biomassebestimmung über die Vorsortierung bis zur Determination inkl. der Möglichkeiten modernder DNA-Methoden gegeben.

Abstract

Malaise traps are the best method currently known for the detection of a broad spectrum of flying insects and are therefore used in biodiversity projects and insect monitoring, among others. In this article, the current state of knowledge on the fields of application, the mode of operation and the spectrum of species covered is compiled from the experiences of large research projects. For the application practical hints are given for the standardization of the traps, for the construction, for the documentation of the trap locations, for the sample storage and for the most important first analysis from the biomass measurements over the pre-sorting up to the determination including the possibilities of modern DNA methods.

Einleitung & Einsatzgebiete von Malaisefallen

Der Einsatz von Malaisefallen (vgl. Abb. 1) ist nicht neu und wurde bereits für zahlreiche wissenschaftliche Untersuchungen weltweit angewendet. Darunter sind auch viele große Projekte wie z. B. das schwedische Projekt STI (Swedish Taxonomy Initiative), ein faunistisches Grundinventar des Landes, in dem inzwischen ca. 1.900 Arten erstmalig für Schweden dokumentiert und ca. 600 Arten als neu für die Wissenschaft erkannt worden sind (Ronquist 2010), verschiedene ATBI-Projekte (All Taxa Biodiversity Inventories, (Ssymank & Doczkal 2017, Eymann et al. 2010, Daugeron et al. 2015a, b, Edit (o. Jahr), DLIA (o. Jahr), Ziegler 2008, 2016) oder die Materialbeschaffung zum Aufbau der DNA-Barcode Bibliotheken Deutschlands (GBOL) (Geiger et al. 2016; https://www.bolgermany.de/) sowie des Barcoding Fauna Bavarica (BFB) (http://barcoding-zsm.de/).

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Abbildung 1. Malaisefalle im NSG/FFH Gebiet Egelsberg bei Krefeld, Natura 2000-Gebiet Nr. DE-4605-302 (© M. Sorg/EVK).

Dabei werden aber immer wieder neue Fallentypen mit abweichender Bauart verwendet und die Methodik ist v. a. für Monitoringprojekte erstaunlich wenig standardisiert. Dies betrifft auch die Art des Aufbaus im Gelände sowie die notwendige Erhebung von Begleitdaten.

Die Insekten stellen mit rund drei Viertel aller bekannten mehrzelligen Tierarten Deutschlands den größten Teil der

Artendiversität aller terrestrischen Ökosysteme. Mehr als 90% der über 33.000 einheimischen Arten der Insekten sind flugaktiv - für diese – und vor allem für die bei uns artenreichsten Insektenordnungen der Zweiflügler (Diptera) mit ca. 9.600 Arten (Schumann 2010, und einige seither neu gemeldete Arten) und der Hautflügler (Hymenoptera) mit ca. 9.600 Arten (Dathe & Blank 2004), mit Einschränkungen auch für viele andere Gruppen z. B. der Käfer (ca. 6.600 Arten (Köhler 2011)) sind Malaisefallen eine ausgesprochen effiziente Fangmethode. Insekten sind wesentliche Träger von Ökosystemfunktionen (Blütenbestäubung, Bodenbildung, Zersetzung von pflanzlichen und tierischen Substraten, Samentransport, regulatorische Funktionen von Predatoren und Parasitoiden u.a.) und bilden das Fundament essentieller Nahrungsnetze bis hin zu insektenfressenden Vögeln, Fledermäusen und anderen Säugetieren.

Abbildung 2. Die erst kürzlich neu entdeckte Trauermückenart *Ctenosciara alexanderkoenigi* Heller & Rulik, 2016 (Diptera: Sciaridae) aus Malaisefallenfängen. [Creative Commons Lizenzvertrag : Zoologisches Forschungsmuseum Alexander Koenig / GBOL. Dieses Werk ist lizenziert unter einer Creative Commons Namensnennung - Weitergabe unter gleichen Bedingungen 4.0 International Lizenz]

Wissenschaftliche Untersuchungen, die Roten Listen gefährdeter Arten (z. B. Binot-Hafke et al. 2013, Grutke et al. 2016), sowie Berichte aus den Bundesländern, des Bundesamtes für Naturschutz und der Europäischen Umweltagentur liefern schon seit mehreren Jahren exemplarische Belege für einen starken Rückgang von Insektenpopulationen und der Biodiversität in Mitteleuropa (BfN 2015, EEA 2013, Wenzel et al. 2006). Großräumige Bestäuberrückgänge gaben schon genügend Anlass zur Sorge (IBPES 2016, Biesmejier 2006). Hinzu kamen jüngst die Erkenntnisse des Entomologischen Vereins Krefelds (EVK) (Sorg et al. 2013, Hallmann et al. 2017), die verstärkt massive Rückgänge von Insekten selbst innerhalb von Schutzgebieten belegen konnten. Dies hat dazu geführt, dass inzwischen in vielen Bundesländern ein standardisiertes Insektenmonitoring eingeführt werden soll und entsprechende Forderungen auch auf politscher Ebene erhoben werden.

Die Auswahl der Fallenstandorte muss entsprechend der Zielsetzung der jeweiligen Untersuchung getroffen werden, so sollten z. B.

- für faunistische Erfassungen, Schutzgebietsinventare und –monitoring, ATBI-Projekte oder Analysen von Habitat-/ Biotoppräferenzen eine möglichst breite Abdeckung des regional/ lokal vorhandenen Biotopspektrums vorliegen
- für Erfassungen zur Veränderungen der Biodiversität durch Klimawandel z. B. Höhengradienten, Wanderwege, Gebiete mit besonders warmem und besonders kaltem Lokalklima berücksichtigt werden (z. B. Ssymank 2017b)
- für Standard-Monitoring für Veränderungen auf Landschaftsebene eine statistisch repräsentative Stichprobenauswahl vorgenommen werden (wie z. B. im Monitoring nach Art. 11 FFH-Richtlinie Sachteleben & Behrens 2010, BfN o. Jahr)

In der Zielrichtung der Anwendung ist strikt zu trennen zwischen Flächen, deren Charakter sich „schleichend" positiv oder negativ verändert, wie z. B. durch Sukzession, Pflege, Bewirtschaftungen oder langsamer Degradierung durch Belastungsfaktoren, und solchen Standorten, die z. B. nutzungsbedingt eine sehr hohe Dynamik aufweisen. Flächen mit sehr hoher Dynamik von sich ändernden Biotopen, Eingriffen, Nutzungen, wie z. B. Siedlungsbereiche oder inmitten von wechselnden Ackerbaukulturen, stellen ein deutlich anderes „Anforderungsprofil" dar, um Veränderungen der Insektenzönosen detektieren und vergleichen zu können. Hier würden primär unterschiedliche Biotope miteinander verglichen. Dies gilt auch für Flächen, in denen das Entwicklungsziel Sukzession oder Prozessschutz ist und eine Veränderung allein aufgrund veränderter Rahmenbedingungen zu erwarten ist (es sei denn die Beprobung dient der wissenschaftlichen Dokumentation dieser Veränderungen selbst).

Vorliegender Leitfaden gibt Hinweise zur Methodik und zum Einsatz von Malaisefallen, die aus umfangreichen Erfahrungen von größeren Projekten stammen und Empfehlungen zur Standardisierung der Methodik im Rahmen größerer Erfassungs-Programme geben. Die Untersuchungen des EVK werden seit Jahrzehnten standardisiert mit dieser Methodik durchgeführt und die Erfahrungen aus dem F+E „Biodiversitätsverluste in FFH-Lebensraumtypen des Offenlandes" (FKZ 3516 85 400) wurden berücksichtigt.

Ausgewählte Einsatzgebiete für Malaisefallen in der Erfassung flugaktiver Insekten/ Monitoring für unterschiedliche Fragestellungen /Zielsetzungen sind:

- Beprobung weitgehend homogener Biotope im Offenland
- Nachweis von Randeffekten & Randeinwirkungen
- Insekten-Monitoring in der Gesamtlandschaft
- Beprobung zur Erfassung eines möglichst vollständigen Artenspektrums sowie zum Nachweis (vermeintlich) seltener Arten oder von Arten mit sehr kurzen Flugzeiten bzw. Aktivitätsphasen
- Nachweis von Veränderungen der Biodiversität im Zuge des Klimawandels
- Nachweis der Wirkung von Naturschutzmaßnahmen oder qualitativen Veränderungen wie z. B. Verschlechterungen des Pflegezustandes
- Erfassung der Phänologie von Arten oder Artengilden und deren Veränderungen
- Erfassung von Biotop- bzw. Habitatpräferenzen bei Einsatz eines Fallenspektrums über verschiedene Biotoptypen in einem Untersuchungsgebiet
- Erfassung der Einwanderung von Neozoen, invasiver Arten etc.

Spezialeinsatzgebiete mit besonderen Fallentypen umfassen z. B. auch:

- Bidirektionale Malaisefallen zur Erfassung von Wanderungen, Funktionsbeziehungen zwischen verschiedenen Biotopen oder Randeffekten
- Besonders große Netzfallen zur Erfassung und Markierung wandernder Arten z. B. an Alpenpässen
- Hängende Fallen zur Erfassung der Kronenfauna in Wäldern
- Schwimmende Fallen in aquatischen Habitaten (z. B. die SLAM-traps)
- Senkrechte Mini-Malaisefallen an Baumstämmen oder Totholz (Erfassung von speziellen Mikrohabitaten wie z. B. Schleimflüsse)
- Bartak-Fallen mit einseitig zum Boden reichenden Dach als besonders leicht und schnell aufzubauende Fallen, die z. B. gut für kurzzeitige Einsätze bei Tagesexkursionen geeignet sind

Auf diese und weitere mögliche speziellen Adaptationen der Malaisefalle wird im Weiteren nicht eingegangen.

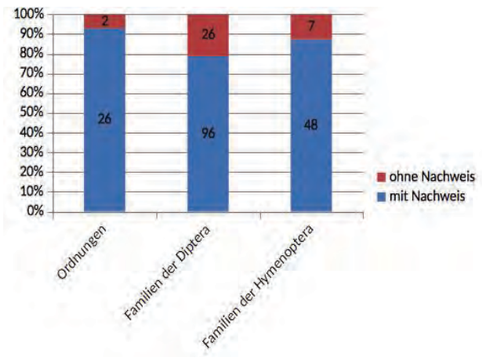

Abbildung 3. Lokal erfassbares Spektrum von Artengruppen der Insekten aus der Vorsortierung von 20 Malaisefallen am südwestlichen Dinkelbergrand (nach Daten aus Doczkal 2017).

Funktionsweise

Eine Malaisefalle eignet sich vor allem für die Erfassung flugaktiver Insekten (Diptera, Hymenoptera, Coleoptera und weitere Insektengruppen, vgl. Abb. 3). Die Falle ist permanent fängig und arbeitet schwach selektierend und semiquantitativ. In die Malaisefalle einfliegende Insekten orientieren sich aufgrund ihres positiv phototaktischen Verhaltens in Richtung des Lichts und fallen dort in eine mit Flüssigkeit gefüllte Fangflasche, wo sie direkt konserviert werden. Auch nachtaktive flugfähige Insektenarten werden mit Malaisefallen relativ gut erfasst.

Malaisefallen eigenen sich aufgrund ihrer Funktionsweise v.a. für Offenlandbiotope mit voller Besonnung der Dachkonstruktion. In Wäldern sind die Fallen nur in ausreichend großen Lichtungen oder an Waldrändern einsetzbar (mindestens 3 h potentielle Sonnenscheindauer empfohlen, ganz beschattete Fallen haben eine stark reduzierte Fängigkeit). Sonderfälle sind Malaisefallen im Kronenraum zur Erfassung der Kronenfauna. Weniger geeignet für Beprobungen sind nordexponierte oder nur teil besonnte Biotope oder Waldränder, in jedem Falle sind unterschiedliche Expositionen und Sonnenscheindauer nicht direkt miteinander vergleichbar in den Ergebnissen. Bei Untersuchungen in Schutzgebieten und speziellen Biotopen sind solche „suboptimalen" Standorte jedoch nicht zu vermeiden und daher möglichst präzise zu dokumentieren, um eine Interpretation der Ergebnisse zu unterstützen. Erfahrungen aus verschiedenen Malaisefallenprojekten zeigen, dass für faunistische Fragestellungen der Einsatz an klaren Randstrukturen von Ost- über Süd- bis Westexposition gute Fangergebnisse erzielen kann.

Aussagen zur Bodenfauna (epigäische und endogäische Gruppen) sind nur indirekt möglich über Arten(gruppen) mit bodenlebenden Larven oder Präimaginalstadien, die flugfähige Imagines haben. Allerdings werden über Malaisefallen auch flugunfähige Taxa in teils höheren Artenzahlen erfasst, die mobil auch vertikale Strukturen hochklettern und so in das Fanggefäß gelangen (z. B. Spinnen, Arbeiterinnen von Ameisen etc.) oder mit ihren Wirten eingetragen werden. Für die „vollständigere" Erfassung von Bodenarthropoden und Wirbeltier-Parasiten sind daher zusätzlich andere Methoden erforderlich.

Erfasstes Artenspektrum

Malaisefallen erfassen bei entsprechender Abdeckung des vorhandenen Biotopspektrums ein sehr breites Spektrum der in einem Gebiet zu erwartenden Arten. Als Beispiel können Ergebnisse eines Forschungsprojekts am südwestlichen Dinkelbergrand bei Basel (Ssymank & Doczkal 2017) dienen. Die Vorsortierungsergebnisse von 20 Malaisefallen aus einem Untersuchungsjahr wurden hier exemplarisch ausgewertet (Doczkal 2017, Abb. 3):

- Auf Ordnungsebene waren in Malaisefallen bis auf 2 Ordnungen (ungeflügelte parasitische Arten) alle Insektenordnungen vertreten.
- Auf Familienebene bei den beiden größten Insektenordnungen 80 % der Ordnung Diptera (Zweiflügler) und 87% der Ordnung Hymenoptera (Hautflügler).
- Die nicht erfassten Familien waren ausnahmslos extrem artenarme Taxa mit Spezialisierung auf saline Biotope (die im Untersuchungsgebiet nicht vorkommen) oder flugunfähige Insekten.

Eine Übersicht zu allen Insektenarten, die mittels einer Malaisefalle an einem Standort erfasst werden, existiert bisher mit konventioneller Artbestimmung nicht (v. a. wegen des nicht leistbaren Aufwands für die Determination der Mikro-Dipteren und -Hymenopteren). Eine Annäherung an die

Verteilung der pro Insektenordnung ermittelten Diversität gibt die Untersuchung eines Jahresganges mit molekularer Auswertung nach Vorsortierung der Morphospecies (Geiger et al. 2016). Hierbei steht die Anzahl der BIN´s (Barcode Index Numbers) für die Zahl der molekular identifizierten Arten.

Ein Betriebsjahr einer Malaisefalle (Geiger et al. 2016), Juli 2013 bis Juli 2014.			
Pterygota	BIN´s	Artenzahl D	Anteil %
Diptera	1.463	9.213	15,9
Hymenoptera	1.059	9.318	11,4
Lepidoptera	318	3.602	8,8
Hemiptera	225	2.483	9,1
Coleoptera	166	6.492	2,6
Neuroptera	14	101	13,9
Trichoptera	7	313	2,2
Psocoptera	4	95	4,2
Orthoptera	3	85	3,5
Mecoptera	3	9	33,3
Dermaptera	3	8	37,5
Blattodea	1	6	16,7
Summe Pterygota	3.266	31.725	10,3

Die Ergebnisse bei Geiger et al. (2016) deuten darauf hin, das beim Einsatz einer Malaisefalle über eine Vegetationsperiode zumindest in bestimmten Habitaten mehr als 10% der Gesamtartenzahl der flugaktiven Gruppen der Pterygota nachgewiesen werden und die erfasste Alphadiversität Grössenordnungen von >3.000 Arten erreicht. Inwieweit diese Ergebnisse einer einzelnen Falle auf andere Standorte übertragbar sind, müssen weitere Forschungen zeigen.

Auf Familienebene konnten in einer Malaisefalle in einem Jahr hier 70 von 122 Familien (in Deutschland) der Diptera und 40 von 55 Familien bei den Hymenoptera nachgewiesen werden.

Innerhalb der einzelnen Familien gibt es jedoch erhebliche Unterschiede in der Effektivität der Erfassung des gesamten Artenspektrums, so dass in Absicht einer vollständigen faunistischen Erfassung immer eine Kombination von Methoden zu empfehlen ist.

Malaisefallen eignen sich besser als jede andere Methode für die Erfassung eines breiten Spektrums flugfähiger Insekten. Alternativen mit ähnlich breitem Fangspektrum von flugaktiven Insekten gibt es nicht.

Vor- und Nachteile von stationären Malaisefallen
Vorteile:

- Ausgesprochen hohe Effizienz in der Erfassung eines breiten Spektrums von Arten unterschiedlicher Familien flugaktiver Insekten.
- Gute Reproduzierbarkeit der Ergebnisse und Normierbarkeit der Methodik.
- Kontinuierliche Erfassung über eine Vegetationsperiode und Bewertbarkeit phänologischer Ereignisse, z. B. der Klimawerte.
- Genaue Wiederholungsaufnahmen und vergleichende Auswertungen sind unter Berücksichtigung der Phänologie der Arten möglich.
- Potentiale in der Ermittlung von Gradienten, z. B. bei der Aufstellung von zeitgleich in Transekten gestellten Fallen einschließlich des Austauschs zwischen angrenzenden Biotopen z. B. mit bidirektionalen Fallen. Solche Fallen haben zwei Fangflaschen mit getrennter Sammlung der Insekten der beiden Fangkammern.
- Vergleichsweise kleiner Betreuungs- und Pflegeaufwand im Gelände. Abgesehen vom Aufbau und Abbau beansprucht der Flaschenwechsel selbst nur wenige Minuten.
- Probennahme unabhängig von Kenntnisstand bzw. Erfahrungen des Betreuers, d. h. Betreuung auch durch fachfremde Hilfskräfte problemlos möglich.
- Keine selektive Anlockung einzelner Arten.
- Der Fang erfolgt in Relation zur Abundanz und Flugaktivität der Arten, lokal seltene Arten werden daher auch nur in sehr geringen Mengen gefangen und deren Populationen nicht gefährdet.
- Relativ kostengünstige Probenahme im Vergleich zu standardisierten, direkten Feldmethoden, die für ein breites Spektrum pro Jahr oftmalige Begehungen und arbeitsintensive Beprobungen durch qualifizierte Personen erfordern.
- Die Proben sind bei korrekter Konservierung auch nach mehreren Jahrzehnten (zumindest morphologisch) noch auswertbar.

Nachteile / Schwierigkeiten:

- Hoher Aufwand in der Vorsortierung.
- Bei konventioneller Auswertung eines breiten Artenspektrums anspruchsvoll für die Experten und in der Organisation der Determination, dafür gute Auswertungsmöglichkeiten von Abundanzen und Veränderungen der Populationen.
- Bei rein DNA-basierter Auswertung von Mischproben sind nach derzeitigen Stand der Wissenschaft keine Messwerte über Häufigkeiten und damit Populationsveränderungen möglich, sondern nur Präsenz – Absenz Angaben.
- Eingeschränkte Anwendbarkeit bzw. Vergleichbarkeit der Ergebnisse in dichtem, geschlossenem Wald (Forst) oder in forstlichen Monokulturen.
- Notwendigkeit der Sicherung des Fallenstandortes bzw. der Falle vor Zerstörung.

Gefangene Mengen und mögliche Beeinträchtigungen

Die im Jahr gefangenen Mengen von Insekten liegen je nach Biotoptyp und Zustand der Insektenpopulation im Regelfall zwischen 0,2 bis 1,5 kg Abtropfgewicht pro Jahr für eine Malaisefalle bei ganzjährigem oder über die ganze Vegetationszeit reichendem Betrieb (die Ausbeute der Wintermonate ist quantitativ vernachlässigbar).

Eine Beeinträchtigung der vorhandenen Insektenpopulationen ist im Regelfall nicht zu erwarten (Ausnahmefälle sind denkbar, wenn mehrere Fallen gleichzeitig in einer sehr kleinen isolierten Fläche einer geringen Quadratmeterzahl aufgestellt werden und nur noch Reliktpopulationen bestimmter Insektenarten vorhanden sind). Der Gesamtfang entspricht ca. der Insektenmenge, die ein Jungvogel im Sommer frisst bzw. der Insektenmenge die auf ca. 25 - maximal 200 m² Boden jährlich schlüpfen. Unser kleinster Kleinsäuger, die Zwergspitzmaus (*Sorex minutus*) frisst täglich etwa dieselbe Menge an Insekten, die in einer Malaisefalle gefangen werden (Churchfield & Searle 2008). Der Fang erfolgt relativ lokal im unmittelbaren Umfeld der Falle. Aus Fallenergebnissen von in Transekten aufgestellten Fallen oder von dicht beieinander stehenden Fallen lässt sich ableiten, dass schon bei Fallenabständen von 10-20 Metern sich die Ergebnisse deutlich unterscheiden können. Mikrohabitate, wie z. B. Totholz, Ameisenhaufen etc. ändern das Ergebnis deutlich. Über die genaue Fängigkeit in Relation zur Abundanz der Arten in Flächeneinheiten gibt es keine Zahlen, aber aus der Kenntnis von Experten sind artspezifische Unterschiede zu erwarten. Für Farbschalen ist bekannt, dass nur 5-10% der anfliegenden Insekten gefangen werden, trotz einer spezifischen Farbanlockwirkung. Da Malaisefallen weitgehend unselektiv und ohne Anlockwirkung fangen (dichteabhängig, d. h. häufige Arten zahlreich, seltene nur in einzelnen oder wenigen Stücken oder gar nicht), ist eine direkte Gefährdung sehr unwahrscheinlich.

Abbildung 4. Große Blutbiene (*Sphecodes albilabris* (Fabricius, 1793)), hier auf Feld-Mannstreu (*Eryngium campestre* L.), als Beispiel für einen Hautflügler, der mit Malaisefallen nachgewiesen werden kann (© M. Sorg/EVK)

Erforderliche Genehmigungen

Für die Anwendung von Malaisefallen im Freiland sind im Regelfall mehrere Genehmigungen erforderlich:

Es ist immer damit zu rechnen, dass Malaisefallen auch einige streng oder besonders geschützte Arten (z. B. Abb. 4) gemäß der BArtSchV fangen. Damit ist für Zwecke naturschutzfachlicher oder wissenschaftlicher Untersuchungen eine artenschutzrechtliche Ausnahmegenehmigung nach BArtSchV erforderlich.

In Schutzgebieten sind zusätzlich die entsprechenden naturschutzrechtlichen Ausnahmegenehmigungen zur Entnahme von Tieren erforderlich, sowie entsprechende Betretungsgenehmigungen, ggf. auch Fahrgenehmigungen für Wirtschaftswege, Erlaubnisse der Eigentümer und Pächter, sowie die Beachtung bzw. Befreiung zu sonstigen Bestimmungen (z. B. der Kampfmittelunfallverhütungsverordnungen im Fall munitionsbelasteter Flächen).

Bei einer Dokumentation der Fallenstandorte mittels Fotodrohnen sind zusätzlich naturschutzrechtliche Ausnahmegenehmigungen z. B. in Schutzgebieten erforderlich.

Praktische Hinweise zum Fallentyp, Aufstellung und Betrieb zur Standardisierung der Methodik

Aufbauend auf dem ursprünglichen Fallentyp von Malaise (1937) gibt es zahlreiche Modelle von Malaisefallen und -größen, die sich in Bauart, Fängigkeit, Zuverlässigkeit und Arbeitsaufwand im Gelände deutlich unterscheiden. Z. B. fangen handelsübliche „SLAM"-traps mit rundem Dach deutlich weniger Insekten als Spitzdächer, die Grundfläche/ Fangfläche, Firsthöhe, teilweise Beschattung, Ausrichtung der Fangflasche etc. haben einen großen Einfluss auf die Ergebnisse. Ferner kann auch die Farbe der Falle und des Daches und witterungsbedingte Alterung der Netze eine Auswirkung haben (Netze jährlich wechseln) etc.

Um hierbei zu einer Normierung der Methodik zu gelangen und Ergebnisse miteinander vergleichen zu können, ist es erforderlich baugleiche Fallen mit einem Mindeststandard bei der Aufstellung zu verwenden. Dies schließt im Handel erhältliche Fallen aus, da über den Handel identische Fallentypen in nur begrenzten Zeitspannen erhältlich sind. Es wird empfohlen, die Fallen (angelehnt an den Bautyp nach Townes 1972, Matthews & Matthews 1983) nach dem beim Entomologischen Verein Krefeld seit 1982 normierten Modell mit einheitlichem Schnittmuster fertigen zu lassen (vgl. Sorg 1990, Schwan et al. 1993, Hallmann et al. 2017).

Empfohlener Fallentyp:

- Malaisefalle, Townes-Modell, Bauplan nach (Schwan et al. 1993, Hallmann, et al. 2017). (vgl. Abb. 5)
- Einflugöffnung: ca. 5 cm Durchmesser (5,1 x 5,3 cm) freie Öffnung
- Fangkopf mit 1 l Fangflasche (Fangflasche ggf. gegen zu starke Erwärmung im Sommer und gegen Licht schützen durch kaschierte Alufolie, Winterschutz für Autoscheiben hat sich bewährt, im Frühjahr und Herbst sind auch 0,5 l Fangflaschen möglich)
- Fangflüssigkeit: 80% Ethanol 1% MEK vergällt (derzeitige Evaluation zum Metabarcoding 96% Ethanol unvergällt, in der Monitoring-Praxis zu teuer).

Hinweise für den Betrieb im Gelände:

- Aufbauanleitungen für Malaisefallen sind als bebilderte Schritt für Schritt-Anleitung auf den Webseiten der Zoologischen Staatssammlung München (http://barcoding-zsm.de/malaisefallenaufbau) und für das Modell des Entomologischen Vereins Krefeld als Video (http://www.entomologica.org/vd/malaise-trap01.mp4).
- Dabei sind folgende Punkte zu beachten:
- Das Netz sollte leicht gespannt sein (kein durchhängendes Dach), die Einflugöffnung muss immer frei sein

(ggf. im Betrieb kontrollieren, Spinnen).

- Insbesondere der First der Fallen in Flaschennähe ist regelmäßig zu kontrollieren (z. B. Beschädigung durch Vögel).
- Erfolgt die Fallenbetreuung bzw. der Flaschenwechsel durch Hilfskräfte, empfiehlt sich die Anfertigung von Fotos zu jeder Fallenleerung.
- Die Mittenwand der Falle muss überall durchgängig mit dem Boden fest verbunden sein, damit keine Insekten unten durchfliegen können. Dies kann durch angeworfenes Erdreich vom Standort oder Steine erreicht werden. Um diesen Vorgang zu vereinfachen sind an den Fallen des EVK heute zusätzliche Stoffstreifen angenäht, auf die Steine oder Erde gelegt werden kann. Zusätzlich wird die Falle an 8 Schlaufen über Heringe mit dem Boden verbunden.
- Ausrichtung der Fangflasche nach Süden, eingemessen mit Kompass (Empfehlung für Standard-Monitoring). Falls dies nicht möglich ist (z. B. in Schutzgebietserfassungen, Erfassungen bestimmter Biotope), Ausrichtung ggf. zum maximalen Lichteinfall, bei anderer Ausrichtung oder teilverdecktem Horizont und geringerer Sonneinstrahlung, Dokumentation der potentiellen Sonnenscheindauer mit Horizontoskop o.ä.)
- Die Fallen werden jeweils mit einem einfachen, mit vier Eckpfosten und drei Drähten gefertigten Zaun geschützt. Dies ist zumindest erforderlich auf beweideten Flächen, aber grundsätzlich zu empfehlen. Die Schnüre der vier oberen Eckpunkte der Falle werden horizontal mit den Eckpfosten verspannt, damit eine gleiche Größe der Einflug-Fangfläche gewährleistet ist.
- Fangflüssigkeit (Empfehlung für standardisiertes Monitoring): 80% Ethanol, 1 % MEK (teilvergällt), wenn DNA-Methoden eingesetzt werden sollen (kein Brennspiritus, keine Methanol-Anteile, kein Formaldehyd-Zusatz)
- Alternative Fangflüssigkeit: Wasser mit Detergentienzusatz und ca. 0,5 - 2 % Formalinzusatz: Vorteil: Besser morphologisch konserviertes Material, Nachteil: DNA-Analysen (nach derzeitigem Stand der Technik) nicht mehr möglich; derzeit für Monitoring-Zwecke daher nicht zu empfehlen
- die v. a. bei der Erfassung von Käfern beliebte Salzlösung konserviert zarte Insekten nicht ausreichend (Beifänge aus solchen Projekten bestehen großen Teils aus beschädigten teilzersetzten Tieren, die nicht mehr oder nur noch mit hohem Aufwand morphologisch bestimmbar sind) und sind daher nicht zu empfehlen
- Fangflaschen i.d.R. 500 ml bei Leerungsintervall 10-14 d im zeitigen Frühjahr und Herbst ausreichend, 1l bei > 14 d und bei 14-tägiger Leerung in den Sommermonaten empfohlen
- Da es durch Verdunstung und die gefangenen Insekten selbst zu einer Verdünnung des Ethanols kommt sowie zum Schutz der Proben bei Transport, sollten die Fangflaschen kurz nach der Fallenleerung mit Ethylalkohol vollständig aufgefüllt werden.
- Die Etikettierung der Flaschen kann bereits vor dem Flaschenwechsel außen und innen durch eine alkoholbeständige Beschriftung (am besten mit weichem Bleistift auf stabilem Papier; kein Zeitungspapier o. ä.) mit Flächennummer und Leerungsdatum auf Einlegezettel erfolgen und die neuen Fangflaschen sollten ca. ¾ bis vollständig mit Ethanol befüllt werden, so dass im Gelände nur ein Flaschenwechsel erfolgen muss.
- Für die beiden Stäbe mittels derer das Dach und die Mittelwand auf Spannung gebracht wird, haben sich feste Rundhölzer von ca. 2cm Durchmesser bewährt, die zuerst in den Boden eingegraben und dann in der passenden Höhe abgeschnitten werden (stabilste Lösung des Entomologischen Vereins Krefeld). Als einfachere Variante für den Mittenpfahl, an der sich die Fangflasche befindet, hat sich eine Konstruktion aus zwei Teilen bewährt, die eine schnelle passgenaue Aufstellung im Gelände sicherstellt (Ssymank 2017a).
- die Intervalle der Flaschenwechsel sollten während der Hauptsaison (Mai bis August/September) nicht länger als zwei Wochen betragen, da andernfalls die Qualität der Konservierung leiden könnte. In der Vor- und Nachsaison sind auch längere Intervalle möglich. Kürzere Intervalle verbessern die phänologische Auflösung, erfordern aber einen entsprechend höheren Betreuungsaufwand, der im Wesentlichen durch die Weg- bzw. Anfahrzeiten bestimmt wird.

Für rein faunistische Projekte bzw. Materialbeschaffung für Barcoding oder für bestimmte Untersuchungs- und Forschungsprojekte können Standorte gewählt werden, die den o.g. Anforderungen an Standardisierung im Monitoring nicht voll entsprechen. Z. B. ist es in unebenem, abschüssigem Gelände oft nicht möglich, die Mittelwand auf ganzer Länge mit dem Boden bündig zu befestigen, oder es ist bei nur in einer Exposition vorkommenden Biotoptypen keine Südausrichtung der Fangflasche möglich etc..

Abbildung 5. Malaisefalle (Townes-Modell) im Bautyp des Entomologischen Vereins Krefeld mit Bemaßung (© M. Sorg/EVK)

Automatisierte Fallen/ Erfassungsstationen

Automatisierte Erfassungsstationen aufbauend auf automatischen Fallenwechslern (AMTC - Automated Malaise Trap Changer, Rulik et al. 2014) sind in Entwicklung. Sie sind aber deutlich teurer als der „manuelle" Einsatz von der oben beschriebenen Malaisefalle, bieten aber ggf. zusätzliche Erfassungsergebnisse für weitere Umweltparameter, z. B. in Kombination mit Klimadatenloggern. Bei diesen autark (Solarpanel + aufladbarer Akku) arbeitenden Malaisefallen-Flaschenwechslern sind bei Aufstellung in unzugänglichem Gelände („remote locations") nur alle 24 Wochen (Sammelintervall 14 Tage) die gesammelten Flaschen auszuwechseln.

Für bestimmte Spezialerfassungen können hier auch tageszeitlich fraktionierte Ergebnisse erzielt werden (z. B. durch automatische Fangflaschenwechsler).

Dokumentation der Fallenstandorte und Leerungen

Um die Reproduzierbarkeit der Ergebnisse zu ermöglichen und spätere Vergleichserhebungen durchführen zu können, sollten grundsätzlich folgende Merkmale erfasst werden:

- Fallenstandort selbst (Geographische Koordinaten, Höhenlage)
- Qualitative Pflanzenartenliste im Umfeld der Falle (ca. 40-50 m Radius)
- Mindestens eine pflanzensoziologische Aufnahme im Zielhabitat oder bei Einsatz von Malaisefallen an Grenzlinien/Zonationen/Habitatmosaiken die Dokumentation beider(aller) Biotope, ggf. dann auch mehrere pflanzensoziologische Aufnahmen
- Standortfoto in relevanten Zeiten der Vegetationsperiode sowie ein
- Luftbild (z. B. Orthofoto mit hochauflösender Kameradrohne z. B. DJI Inspire oder DJI Phantom in standardisierter Flughöhe oder Übernahme des GPS-eingemessenen Standorts in ein aktuelles Luftbild mit dauerhafter Abspeicherung; Abb. 6). Reine Koordinatenangaben reichen nicht aus, da später oft die Luftbilder zum Zeitpunkt der Fallenexposition nicht mehr verfügbar sind.

Zusätzlich sollten zu jeder Fallenleerung im normalerweise ca. 14-tägigen Intervall als Begleitdaten der Zustand der Falle sowie erkennbare Nutzungen im Umfeld notiert werden.

Probenaufbewahrung

Zur Aufbewahrung der Proben der Malaisefallen sollten Polyethylenflaschen (PE; 500ml; 250ml) für den Gesamtfang jeder Fallenleerung verwendet werden. In den PE-Flaschen sollte die Konzentration des Ethylalkohol für die Archivierung auf knapp über 80% (Empfehlung Entomologischer Verein Krefeld: ca. 82-83%; 1%MEK) eingestellt und in Abständen von 5-10 Jahren die Konzentration kontrolliert werden. Jedes Gefäß muss einzeln innerhalb sowie außen mit einer alkohol- und wasserfesten Etikettierung versehen werden. Nach Untersuchungsstandorten und Zeitintervallen sortierte Proben sollten in Archivierungsboxen dunkel und kühl gelagert werden. Eine zusätzliche Verdunklung des Lagerraumes ist sinnvoll.

Die großen Mengen von Alkohol erfordern besondere Feuerschutzmaßnahmen.

Für teilsortierte Proben und die Endaufbewahrung von determinierten Tieren oder DNA-Vouchers haben sich chemikalienbeständige und altersbeständige Schraubröhren aus Polypropylen, PP mit Schraubdeckel mit Silikondichtring bewährt (z.B. Firma. Sarstedt, Nümbrecht www.sarstedt.com in 8 ml oder 2 ml). Einfache alkoholbeständige Plastikgefäße wie z. B. im medizinischen Bedarf verwendet werden sind zur Vorsortierung und zeitweisen Lagerung der Proben verwendbar, erfüllen jedoch nicht die Anforderungen an dauerhafte sichere Lagerung. Rollrandgläschen etc. sind wenig geeignet, da die Deckel altern und brüchig werden, das gleiche gilt für viele andere Kunststoffe, sowie für Dichtungen der Deckel mit Kork oder Gummieinlagen.

Alternativ können Glasröhrchen verwendet werden, die zur Lagerung in größeren mit Alkohol zusätzlich befüllten Gefäßen aufbewahrt werden (schlechterer Zugang zu den Einzelproben, keine Twist-Off Gläser verwenden, da die Deckel rosten können, ggf. spezielle Präpariergläser verwenden). Hierbei sind Glasröhrchen auf Borosilikatbasis gegenüber Kalknatronglas zu bevorzugen, da letztere durch Kationenaustausch massiv den pH-Wert beeinflussen und zur irreversiblen Beschädigung des Materials führen können (Kotrba & Golbig 2011). Dieses Verfahren ist bestens geeignet für die langfristige Aufbewahrung, jedoch umständlich in der Handhabung. Für Tiere, mit denen noch gearbeitet werden soll, empfehlen wir daher die zuvor erwähnte Methode mit den Polypropylen-Röhrchen, die sich übersichtlich in Boxen mit Rastereinsätzen lagern lassen und ein rasches Auffinden bestimmter Röhrchen erlauben.

Für die dauerhafte Lagerung von Gewebeproben (Beine für DNA-Analysen) und für die DNA-Proben sind folgende Lagerbedingungen optimal:

Gewebeproben: nach Möglichkeit in hochprozentigem EtOH (96%) lagern, da jedes Gramm Wasser über die Zeit die DNA hydrolytisch angreift. Ethanole mit mehr als 96% (99,9%, „absoluter Alkohol") sind zu vermeiden, da hier Trocknungsmittel eingesetzt werden, die später eine DNA Verarbeitung behindern können. Optimal ist eine Lagerung in flüssigem Stickstoff bei ca. -196°C. Generell gilt, je kälter desto besser die Konservierung. Häufiges Auftauen und Wiedereinfrieren ist zu vermeiden. Material mit solchen Zyklen besser in einem Kühlschrank (zwischen)lagern.

DNA-Proben: getrocknet bei Raumtemperatur und niedriger Luftfeuchtigkeit oder in flüssigen Stickstoff.

Für die Sicherstellung einer langfristigen, optimalen Lagerung ist eine Kooperation mit einer professionellen Biobank anzustreben. Potentielle Partner können über das „Global Genome Biodiversity Network" identifiziert werden (http://www.ggbn.org).

Biomassebestimmungen

Die Malaisefallenmethodik ermöglicht abschätzende Aussagen zur Biomasse an den verschiedenen Fallenstandorten. Um zu vergleichbaren Ergebnis zu gelangen, muss die Messung standardisiert erfolgen:

Der Ethylalkohol mit den enthaltenen Insekten und anderen Arthropoden (darüber hinausgehende Fänge wie z. B. Nacktschnecken werden aussortiert) wird über einem Edelstahl-Feinsieb (Maschenweite < 0,5 mm) abgeschüttet.

Es wird solange gewartet, bis die Tropfenfolge länger als ca. 10 Sekunden beträgt.

Nach dem Abwiegen mit einer Feinwaage (mind. Messgenauigkeit < 0,1 g) werden Tiere und Ethylalkohol wieder in

die Polyethylenflaschen zurückgegeben.

Alle verwendeten Materialien (Siebe, Trichter, Waage, Messgenauigkeit etc.) und deren Anwendung sollten hierüber normiert sein (vgl. Hallmann et al. 2017; Schwan et al. 1993). Die so erhobene Masse, gibt einen Hinweis auf das relative Maß der im zeitlichen Intervall aktiven Biomasse am Standort der jeweiligen Falle. Die Abtropfmasse besteht überwiegend aus flugaktiven Insekten.

Um sicherzustellen, dass die Messung der Insekten-Biomassen in allen Details nach dem gleichen Verfahrensgang erfolgt, wurde für den Prozess im F+E „Biodiversitätsverluste in FFH Lebensraumtypen des Offenlandes“ ein Video angefertigt und in den Entomologischen Sammlungen Krefeld archiviert (http://www.entomologica.org/vd/biomass01.mp4).

Soll die Artbestimmung aus den Proben ggf. später durch molekulare Artbestimmung bearbeitet werden, müssen die Arbeitsvorgänge mit sterilisierten Gefäßen/ Sieben durchgeführt werden.

Probensortierung und Determination

Je nach Fragestellung können aktuelle aber auch archivierte Proben für vergleichende Analysen herangezogen werden. Die konservierten Proben können für ergänzende Determinationen, taxonomische Überprüfungen etc. jederzeit auch später noch herangezogen werden, sofern sie fachgerecht konserviert wurden (s.o.). Eine gute Dokumentation vorausgesetzt, können die Proben z. B. zur Bewertung von Trends für verschiedene Habitate oder zu ausgewählten Insektengruppen herangezogen werden.

In vielen Projekten wird bisher so vorgegangen, dass Spezialisten für einzelne Tiergruppen gebeten werden, sich ihre Gruppen aus den Proben selbst herauszusuchen. Da bei jedem Sortierdurchgang z.T. bestimmungskritische Merkmale verlorengehen (Abbrechen von Beinen, Borsten etc.) und die Proben allmählich an Qualität einbüßen, empfiehlt es sich die Anzahl der Sortierdurchgänge zu minimieren, optimal ist eine Vorsortierung in nur 1-2 Durchgängen. Damit sollte die Vorsortierung möglichst alle Gruppen, die voraussichtlich später bearbeitet werden können / sollen, erfassen. Dies spart erheblich Zeit für die nachfolgende Bearbeitung durch Artspezialisten, erhöht die Bereitschaft der (oft ehrenamtlichen) Mitarbeit von Spezialisten und garantiert eine gute Qualität auch des Restmaterials, welches ggf. später für weitere Vergleiche / Auswertungen wieder benötigt wird. (vgl. hierzu z. B. Doczkal 2017). Bei speziellen Fragestellungen (z. B. Mikrohymenopteren) kann eine halbautomatische Vorsortierung in Größenklassen hilfreich sein (Buffington & Gates 2008), die jedoch unvermeidbar zu Beschädigungen an den empfindlichen Mikro-Diptera führen.

Damit steigt der Anspruch an die Vorsortierung erheblich, da hier bereits viele Gruppen auf Familienniveau für Dipteren und Hymenopteren, oder zumindest auf Ordnungs- bzw. Unterordnungsniveau sicher erkannt werden müssen. Dies ist erfahrungsgemäß nur nach längerer intensiver Einarbeitung und entsprechender Qualifikation möglich und effektiv umzusetzen, keinesfalls aber von unerfahrenen (studentischen) Hilfskräften. Schon bei wenigen Fallen lohnt sich hier ein Probensortierzentrum einzurichten, was eine permanente berufliche Perspektive für Sortierpersonal bietet und die Archivierung/Verwaltung der Proben einschließlich Verleih an die einzelnen Artexperten organisiert. Die Vorsortierung ist oft ein „Flaschenhals“ von Malaisefallen-Projekten. Die großen Mengen an Insekten stellen selbst für erfahrene Entomologen eine Herausforderung dar. Eine realistische Planung der Vorsortierung ist dringend anzuraten, da andernfalls die Projektziele infolge gescheiterter Probensortierung gefährdet sind. Dieser häufig vernachlässigte oder unterschätzte Schritt ist eine unumgängliche Vorbedingung für alle auf morphologischer Determination basierenden Projekte.

Die Determination erfolgt in der Regel morphologisch durch Artexperten, wobei Anzahl, Geschlecht jeder Art letztendlich in Datenbanken eingegeben werden. Eine alphanumerische „unique ID“ (BR-2018-1307) verbindet das Belegexemplar (ggf. DNA-Voucher) mit dem Datenbankeintrag idealerweise. Bei großen Individuenzahlen empfiehlt sich die Aufbewahrung getrennt nach Arten und Leerungsperioden in Einzelröhrchen (Aufwand für individuelle Einzeletikettierung zu hoch). Das bestimmte Material sollte ebenfalls vollständig aufbewahrt werden (in aller Regel als Alkoholsammlung), da bei späteren Vergleichen oft einzelne Arten verifiziert werden müssen, z. B. aufgrund neuerer Erkenntnisse zur Taxonomie oder bei Entdeckung neuer Arten. Nur so sind über längere Zeiträume hinweg abgesicherte Vergleiche möglich und ggf. Determinationsfehler korrigier- und überprüfbar.

DNA-Methoden (Barcoding, NGS etc.)

Die Beständigkeit und Verwendbarkeit von DNA ist von vielen Faktoren abhängig. DNA kann durch Konservierungsflüssigkeiten oder Zusätze zerstört werden, zersetzt sich aber auch langsam im Laufe der Zeit in Abhängigkeit von Lagerbedingungen der Proben, insbesondere auch der Temperatur. Grundsätzlich stehen verschiedene DNA-Methoden zur Artbestimmung zur Verfügung, die wichtigsten sind derzeit:

DNA-Barcoding

Hierbei wird ein relativ kurzer mitochondrialer DNA-Abschnitt von 658 Basenpaaren verwendet, der im Regelfall eine Erkennung von Arten erlaubt. Vergleichsbibliotheken der DNA-Barcodes werden im GBOL-Projekt Deutschlands (https://www.bolgermany.de/) und im Projekt Barcoding Fauna Bavarica (BFB) der Zoologischen Staatssammlung München seit mehreren Jahren aufgebaut und erlauben inzwischen die Determination von ca. 60-70% in vielen Artengruppen. Sie sind z.B. für Großschmetterlinge annähernd vollständig. Allerdings gibt es auch Artengruppen bei den Insekten mit noch geringem Prozentsatz in den Vergleichsbibliotheken (z. B. viele Familien der Diptera & Hymenoptera) und es gibt bestimmte Artengruppen, wo eine Bestimmung mit DNA-Barcode nicht funktioniert, da sich die Barcodes von nahe verwandten, morphologisch klar unterscheidbaren Arten nicht unterscheiden oder die Barcodes eine Überlappung aufweisen. In diesen Fällen sind die genetischen Unterschiede zwischen den Arten nur mit DNA-Analysen mehrerer Gene oder Genabschnitte oder Genomanalysen nachweisbar und für Monitoring-Zwecke nicht verwendbar. Klarer Vorteil des Barcoding: Relativ preiswert, Größenordnung von ca. 1 € (in Kombination mit Next Generation Sequenzing (NGS) im Plattenmaßstab (Meier et al. 2016, Wang et al. 2018)), bis € 30,- bei kommerziellen Anbietern zu Einzelproben (pers. comm. Fa. AIM) pro Bestimmung.

Möglichkeiten der Probenahme:

- einzelnes Bein bei Erhalt des übrigen Tieres für morphologische Überprüfungen
- nicht destruktive Extraktion der DNA (Lyse) aus dem Gesamttier unter weitgehendem Erhalt des Tieres (intakte Außenhülle, Insekt noch präparierbar und morphologisch bestimmbar)
- Bestimmung der DNA aus dem Probenalkohol der Fangflaschen der Malaisefallen direkt
- Diese Verfahren befinden sich derzeit auch mit aktuellen und verschieden lang gelagerten Probensätzen (1 - 30 Jahre) des EVK in der Evaluation und werden in den Barcoding-Projekten des ZFMK (GBOL) und des BFB in der ZSM weiterentwickelt, getestet und evaluiert.

Abbildung 6. Beispiel für ein Luftbild eines Malaisefallenstandorts, aufgenommen mit einer Kamera-Drohne, Latumer Bruch, 02.04.2017 (© M. Sorg/EVK)

Metabarcoding

Das Metabarcoding ist eine schnelle Methode zur DNA-basierten Identifizierung einer ganzen Artengemeinschaft aus einer komplexen Umweltprobe (z. B. Bodenprobe, Wasserprobe oder Malaisefallenflasche eines Fangintervalls). Beim Metabarcoding werden aus der Gesamt DNA in Kombination mit Hochdurchsatztechnologien simultan Barcodes aller enthaltenen Taxa generiert. Eine bioinformatorische Verarbeitung gleicht die Millionen von Sequenzen gegen vorhandene Referenzbibliotheken ab und gibt eine Artenliste aus. Ferner können durch spezifische Markierung mehrere Proben gleichzeitig gefahren werden (Yu et al. 2012, Brandon-Mong et al. 2015).

Möglichkeiten der Probenahme:

- Bestimmung der DNA aus dem dekantierten Probenalkohol ganzer Fangflaschen
- DNA-Extraktion der Gesamtprobe eines Fangintervalls durch Lyse-Puffer
- Homogenisierung der Gesamtprobe (Nachteil: Danach nicht mehr überprüfbar und daher für Monitoring nicht zu empfehlen)

DNA-Methoden entwickeln sich derzeit rasch weiter, sowohl was die Ansprachegenauigkeit als auch was die Sicherheit des Artnachweises aus Mischproben angeht. Daher ist es durchaus möglich und sinnvoll ggf. einen Teil zunächst nur fachgerecht zu lagern, um sie später kostengünstiger und besser mit DNA-Methoden bearbeiten zu können.

Wesentlicher Nachteil bei der Anwendung des NGS oder gemischter Proben im Barcoding: Man erhält lediglich eine Artenliste (Vollständigkeit je nach Methodik bei derzeit ca. 70-80%), ohne jedoch Mengenangaben (Abundanzen), die im Naturschutz oft von entscheidender Bedeutung sind. Auch Angaben zum Geschlechterverhältnis/ Vitalität der Populationen sind nicht ableitbar.

Klarer Vorteil: Auch ohne Spezialisten sind schnelle Ergebnisse als vorläufige Artenlisten ohne aufwändige Einzeldetermination möglich, die ggf. auch unbeschriebene oder bisher nicht in DNA-Datenbanken vorhandene Arten („molecular operational taxonomic units (MOTUs)“ mit erfassen. Hierbei besteht die Möglichkeit sehr rationell Gesamtmessgrößen der α – Diversität flugaktiver Insekten aus den Probenserien zu erhalten.

DNA-Methoden mit Erhalt des Probenmaterials für „konventionelle“ morphologische Determination sind in jedem Falle zu bevorzugen, da hierüber quantifizierbare Aussagen zur Häufigkeit auch im nach hinein möglich sind und nicht per DNA ermittelte bzw. ermittelbare Arten erfassbar sind.

Im Unterschied zur konventionellen Artbestimmung oder dem Barcoding einzelner Individuen erhält man beim Metabarcoding eine Auflistung aller MOTU´s bzw. BIN´s aus einer Mischprobe – oder aus der Mischprobe extrahierter Substanz. Der Ursprung des Signals ist hierbei nicht zwingend ein 1:1 Bezug zu den in die Falle eingeflogenen Insektenarten. Vielmehr kann es sich hierbei auch – zusätzlich - um z. B. Inhalte des Verdauungstraktes der Individuen oder außen an den Tieren haftende Gewebepartikel handeln.

Weitere Auswertemöglichkeiten und Forschungsbedarf

Bei der Anwendung von DNA-Techniken können auch weitergehende Informationen aus den Malaisefallen gewonnen werden:

- In die Fallen werden über Parasiten z. B. auch Haare, aufgenommenes Blut oder andere organische Substanzen von Säugetieren und Vögeln oder anderen Tiergruppen eingetragen, so dass sich z. B. auch das Vorkommen von Arten im Umfeld der Fallen (Forschungsbedarf) feststellen lässt die nicht direkt als Individuen in die Proben gelangt sind.
- Ebenso wird Pollen v.a. von entomophilen Pflanzen eingetragen, der auch eine Bestimmung von Pflanzenarten ermöglicht.
- Ferner eröffnen sich eine ganze Reihe von wissenschaftlichen Fragestellungen, z. B. die Erforschung von Wirt-Parasitbeziehungen, die Zuordnung von morphologisch unbestimmbaren Weibchen etc.

Fluktuationen:

Viele Insektenarten weisen natürlicherweise hohe Fluktuationen und ein relativ hohes Artenturnover von Jahr zu Jahr auf. Dies ist von Witterungsverhältnissen und weiteren Faktoren abhängig und erschwert die Auswertung von Fangergebnissen einzelner Jahre. Eine Möglichkeit hier bei Untersuchungsprogrammen zu einer Ergänzung der Daten zu kommen ist eine kleinere Anzahl von Referenzstandorten durchgängig jedes Jahr zu beproben, ggf. mit einer geringeren Expositionsdauer von intermittierendem Fang von 10-14 Tagen über das ganze Jahr (Probennahme nur jedes 2 Fangintervall).

Über Malaisefallen lassen sich wegen ihrer Langzeitexposition auch Flugzeiten und deren Veränderungen im Zuge des Klimawandels analysieren. Für vollständige Erfassung von Arten mit sehr kurzer Flugzeit und die genaue Analyse der Phänologien empfiehlt sich, kürzere Leerungsintervalle von einer Woche zu verwenden. Bei ausreichend vielen Standorten in einem breiten Biotoptypenspektrum lassen sich selbst für weniger häufige Arten Habitatpräferenzen und Aktivitätsdiagramme ableiten, die sonst durch direkte Beobachtungen nur mit erheblichem Aufwand oder gar nicht möglich wären (Beispiele in Ssymank & Doczkal 2017).

Möglichkeiten abgestufter Konzepte zur Auswertung von Malaisefallenmaterial

Beim Aufbau eines größeren Projektes/ Programmes zur Untersuchung von Gebieten oder im Zuge eines Monitorings mit Malaisefallen ist es zweckmäßig abgestuft zu verfahren:

1. Priorität hat die Auswahl geeigneter Probeflächen, ihre vollständige Erstdokumentation und die Durchführung der Beprobung (Aufstellen und Leeren der Fallen).
2. Die Biomassebestimmungen ermöglichen einen schnellen Überblick und eine Quantifizierung der Gesamt-Insektenbiomasse ohne allzu großen Aufwand, jeweils noch im gleichen Jahr der Probenahme bzw. spätestens im Winter nach Probenahme.
3. Reichen Mittel und Möglichkeiten für eine weitere Bearbeitung (zunächst) nicht aus, kann die weitere Bearbeitung bei sachgemäßer Probenlagerung mehrere Jahre für DNA-Proben, bei morphologischer Bearbeitung sogar nahezu unbegrenzt unterbrochen werden.
4. Eine möglichst weitgehende Vorsortierung der Proben eröffnet die Möglichkeit je nach Verfügbarkeit von Spezialisten, weiteren Fragestellung etwa Synergien bei der Erarbeitung von Roten Listen jederzeit auf die Proben gezielt zugreifen zu können.
5. Wichtige Artengruppen können so stückweise bearbeitet werden oder Fallenvergleiche zwischen älteren und neueren Beprobungen auch gezielt zu einem späteren Zeitpunkt noch erfolgen.

Aufwandsabschätzungen

Alle Angaben sind Durchschnittsangaben für die Anwendung von 10 Malaisefallen und nehmen Bezug auf gut eingearbeitetes Personal bei räumlich nicht zu weit voneinander entfernten Standorten (Umkreis von ca. 10-15 km).

In der Anfangsphase sind z.T. erheblich längere Zeiten einzurechnen, v.a. bei der Vorsortierung. Bei weit verstreut liegenden Fallen oder schwerer Zugänglichkeit der Fallen sind erheblich längere Zeiten für den Fallenbetrieb einzurechnen.

Freilandarbeiten:

1. Vorbereitung des Fallenbetriebs mit Einholung der notwendigen Ausnahmegenehmigungen, Vorauswahl der Flächen, Abstimmung mit Flächeneigentümern & Flächennutzern, Pächtern etc., ggf. notwendige vor Ort-Termine: ca. 20-30 h.
2. Detailwahl Standorte: 2 Tage à 2 Personen (ca. 30-40 h).
3. Probeflächendokumentation (Fotos, Lufbilder mit Drohne, pflanzensoziologische Aufnahme, Habitatmerkmale, inkl. Anfahrt, u.a.): 2-3 Tage à 2 Personen (ca. 40 h).
4. Aufbau und Abbau: 2 Tage à 2 Personen (30-40 h).
5. Vorbereitung/ Etikettierung von Fangflaschen sowie Auffüllen des Alkohols : 2 Tage (16-20 h).
6. Hochkonzentrieren des Alkohols direkt am Tag nach dem Flaschenwechsel – Ermittlung der Biomasse nur wenn der Alkohol bei stabil ca. 80% eingestellt ist.
7. Fallenbetrieb (Leerung und ggf. notwendige Reparaturen, bei 14 tägiger Leerung, 20 Leerungsintervalle): ca. 100 h.
8. Im Falle eines notwendigen Tausches von einzelnen Fallen wegen nicht vorhersehbarer Beschädigung, sind erneut Zeiten für den Aufbau einzurechnen.

Gesamtzeit für 10 Fallen: ca. 230 – 270 h.

Biomassenwägungen:

ca. 4-6 Tage. Bei sterilem Arbeiten für spätere DNA-Analysen aus dem Probenalkohol ist ungefähr die doppelte Zeit anzusetzen.

Probenvorsortierung:

Stark abhängig vom Umfang der Proben und Kenntnisstand der SortiererInnen. (bei gut eingearbeitetem Personal, ca. 30-40 Fraktionen): ca. 1.000 - 5.000 h.

Materialaufwand:

1. Malaisefalle (Netze der Fangeinrichtung, Schnüre, Pflöcke und Hilfsmittel zum Aufbau): ca. 440,- € pro Falle und Jahr (Kostenansatz des EVK, jährlich neue Netze, nur die in der Preisangabe nicht enthaltenen V_2A Bauteile des Fallenkopfes werden weiterverwendet). Bei 10 Fallen sollten 1-2 Ersatznetze eingeplant werden, im Falle von Beschädigungen während des Freilandbetriebs.
2. Ethanol 80%, 1%MEK (ca. 150 l) für den Fallenbetrieb (ggf. 96% Ethanol unvergällt für Metabarcoding)
3. Proberöhrchen zur Fraktionierung: ca. 6.000 - 8.000 Stück.
4. Proberöhrchen zur Determination: je nach Anzahl der Fraktionen bzw. der Zielsetzung der Auswertung.
5. Ethanol für die Vorsortierung und Determination des Materials: ca. 100 l oder mehr in Abhängigkeit von der Vollständigkeit der Determination und der erfassten Insekten.

Nicht abgeschätzt: Kostenaufwand für Probenlagerung, DNA-Barcoding oder Labormethoden, sowie die Kosten/ Arbeitszeiten für die Determination (unterschiedlicher Aufwand für verschiedene Taxa).

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Verzeichnis der verwendeten Abkürzungen:

AMTC: Automated Malaise Trap Changer, automatischer Fangflaschenwechsler an Malaisefallen

ATBI: All Taxa Biodiveristy Inventory, Forschungsprojekte zur Erfassung der gesamten Artenvielfalt eines Gebietes

BArtSchV: Bundesartenschutzverordnung

BfB: Barcoding Fauna Bavarica

BfN: Bundesamt für Naturschutz

BIN: Barcode Index Number, eindeutige Kennnummer für einen DNA-Barcode, wird z. B. dann benutzt, wenn die zugehörige Art (noch) nicht bekannt oder beschrieben ist

DLIA: Discover Life of America, Gesellschaft die sich die Erfassung der Artenvielfalt v.a. von Nationalparken in Amerika zur Aufgabe gemacht hat, und zum Monitoring und Management in den Schutzgebieten beiträgt

DNA: Desoxyribonukleinsäure (deoxyribonucleic acid), Polnukleotid, bestehend aus einer Kette von Nukleinsäuren, in der genetische Informationen gespeichert sind

EVK: Entomologischer Verein Krefeld

F+E: Forschungs- und Entwicklungsprojekte, von Bundeseite (Bundesumweltninisterium/ Bundesamt für Naturschutz) betreute und finanzierte angewandte Forschungsprojekte im Natur- und Umweltschutz

GBOL: German Barcoding of Life, Deutsches Projekt zur Erfassung der DNA-Barcodes aller in Deutschland vorkommenden Arten unter Leitung des Zoologischen Forschungsmuseum Alexander Koenig in Bonn

MEK: Methyl-Ethyl-Keton, Vergällungsmittel für Alkohol

MOTU: Molecular Operational Taxonomic Unit, aussagefähiger Teilbereich der DNA, der im Regelfall eine Artansprache ermöglicht, DNA-Barcodes sind ein Beispiel für MOTU's.

NGS: Next Generation Sequenzing

STI: (Swedish Taxonomy Initiative), ein faunistisches Grundinventar des Landes Schweden

ZFMK: Zoologisches Forschungsmuseum Alexander Koenig in Bonn

ZSM: Zoologische Staatssammlung München

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Insect biomass decline scaled to species diversity: General patterns derived from a hoverfly community

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Reports of declines in biomass of flying insects have alarmed the world in recent years. However, how biomass declines reflect biodiversity loss is still an open question. Here, we analyze the abundance (19,604 individuals) of 162 hoverfly species (Diptera: Syrphidae), at six locations in German nature reserves in 1989 and 2014, and generalize the results with a model varying decline rates of common vs. rare species. We show isometric decline rates between total insect biomass and total hoverfly abundance and a scale-dependent decline in hoverfly species richness, ranging between −23% over the season to −82% at the daily level. We constructed a theoretical null model to explore how strong declines in total abundance translate to changing rank-abundance curves, species persistence, and diversity measures. Observed persistence rates were disproportionately lower than expected for species of intermediate abundance, while the rarest species showed decline and appearance rates consistent with random expectation. Our results suggest that large insect biomass declines are predictive of insect diversity declines. Under current threats, even the more common species are in peril, calling for a reevaluation of hazards and conservation strategies that traditionally target already rare and endangered species only.

biodiversity loss | insect decline | temporal scaling

Recent reports from lowland Germany have demonstrated a 3/4 loss in the biomass of flying insects in protected areas over a period of less than 30 y (1), as well as severe declines in abundance for several groups of insect species (2). These findings question the stability of ecosystem functioning under contemporary European land use. A biomass drop of such proportions can hardly be envisaged without cascading trophic effects (3–5) or without disruptions in pollination (6–8) and nutrient cycling (9). Most of these potentially far-reaching consequences will depend on the nature of the decline with respect to the abundance and diversity of the insect species in question (10). Hence, there is an urgent need to unravel whether and how total insect biomass decline translates into declines in the abundance and richness of insect species.

Long-term, taxon-specific studies on insects have revealed ongoing numerical declines and range contractions over the past decades (11–22). However, it is difficult to reconcile their findings with insect biomass decline as they represent 1) different facets of diversity changes (changes in areal coverage, species lists, abundance, and biomass), 2) differences in sampling methodology, and 3) differences with respect to the spatial and temporal scale of inference. As such, it is not straightforward to predict how the 3/4 decline in total flying-insect biomass in the Krefeld data (1) translates into abundance and diversity loss of insect species. Nonetheless, whether or not biomass losses are equally distributed over rare and common species could have large consequences for ecological functionality, such as affecting food availability at higher trophic levels (23, 24).

Interspecific variation in abundance changes may help uncover factors associated with the observed insect biomass loss. However, to predict the relationships between total insect biomass declines with persistence and abundance changes at the species level, as well as changes in diversity metrics at the community level, requires that we account for the stochastic nature of the processes involved (e.g., higher extirpation rates for rare species) (25, 26). Additionally, imperfect species detection during sampling in the field (i.e., species with low abundance could easily be missed) prevents a straightforward comparison of insect assemblages over time (27). To facilitate a meaningful analysis, we developed a theoretical framework, in which variability in rate of species decline as well as imperfect detection are integrated, permitting us to investigate how species persistence and diversity measures (Hill numbers) are theoretically affected under contrasting scenarios of decline rates along the common-to-rare species abundance axis. Such a framework is also crucial for properly interpreting empirical data of declining catches over time.

Next, we here examine the relationship between total insect biomass and diversity in an insect family: the hoverflies (Syrphidae). Hoverflies are considered important wild pollinators (28–30), important agents in biocontrol (31–33), suitable as bioindicators (34, 35), and hence a potentially informative group of insects, representative for a variety of ecological functions. All hoverfly individuals caught in six trap locations in German nature reserves in two seasons that were 25 y apart (1989 vs. 2014, two endpoints of the trend in the Krefeld data as described in ref. 1, with identical trap locations in each season) were identified at the species level, amounting to 19,604 individuals of 162 species from 59 genera.

Significance

Various sources have reported insect decline in total biomass, numbers, and species diversity. With German data on a species-rich hoverfly community over 25 y and a theoretical model, we show how these decline rates are interrelated. The relationship between biomass and diversity losses depends on whether common or rarer species are most affected. Our analyses show stronger declines of common than rare hoverfly species. Strong reductions (up to −80%) in total abundance and biomass correspond with observed species richness declines of −20% to −40% on a seasonal basis. On a daily basis, however, hoverfly diversity declined in proportion to biomass loss, with important consequences for the functioning of ecosystems.

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We investigated how samples of total flying-insect biomass reflect changes in diversity of hoverflies, which form only a small subset (<5% share in total flying-insect biomass; *SI Appendix*) in these samples of insect communities. We then compare these empirical findings to the theoretical results on hoverfly species, to establish how rates of decline are shared among common and rare species. Finally, we compare the rate of decline in total abundance and species richness of hoverflies at two temporal scales: across the season and daily (quantified as a latent variable in our analyses of the insect data based on variable trapping duration).

Theoretical Results

We first explore how the total biomass of a community depends on the abundance and richness of its constituent species. Declines in total insect biomass implicate declines in total insect abundance. However, total biomass declines may come about as a result of species loss, abundance loss, decline of especially the heavier species, or any combination of these mechanisms. At the same time, observed loss of species depends on the relative abundance of the species in the community, as well as on the variation in rate of decline among locally common and rare species. Small populations tend to be more sensitive to demographic and environmental stochasticity and as a result more prone to local extirpation (25, 26), even if their rates of decline (up to extirpation) equal those of more common species.

Under the assumption of a Poisson distribution of species abundance, and given the population "growth" rate of each species (e.g., λ_i; if $\lambda_i < 1$ a population is declining), the number of species that are expected to still be present at a given time point (t) is given by

$$S_t = \sum_{i=1}^{S(t_0)} \frac{e^{-N_i(t_0)} N_i(t_0)^0}{0!} = \sum_{i=1}^{S(t_0)} 1 - e^{-\lambda_i \times N_i(t_0)}. \quad [1]$$

Here we assume three different scenarios: (I) a uniform decline rate among species, (II) common species declining more rapidly than rare species, and (III) rare species declining more rapidly than common species (Fig. 1*A*). Additionally, we acknowledge that direct assessment of species loss is inhibited by imperfect detection. For a given sampling efficiency p (i.e., the fraction of locally present individual insects that are trapped), the expected number of species detected is given by

$$S^{obs.} = \sum_{i=1}^{S} 1 - (1-p)^{N_i} \quad [2]$$

which shows that besides sampling efficiency, observed richness also relies on the abundance of each species (N_i; i.e., the number of individuals available to be trapped from species i). In *SI Appendix*, we provide further details on the steps undertaken to derive species decline rates for each of the scenarios.

In all three scenarios, rare species have lower persistence rates than common species (Fig. 1*B*). Observed persistence appears even less when assuming imperfect detection (here arbitrarily at 40%; Fig. 1*B*). The species rank-abundance distributions are affected as well (Fig. 1*C*), but this is particularly evident for high-ranking (i.e., less common) species. For a given total abundance loss, the strongest declines in the number of species are to be expected under scenario III. In all scenarios, observed species losses are greater when detection is imperfect compared to when all available insects are trapped (Fig. 1*D*). However, this does not affect the slope of the relationship between persistence rates and initial abundance and does not alter qualitatively the difference in persistence rates among the three scenarios. Furthermore, higher-order diversity measures (i.e., Hill numbers of order 1 and higher) (27, 36) respond differently to scenario II (higher decline rates of previously abundant species) than species richness (i.e., consistent with the Hill number of order 0): The higher-order Hill numbers increase over time under scenario II due to the increasing evenness among species, even though all species decline in abundance (*SI Appendix*, Fig. S1).

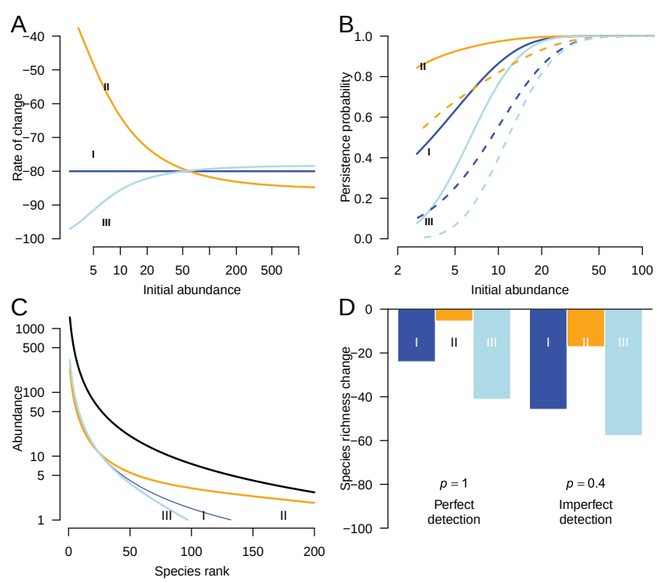

Fig. 1. Theoretical exploration of the meaning of 80% total abundance loss for the persistence, abundance, and loss of the species that make up a community. (*A*) Three different scenarios of how the rate of decline is distributed across the gradient of common to rare species, while maintaining an overall loss of 80% (I, equal decline rates between species; II, higher decline rates for abundant species; and III, higher decline rates for rare species). (*B*) Persistence probabilities for each scenario assuming perfect (p = 100%; solid lines) and imperfect (p = 40%; dashed lines) sampling efficiency. (*C*) Rank abundance curves for the initial population (thick black line) and for each of the scenarios of decline. (*D*) Fraction of species lost in each scenario under perfect (p = 100%) and imperfect (p = 40%) sampling efficiency.

Empirical Results

The total flying-insect biomass, number of hoverflies, and number of species of hoverflies were severely reduced in 2014 compared to 1989, despite the approximately 41% longer trap exposure time in 2014 (Table 1 and *SI Appendix*). Accounting for trap-exposure time only, 82% less insect biomass was trapped in 2014 than in 1989, as well as 89% fewer hoverfly individuals (Table 1). The overall species richness of hoverflies, as well as their accumulation pattern with increasing exposure time, indicated a lower richness in 2014 than in 1989 (Fig. 2*A*). Chao's estimates of richness based on the accumulated species-abundance lists suggest 161.4 (SE = 10.9) hoverfly species were present in 1989 against 125.0 (SE = 11.2) in 2014, essentially a 23% decline in richness between the 2 y over a 25-y period. Similar losses in richness have been reported recently for various insect orders (2, 12), depending obviously on the spatial and temporal scales of inference. Furthermore, higher-order diversity measures (i.e., Hill numbers of orders 0 to 3, respectively species richness, Shannon diversity, Simpson diversity; and unnamed higher-order diversity measure in *SI Appendix*, Fig. S2) all declined, with increasing magnitude of decline with increasing order of Hill number (27, 36).

Even though hoverflies make up less than 5% of total insect biomass in the samples, we found that the total hoverfly abundance was significantly correlated with total flying-insect biomass, with abundance increasing linearly with larger biomass samples (on log-log scale; Fig. 3*A*). The relationship of the number of individuals to the total insect biomass changed from 1989 to 2014 in both intercept and slope (model with and without interaction; likelihood-ratio test, F = 6.5, P = 0.012, d.f. = 87, R^2 = 75.05%; Fig. 3*A*), showing that somewhat fewer hoverflies were trapped per gram of total insect biomass in 2014 than in 1989. We did not observe any significant difference in the distribution of log-body size of the trapped species between the 2 y (*SI Appendix*, Fig. S3), suggesting that it is unlikely that declines in biomass are a result of lighter species replacing heavier ones, at least within the group of hoverflies. Hoverfly species richness was nonlinearly related to biomass (Fig. 3*B*), with slightly diminishing increases in richness at larger biomass samples as a consequence of the nonlinearity of the species accumulation curve against cumulative exposure time (Fig. 2*A*).

We developed a statistical model to increase the temporal resolution of our analyses and to incorporate sampling aspects (i.e., exposure length and spatial differences; *Materials and Methods*) and interpolated daily weather conditions (*SI Appendix*, Fig. S4). Using this model, we estimated a mean loss of 82.7% (CI: 82.0 to 83.5) in daily total hoverfly abundance $log(\lambda_{abundance})$ = −1.756, SD = 0.028; *SI Appendix*, Fig. S5*A* and Table S1) and a decline of 81.2% (CI: 79.6 to 82.6) in hoverfly species richness per trapping day ($log(\lambda_{richness})$ = −1.671, SD = 0.040 (*SI Appendix*, Fig. S5*B* and Table S2). Weather and trap effects were significant (*SI Appendix*, Tables S1 and S2), but did not affect the annual rate of decline in either response variable. These estimates indicate that at the daily level, declines in total insect biomass are paralleled by isometric declines in abundance and species richness. However, the strength of the correlation between total flying-insect biomass and species richness depends on the temporal scale of inference, with species richness declining much more on a daily basis (−82%) than total richness decline obtained from the seasonally accumulated samples (−23%). These results bear consequence for ecosystem functionality, for which arguably the daily activity and presence of hoverfly species are most relevant.

For the 141 hoverfly species caught in 1989, the probability of being caught again in 2014 increased linearly with log abundance in 1989 (Fig. 4*A*). The probability of presence in the 2014 trap data (given presence in 1989) was lower than expected under a null model with a uniform decline rate across species (i.e., scenario I in Fig. 1*A*), especially for the species that were relatively abundant in 1989. The observed extirpation rates are thus more consistent with a scenario in which common species have higher per capita decline rates than rare species (scenario II in Fig. 1*A*). Note the similarity of the lines of Fig. 4*A* with theoretical results in Fig. 1*B*: high decline rates of common species under imperfect detection (as not all flying insects will be trapped; orange dashed line) compared to the equal decline rate scenario and perfect detection (blue solid line).

Among species trapped in both years (n = 81), species abundances in 2014 appeared to have, on average, declined relatively less for rare than for common species, with a slope estimate of b_n = 0.861 (SE) against log abundance in 1989 (Eq. **15** and Fig. 4*B*). Comparison with a model of equal decline rates between species (scenario I) also suggests that persistent rare species experience lower abundance decline rates (i.e., black line versus theoretical blue line in Fig. 4*B*), even though changes in abundance between the years differed considerably between species. Of the 24 most common species in 1989 (N > 200 per 1,000 trap-sampling days), 3 were extirpated in 2014, while almost all remaining species were severely reduced in numbers (Table 2). In the group of rare species (between one and four individuals per 1,000 trap-sampling days), only 2 increased in

Table 1. Summary of hoverfly data

Trap no.	No. samples		Exposure time		No. species		No. individuals		Biomass	
	1989	2014	1989	2014	1989	2014	1989	2014	1989	2014
1	20	13	140	216	96	52	2,084	394	949	416
2	20	12	140	182	86	28	3,222	122	1,508	223
3	21	13	146	216	73	56	2,005	516	898	240
4	21	13	146	216	95	66	4,091	417	1,429	423
5	21	12	146	184	75	45	3,504	953	1,020	178
6	20	10	140	200	91	38	2,060	236	1,453	257
∑	123	73	864	1,220	141	102	16,966	2,638	7,257	1,737

For each trap and year the number of samples, the total exposure time (in days), the total number of hoverfly species and individuals, and the biomass of all flying insects are given.

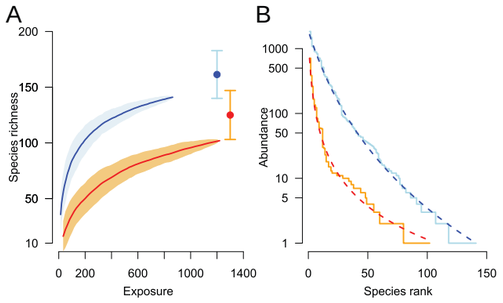

Fig. 2. Comparison of species richness and species relative abundance between 1989 (blue) and 2014 (red) based on six malaise traps in each year. (*A*) Species accumulation curves along with 95% intervals based on 100 random permutations of original data (data pooled within year), against cumulative exposure time (number of trap-sampling days). Points depict Chao's estimates of richness in each year along with 95% confidence intervals. (*B*) Rank abundance curves where solid lines depict data and dashed lines the fitted Zipf–Mandelbrot estimates.

abundance class, and 34 species (67%) of this group were not seen in 2014. However, 18 of the 21 new species in 2014 were in this rare species group ($N \leq 4$; Table 2). Of the remaining group of species of intermediate abundance (66 species in 1989) a considerable number ($n = 23$) were no longer observed in 2014 and those that did reappear were considerably reduced in numbers.

Discussion

Biomass declines of total flying insects predict diversity declines in hoverflies, with numerical declines appearing across the full range of species. The highly time-demanding and logistically demanding effort required for taxonomic identification in insect communities forms a challenge in insect biodiversity studies such as the present one. Although nearly 20,000 specimens were identified to species level, only 2 y of data are available and utilized in the present study. Ecological processes that may affect our conclusions based on those 2 y, such as for example boom-and-burst dynamics of species with longer development cycles (observed for example in several beetle and cricket species) or mass-migration influx during autumn, are, however, not evident in our data and as such we do not expect such processes to have affected our results and conclusions. Our data, being representative for regional biomass distribution (*SI Appendix*, Fig. S6) and fitting in the 27-y trend of biomass decline across 63 different sites in Germany (1), suggest that our study sites are not exceptional and that these patterns are likely to be widespread.

Species persistence probabilities appeared lower than expected for species of intermediate abundance, where the expectation is drawn assuming a uniform rate of decline among species. Contrarily, for rare species, persistence probabilities are higher than expected under this same model, although maintaining lower persistence probabilities than more common species. Variation in species persistence probabilities thus appears to be most consistent with our hypothetical scenario II, in which the declining rates of common species are stronger than those of rare ones, while still resulting in an overall 80% drop in abundance and assuming imperfect sampling. Conditional on persistence, variation in the rate of decline between common and rare species (Fig. 4*B*) corroborates this result. The disproportionately high extirpation rate of intermediately common species in the empirical data did not match any of the model scenarios, which included only monotonically increasing or decreasing decline rates along the abundance axis. This difference likely caused the mismatch in the higher-order Hill number responses between empirical data and hypothetical scenarios (compare *SI Appendix*, Fig. S1, scenario II vs. *SI Appendix*, Fig S2).

We conclude that large insect biomass reductions are thus disproportionately affected by the numerical declines of common species and by the extirpation of intermediately common species. The relative abundances of the hoverfly species in the malaise traps, even though only 2 y were analyzed, match the distribution and abundance of the species at the national scale (37) (*SI Appendix*, Fig. S7). As such, these results challenge our current understanding of population extinction processes, where stochastic variation pushes populations with the lowest numbers to disappear first (25, 26). While the mechanisms require additional research, it might be that previously common species are more heavily affected by reduced population sizes than expected because they are less adapted to deal with potential Allee effects (38) than already rare species or may be more dependent on intact metapopulations compared to naturally rare species (39, 40). Accordingly, the decline in most common species, and decline and disappearance of the intermediate species, contributed most to the drop in higher-order diversity indexes, as these indexes rely less on the response of rare species to community change (27). As such, the observed declines in rare, intermediate, and most common species differentially determined the responses in total abundance, species richness, and diversity.

In several recent studies, attempts have been made to convert numerical species and abundance loss into biomass loss (16, 19–21). By scaling with species average weight they show that abundance declines, species range contraction, or species loss may or may not be paralleled by their respective biomass loss (19–21). However, as these studies typically focus on the biomass of single insect taxonomic groups, they cannot reveal the true correspondence in declines between total insect biomass and species diversity. While abundance and biomass are proportional under spatial and temporal scaling, species richness is not (Fig. 3). Hence, sampling differences (and efficiency) between the various studies, e.g., whether or not monitoring occurs throughout the growing season, are likely to distort proportionality between declines in persistence and abundance and hence correspondence between biomass and diversity loss. In this study we demonstrate that under large biomass drops, species richness and diversity are inevitably reduced, particularly so when inferring at a small temporal scale (*SI Appendix*, Figs. S2 and S5).

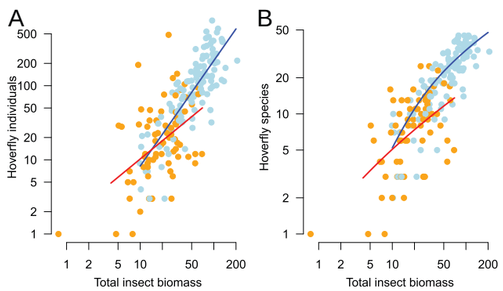

Fig. 3. (*A* and *B*) Relationships between total biomass of flying insects (grams per sample) and (*A*) number of hoverfly individuals and (*B*) number of hoverfly species. Blue and orange points depict trap sample data of 1989 and 2014, respectively, while blue and red lines depict year-specific fitted relationships.

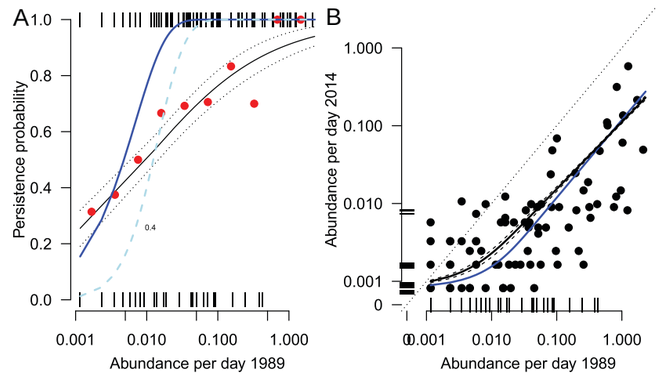

Fig. 4. (*A*) Probability of species persistence in the malaise trap data versus log abundance ($n = 141$). Red points depict average probabilities over 10 equidistant classes of abundance (for depiction purposes only), while the solid black line represents the fitted probabilities from a logistic regression (Eq. **13**) along with 1 SE (dashed black lines). The blue line depicts the expected persistence probabilities calculated under a null model with uniform rate of decline across species (i.e., scenario I in Fig. 1), while the dashed light blue line represents expectations for observed persistence based on an arbitrarily chosen 40% sampling efficiency. (*B*) Population sizes in 2014 versus 1989. The solid black line depicts expected abundance (i.e., for species that are present in both years and for which a trend can be derived) along with 95% confidence levels (dashed black lines) in 2014 given abundance in 1989 as calculated from data (Eq. **17**), while the solid blue line depicts the expected abundance in 2014 assuming a uniform rate of decline across species (i.e., scenario I in Fig. 1*A*).

As hoverflies are a relatively rich and diverse taxon (in terms of habitat requirements and functional groups), the observed declines across the species (mainly losers, essentially no winners) suggest that a common factor is responsible for the declines in hoverflies and possibly for other insect orders. While the variety of ecological functions is proportional to species richness (41–44), resource flows are mostly governed by the abundance of species (45–47), and hence we expect ecological functionality to be diminished in analogous proportions to abundance loss. Furthermore, the severe drop in both daily richness and daily abundance during the growing season suggests that both the diversity and quantity of the ecological functions that hoverflies perform (such as pollination and predation) will be jeopardized.

We conclude that an 80% insect biomass decline implies a disruption of the entire insect community, which constitutes a major part of the second trophic level in many ecosystems. Our results, with species of intermediate abundance (both locally and regionally; *SI Appendix*, Fig. S7) disproportionately in peril (Fig. 4*A*) and the most common species severely reduced in numbers (Figs. 2*B* and 4*B*), challenge current conservation efforts. Under the "umbrella species" paradigm, rare and specialized species and their habitats are prioritized in conservation strategies, from the notion that by doing this it will provide a safe haven for the more common and generalist species as well (40). To revert current trends in insect decline, this may be insufficient if current pressures on rare species are different from those on more common species. A holistic approach is required (48, 49) involving connecting and enlarging of nature reserves, together restoring basic ecological conditions, also for common species.

Materials and Methods

Data. We utilize data obtained from six malaise traps in the Wahnbachtal (North Rhine-Westphalia, Germany, 50°51′7″N, 7°19′15″E) that were deployed in 1989 and again in 2014, at the exact same locations. Traps were situated in wet meadows as well as tall perennial meadows, in close proximity to shrub corridors, to forest–grassland borders, and to the Wahnbach River and surrounded by agricultural land, essentially a rather heterogeneous habitat. The Wahnbach River and the greater part of the valley are protected for watershed purposes and are subject to nature conservation management by the Wahnbach Talperrenverband. Hence, several restrictions apply to safeguard against water contamination.

Total insect biomass collected with these traps was already included in ref. 1, but here we focus on additional information: the abundance and richness of hoverflies (Syrphidae) in each of the collected samples. Methodologies of collection are described in refs. 1 and 50–53. In brief,

Table 2. Distribution of number of species per abundance-class category in 2014 and 1989

	1989				
	Common > 200 (%)	Intermediate 5 to 200 (%)	Rare 1 to 4 (%)	Not trapped (%)	Total trapped
2014					
Common	3 (12.5)	0	0	0	3
Intermediate	16 (66.7)	19 (28.8)	2 (3.9)	3 (14.3)	37
Rare	2 (8.3)	24 (36.4)	15 (29.4)	18 (85.7)	41
Not trapped	3 (12.5)	23 (34.8)	34 (66.7)	0	
Total trapped	24	66	51		

Abundance classes are defined as rare, 1 to 4 individuals per 1,000 trapping days; intermediate, 5 to 200 individuals per 1,000 trapping days; and common, >200 individuals per 1,000 trapping days. Percentages in parentheses quantify the distribution of species column-wise.

malaise traps were deployed throughout the growing season and operated continuously (day and night). Malaise trap construction (e.g., size, material, coloring, and ground sealing) and placing (e.g., positioning, orientation, and slope of the locations) were standardized in all aspects. Insect samples were preserved in 80% ethanol solution. Catches of the six traps investigated in the present study were emptied regularly: On average exposure intervals were 7.0 d (SD = 0.5) in 1989 and 16.7 d (SD = 5.6) in 2014. Across the six traps in 2014 the total exposure time (in number of days) was 42% higher compared to 1989. All collected samples (n = 196) were used in the present analysis with in total 19,604 individual hoverflies counted, distributed over 162 species and 59 genera. In Table 1 we further provide summary statistics relevant for sample size descriptions.

To assess how environmental conditions have changed over the 25 y, several additional datasets were assembled. Aerial photographs allowed us to investigate broad changes in the landscape surrounding the trap locations. Virtually no landscape changes were observed in this area, and hence we did not include landscape variables in our analysis. Furthermore, climatic data were obtained from 169 climatic stations and were used to interpolate daily weather variables to each trap location, using spatiotemporal kriging. These steps are described in ref. 1. Seasonal profiles of temperature, precipitation, and wind speed are given in *SI Appendix*, Fig. S3. Raw data and R code of the analysis are available in Zenodo (54).

Analysis Overview. Our analysis consists of three components. First, we considered total abundance, species richness, and species diversity, at two temporal scales: pooled per year, i.e., across the sampling season, and seasonally (i.e., per day), and we compared these metrics between 1989 and 2014. Second, we examined how total flying biomass (i.e., the weight of all trapped insects, of which hoverflies are only a small proportion) related to total abundance as well as species richness of hoverflies. Third, we derived persistence probabilities and population growth rate trends per species, to examine interspecific variation in these parameters.

Pooled Species Richness and Diversity. We pooled data across traps in each year and compared species richness and diversity between the two sampling years. Because of unequal sampling length between the 2 y (Table 1), we calculated the change in species richness between 1989 and 2014 using two methods. First, we used the Chao (55, 56) estimator for species richness, as it has been found to perform best among competing estimators (57),

$$\hat{S}_{chao} = S + \hat{f}_0 = S + \frac{n-1}{n} f_1 \frac{f_1 \times 0.5}{f_2}, \quad [3]$$

where S is the observed richness, n the samples size, and f_k the number of species with exactly k detections, i.e., f_1 the number of singletons, f_2 the number of doubletons, and f_0 the (unobserved) number of species not detected. Second, changes in species richness between the two sampling years were also assessed by species accumulation curves against exposure time.

To better visualize how dominance and diversity changed between the 2 y, we fitted rank-abundance curves (58) to the hoverfly data. We initially considered five common distributions (broken stick, preemption, log-normal, Zipf, and Zipf–Mandelbrot) (59, 60) but for both datasets the Zipf–Mandelbrot distributions had a superior fit. We therefore report only results on the fitting of this rank distribution. The Zipf–Mandelbrot rank-abundance distribution is given by

$$\hat{n}_r = N \times \frac{e^{\beta_0 * \log(r+\beta_1)}}{\sum(e^{\beta_0 * \log(r+\beta_1)})}, \quad [4]$$

where β_0 and β_1 parameters shape the decline in abundance with increasing species rank.

Finally, we compared the Hill numbers (27) of orders q = 0 to 3 for the pooled data across the 2 y. Hill numbers conveniently express diversity with varying emphasis along the common to rare species axis, with higher-order estimates putting more weight on the common species compared to rare ones. Hill numbers are given by

$$H(q) = \sum(p_i^q)^{\frac{1}{1-q}}, \quad [5]$$

where p_i is the relative proportion of the ith species in the sample, and the summation is taken over all species in the data. For $q = 0$, $H(1)$ equals the species richness; for $q = 1$ it corresponds to the exponent of the Shannon diversity index; for $q = 2$, $H(2)$ corresponds to the inverse Simpson index; while for higher-order values of q, diversity measures emphasize common species more over rare species (27).

Daily Activity Abundance, Species Richness, and Diversity. We considered the total abundance (number of hoverfly individuals) and number of species at a finer temporal scale, in addition to the analysis integrating data across the sampling years. At this finer temporal scale of analysis, sampling and environmental effects are likely to be more pronounced than in the pooled analysis. For example, abundance is measured through the number of individuals trapped, which in turn depends on both trap (and sample) exposure length (longer intervals trap more insects) and the environmental conditions (e.g., weather) affecting the activity of species during the exposure period of a sample. Furthermore, contrary to abundance, species richness does not act additively with respect to exposure period length; i.e., we do not expect a monotonic increase in richness with sampling interval length, but rather a nonlinear increase approaching an asymptote akin to species–area relationships.

To allow comparison of abundance and species richness between the 2 y, we developed a model that accounts for environmental and sampling processes, by modeling the daily values of the response variable using a latent variable approach (1) and where sample expectations are aggregated over daily expectations of the corresponding exposure interval. Parameter estimates were obtained by fitting three parallel Markov chain Monte Carlo (MCMC) chains using the Just Another Gibbs Sampler (JAGS) (61) and R (62) using 12,000 iterations, a burn-in period of 2,000 samples and a thinning interval of 10 samples to account for serial chain autocorrelation. Inference was thus based on 3,000 posterior samples for each parameter.

Total daily abundance. Let N_j be the total number of individuals observed in each sample j, collected between day $\tau_{1,j}$ and $\tau_{2,j}$, and let Y_j be its expectation under a Poisson process:

$$N_j \sim Poisson(Y_j). \quad [6]$$

In turn, the expectation per sample is the sum of the (unobserved) daily expectations over the corresponding exposure interval

$$Y_j = \sum_{t=\tau_1}^{\tau_2} y_{j,t}, \quad [7]$$

where $y_{j,t}$ is the latent number of individuals on a given day t in sample j, which in turn is modeled as a function of a number of covariates (*Parameterization*).

Observed and expected daily species richness. Let $q_{j,t} = y_{j,t}/Y_j$ be the proportion of the total abundance on day t of the exposure interval of sample j. Also let $N_{i,j}$ be the observed abundance of species i in sample j. Under the assumption that $q_{j,t}$ is invariant with respect to species, the expected abundance of each species in each day is given as the latent multinomial sample $n_{i,j,t} \sim \text{Multinomial}(q_{j,t}, N_{i,j})$.

The number of species expected to have been trapped on day t is then simply

$$S_{t,j} = \sum_{i=1}^{K} X_{i,j,t}, \quad [8]$$

where $X_{i,j,t} = 1$ if $n_{i,j,t} > 0$ and 0 otherwise. Next, to account for imperfect detection (not all species present on a particular day are likely to have been trapped), we relied on Chao's estimator to derive the number of species expected to be present: $\hat{s}_{t,j}$. To this end, we tracked doubletons (f_2) and singletons (f_1) for each exposure day in the MCMC samples and computed the expected richness using Eq. **3**.

Parameterization. The daily expectations of total number of hoverfly individuals were modeled as a function of year, a seasonal component (day number τ, where 0 = January 1), weather effects (temperature, wind speed, and precipitation), and an effect for each trap (five contrasts),

$$log(y_{i,\tau}) = \alpha_N + \beta_{N,year} \times X + f_N(\tau) + f_N(climate) + \beta_{N,trap}, \quad [9]$$

where $f(\tau) = \beta_\tau^{(1)} \times \tau + \beta_\tau^{(2)} \times \tau^2$ and $f(climate) = \sum_{i=1}^{3}(\beta_{clim}^i \times C_i)$, with C_i representing each weather variable i. Prior to analysis, weather and seasonal covariates were scaled to unit variance and zero mean.

Using the posterior estimates of expected daily richness ($S_{t,j}$), we also derived the rate of decline in richness between the 2 y, while at the same time accounting for weather and sampling effects. To accomplish this, we used expected richness estimates $\hat{s}_{t,j}$ as the response in a regression with Poisson error structure (allowing for overdispersion) and a log link:

$$log(\hat{s}_{t,trap}) = \alpha_s + \beta_{s,year} \times X + f_s(\tau) + f_s(climate) + \beta_{s,trap}. \quad [10]$$

This was performed for each of the MCMC iterations, and results were summarized over the posterior distributions of the coefficients.

Representativeness of the Sampled Years. We compared within-year profiles of total flying-insect biomass between Wahnbachtal and all other sites analyzed in ref. 1 in the periods 1989 to 1992 and 2013 to 2015 (n = 15 and 29, respectively), which allowed us to infer how representative the six malaise traps included in this study are for the regional biomass distribution and trend (*SI Appendix*, Fig. S6). The years (1989 and 2014) in which the Wahnbachtal was sampled are at the beginning and toward the end of the study period analyzed in ref. 1, allowing easy comparison with the overall biomass declines reported in that study.

Abundance–Biomass Relationship. To infer how total flying-insect biomass related to the abundance of hoverflies, we regressed the log of the number of individuals per sample against the log of the biomass per sample. We used simple linear regression with Gaussian error and with separate slope and intercept for each year and examined whether simpler models (for example a common slope across years) were more parsimonious:

$$N_j = \psi + \phi B_j, \quad [11]$$

where ψ and ϕ are the intercept and slope coefficients relating abundance to biomass (B_j).

We did not expect a linear relationship between biomass and hoverfly richness, but rather a curvilinear one, with the increase in species richness diminishing at large biomass quantities. To relate the number of species to total flying-insect biomass of a given sample, we used rarefaction theory (63). The number of species expected to be trapped in sample j depends on the number of individuals trapped (N_j) total richness (S), and relative abundance of each species (N_i). Additionally, it depends on the seasonal activity of each species, as not all species may be available to be trapped during each exposure period of each sample. The expected number of species in sample j given total sample abundance N_j is given by

$$\hat{s}_j(N_j, S) = c \times \sum_i^S \left(1 - \frac{\binom{N-N_i}{N_j}}{\binom{N}{N_j}}\right), \quad [12]$$

which essentially represents sampling without replacement. The summation is taken over all species observed (S, here across locations and years) and results in the rarefied richness from a total of N individuals (ever counted across locations and years) to the total abundance N_j of sample j. Parameter c represents the average species' seasonal availability (*SI Appendix*). To produce the relationship between richness and biomass (Fig. 3), we replaced N_j in Eq. **12** with the mean expectation of abundance given biomass from Eq. **11**.

Persistence and Rates of Change by Species. We examined variation in the persistence probabilities between species (i.e., the probability of a species being present in 2014, given its presence in 1989) as well as rate of change in abundance for all species present in both years (n = 81). Both response variables were subsequently contrasted against our theoretical results (Fig. 1).

To analyze persistence, we used generalized linear models (GLMs) with species presence in 2014 as a response, assuming a binary error distribution and a logit link, and with log(abundance 1989) as an explanatory variable:

$$\log\left(\frac{\hat{p}_i}{1-\hat{p}_i}\right) = a_p + b_p \times \log(n_{i,1989}). \quad [13]$$

The fitted logistic regression (based on observations) was compared to the expected persistence probability for each species under a uniform decline rate (i.e., scenario I in Fig. 1). The expected probability of persistence was derived using Eq. **1**, where we defined the rate of decline in total abundance of species present in 1989 as

$$\lambda = \frac{\sum_1^K n_{i,2014}}{\sum_1^K n_{i,1989}}. \quad [14]$$

For species present in both years we modeled the abundance per species in 2014 by maximizing the likelihood of a zero-truncated Poisson distribution, with a log-link relationship to log(abundance in 1989):

$$\log(n_{i,2014}) = a_n + b_n \times \log(n_{i,1989}). \quad [15]$$

Here too, we compared this observed species abundance to the expected abundance in 2014 under a uniform decline rate. Parameter b_n measures the effect of initial abundance on rate of species decline: Value $b_n = 1$ reflects scenario I, $b_n < 1$ reflects scenario II, and $b_n > 1$ reflects scenario III. Because zero observations are excluded in this analysis, we used a zero-truncated Poisson distribution to estimate a_n and b_n:

$$P(x) = \frac{\text{Pois}(x, \mu)}{1 - \text{Pois}(0, \mu)}, \quad [16]$$

where mu is the expectation under a Poisson distribution. The expected abundance of each species in 2014 is given as $n_{i,2014} = \lambda \times n_{i,1989}$. To integrate that only nonzero-integer values are observed, i.e., $n_i(1989) > 0$ and $n_i(2014) > 0$, the expected abundance given initial abundance in 1989 is given as

$$\frac{\lambda \times n_{i,1989}}{1 - exp(-\lambda \times n_{i,1989})}, \quad [17]$$

which typically produces nonlinear curves, reflecting that only nonzero observation can be observed for low initial abundances (Fig. 4*B*).

Data Availability. Dataset and R-code data have been deposited in Zenodo (54).

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Supporting Information Text

Supplementary Methods.

Determining the relative biomass contribution of Hoverflies. In order to assess how much hoverflies contribute to the total biomass (of all flying insects) in the malaise traps, we utilized two independent datasets. We used measurements of body length made by the Krefeld Entomological Society (Axel Ssymank, all species in our data), and fresh-weight measurements kindly provided by Nick Hofland (Radboud University). The fresh-weight data were collected in 2016 and 2017 and included in total 97 measurements, over 13 hoverfly genera). We then paired the two datasets by species (if unknown, by genus) and regressed the log of the body weight to body length (intercept = -6.33, slope coefficient= 0.24). The resulting model coefficients were used to allometrically predict the weight per individual in our data, which were subsequently summed over all individuals per year. Based on these calculations, we predicted total hoverfly mass of 321.6 and 52.2 gram for 1989 and 2014, respectively. This implied a relative contribution of 4.4% and 3.0% to the total flying insect biomass collected in the Wahnbachtal malaise traps in 1989 and 2014, respectively.

Steps in deriving hypothetical scenarios of variation species decline rate. In the main text, we describe three alternative hypothetical scenarios of species decline rates. Here we describe the steps and assumptions that were made while designing these scenarios. We started off with a rank-abundance curve that was similar to the observed rank-abundance curve of the hoverflies (Fig. 2B in the main text), i.e. by using a zipf-mandelbrot distribution with arbitrary parameters of $\beta_0 = -1.5$ and $beta_1 = 2$ (see equation 4 in main text), for a pool of 200 species. The total hoverfly community was scaled so that the most abundant species arbitrarily consisted of 1500 individuals. Next we defined the rate of decline in each of the three scenarios. For equal rates of decline between species (scenario I) we set $\lambda_i = 0.2$, i.e. at 80% decline for each species i. In scenarios II and III we allowed decline rates to scale linearly to species rank, where the relationship was negative in scenario II and positive in scenario III, at arbitrary slopes of -0.015 and 0.020, respectively. Finally we scaled the resulting species decline rate vector in order to achieve a total abundance loss of 80% (see Fig. 1A in main text). Using these three scenarios of hypothetical decline rates, we proceeded in calculating persistence (equation 1), rank abundance distributions, and fraction of species lost (Fig. 1B,C,D), under perfect and imperfect (at 40%) detection efficiency. We also examined how other diversity measures, i.e. Hill numbers (1, 2) of orders 0, 1, 2, and 3, behave in the presence of the three scenarios of decline rates, and under imperfect detection. To this end, we simulated 1000 hypothetical hoverfly communities (based on parameters as above) and for each community we calculated the percentage change in Hill numbers of orders q=0-3 (see Fig. S1).

Approximating average seasonal species availability. If detectability of individual species is invariant during the season, i.e. they are equally likely to be trapped on each of the sampling days, then the distribution of number of species in each pot could be approximated in a straightforward manner by a sampling-without-replacement process, conditional on the accumulated community data. However, hoverfly species are not likely to be active during the entire season, leading to non-uniform detectability during the season. Formally, the number of species expected to be trapped in a single pot ($\hat{s}$) will depend on the relative abundance of each species (N_i), the total abundance in the pot (N_j) and total species richness S, according to

$$\hat{s}(N_j, S) = \sum_i^S \left(1 - \frac{\binom{N-N_i}{N_j}}{\binom{N}{N_j}} \right)$$

(3) where $N = \sum N_j = \sum N_i$.

In equation 11, main text, we introduced a correction factor c, that measures the average availability of species during the season. We used the following approach to obtain an estimate of c.

First we produced average daily total abundance per pot j (abundance per pot divided by exposure length) which we denote as $\hat{n}_j$. We then calculated the expected number of species given total richness (S), total abundance (N) and relative species abundance (N_i). Additionally, and for each pot, we calculated the expected number of species per day conditional on the number of species seen in each pot (S_j).

$$\hat{s}_j^{(2)}(\hat{n}_j, S_j) = \sum_i^{S_j} \left(1 - \frac{\binom{N-N_i}{\hat{n}_j}}{\binom{N}{\hat{n}_j}} \right)$$

The relationship between $\hat{s}_j^{(1)}(\hat{n}_j, S)$ and $\hat{s}_j^{(2)}(\hat{n}_j, S_j)$ is linear, with zero intercept and slope $0 < c \leq 1$, because typically $S_j \leq S$. The coefficient c is hence obtained as:

$$c = \frac{\hat{s}_j^{(2)}(\hat{n}_j, S_j)}{\hat{s}_j^{(2)}(\hat{n}_j, S)}$$

.

56 **Supplementary Figures**

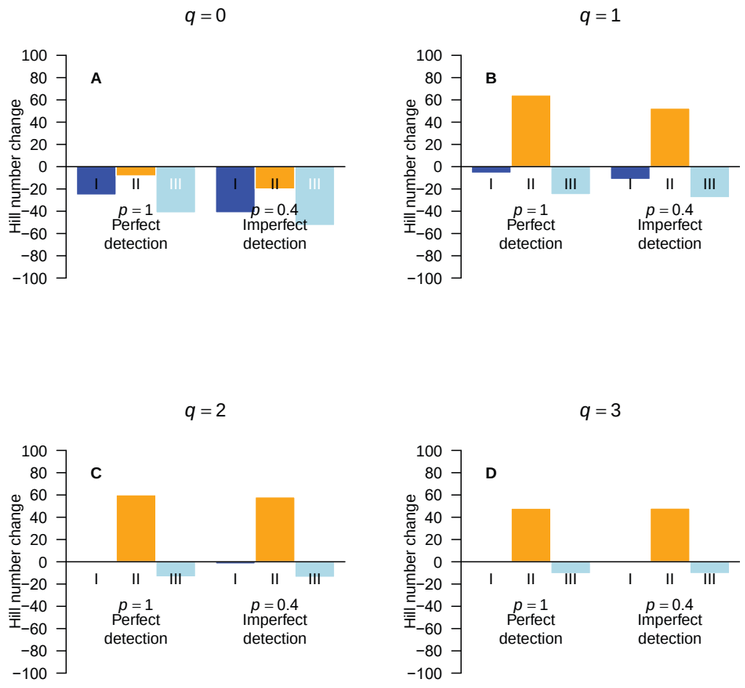

Fig. S1. Change in diversity measures (Hill numbers for orders $q \in \{0, 1, 2, 3\}$) in each theoretical scenario under perfect (p=100%) and imperfect (p=40%) sampling efficiency. A: Change in species richness (q=0), B: Change in Shannon diversity (q=1), C: Change in inverse Simpson index (q=2), D: Change in a higher-order diversity measure (q=3).

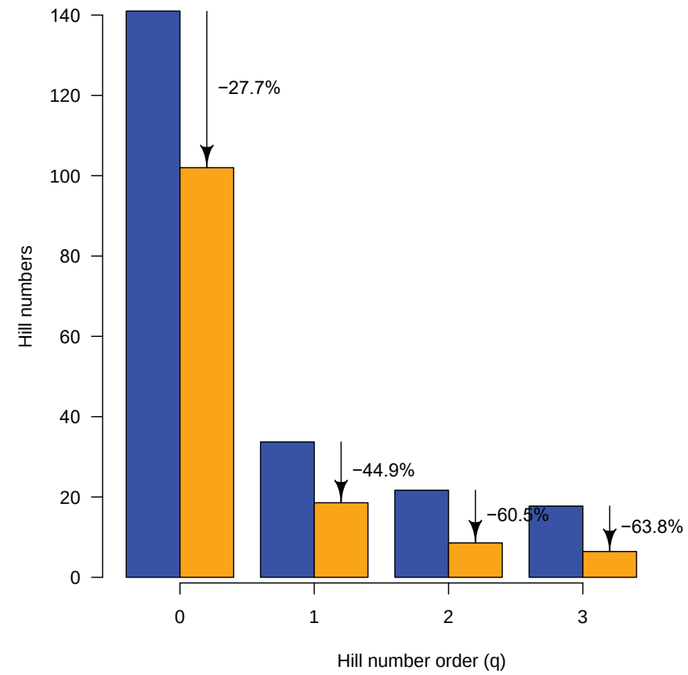

Fig. S2. Hill numbers of order 0-3 for 1989 (blue bars) and 2014 (orange bars), with accompanying amount of decline between the years. Orders of 0-2 denote species richness, exponent of Shannon entropy, and Simpson diversity, respectively, while for q=3 emphasis is placed predominantly on the more common species in the assemblages.

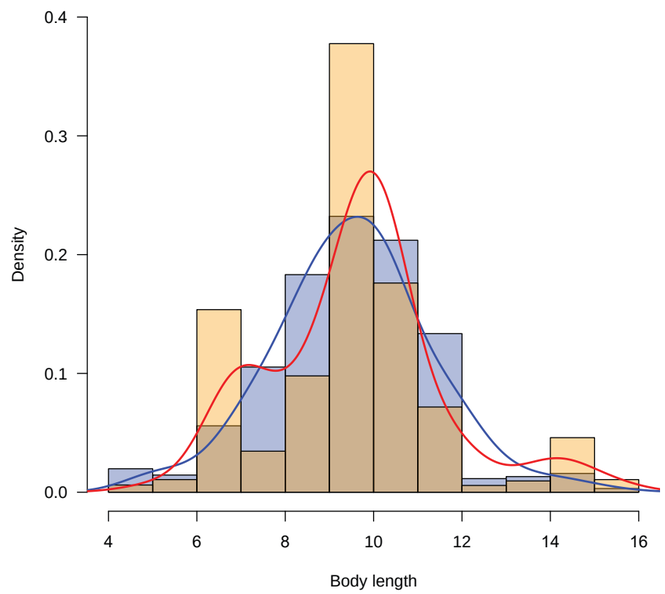

Fig. S3. Distribution of body length weighted by specie's abundances for 1989 (blue) and 2014 (red)

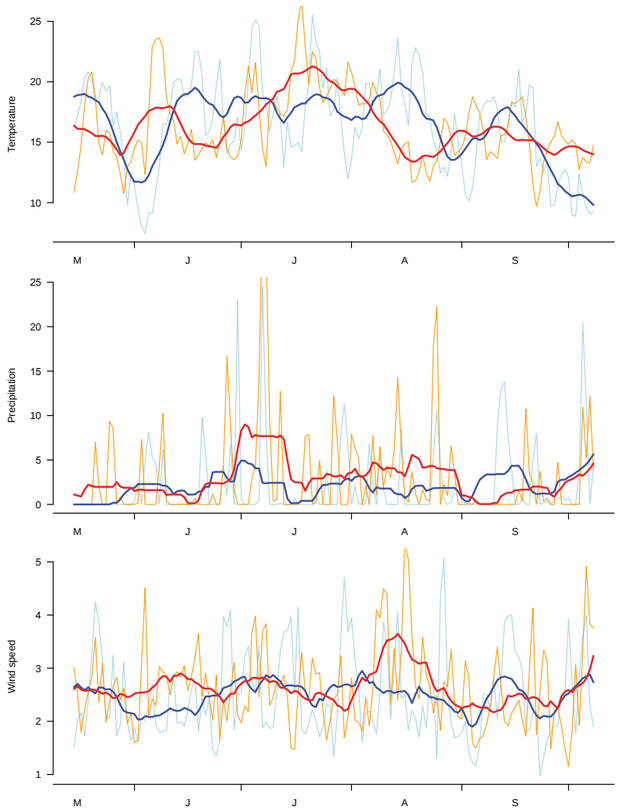

Fig. S4. Climatic variables in 1989 (light blue) and 2014 (orange) for temperature (in C^o), precipitation (mm/day) and wind speed (m/s). Thick red and blue lines represent the 2-week moving average.

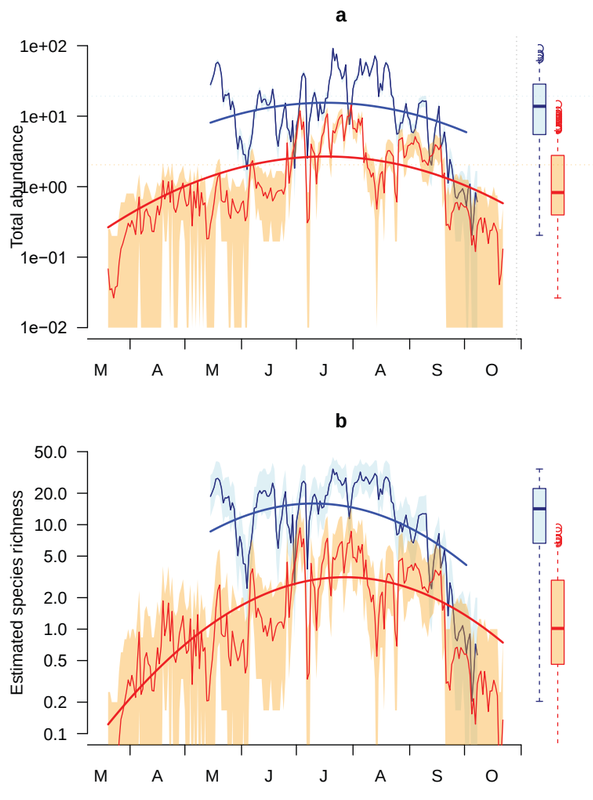

Fig. S5. Seasonal trajectory of estimated number of hoverfly individuals (A) and species (B) in 1989 (blue) and 2014 (red) along with 95% credible intervals. Boxplots provide the distribution of the mean daily values over the two seasons.

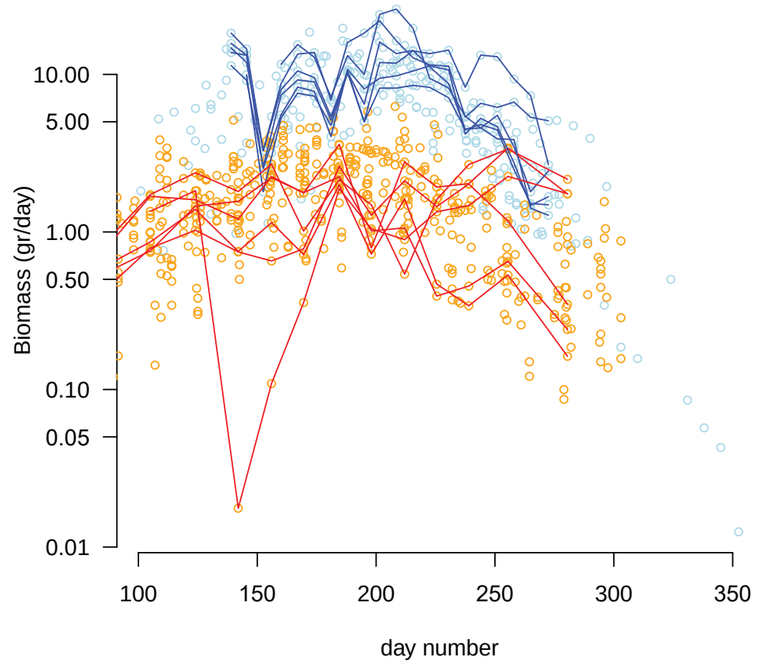

Fig. S6. Temporal distribution of biomass (in gram per day) of total flying insects for all pots in the period 1989-1992 (light blue dots) and period 2012-2015 (orange dots). Blue and red lines depict the seasonal biomass distribution for the six Wahnbachtal traps examined in 1989 and 2014

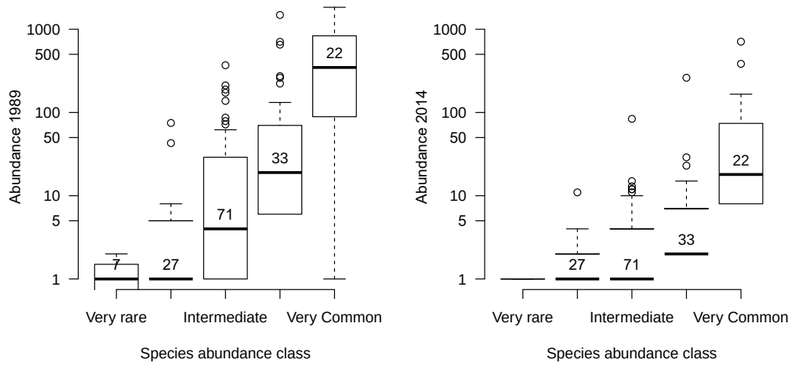

Fig. S7. Observed abundance (sum of 1998 and 2014 by species) versus abundance-class of species in Germany as classified in (4). Numbers inside boxplots represent the number of species in that class

Supplementary Tables

Table S1. Parameter estimates from posterior distribution for daily total hoverfly abundance. d: climatic parameters. c: seasonal (quadratic effect) parameters, b: trap effects, and log(λ): the log-rate of decline from 1989 to 2014.

	mean	sd	2.5%	97.5%	$\hat{R}$
Intercept	2.477	0.027	2.424	2.529	1.002
log(λ)	-1.756	0.028	-1.808	-1.697	1.001
c_1	0.090	0.014	0.063	0.116	1.001
c_2	-0.480	0.019	-0.516	-0.443	1.002
c_3	0.476	0.033	0.412	0.541	1.001
c_4	-0.614	0.035	-0.683	-0.548	1.001
d_1	0.590	0.013	0.564	0.615	1.001
d_2	-0.367	0.032	-0.432	-0.310	1.001
d_3	-0.048	0.023	-0.094	-0.003	1.001
b_2	0.318	0.027	0.264	0.371	1.001
b_3	0.024	0.028	-0.031	0.082	1.002
b_4	0.631	0.025	0.583	0.678	1.001
b_5	0.629	0.025	0.581	0.678	1.001
b_6	-0.050	0.029	-0.107	0.007	1.001

Table S2. Parameter estimates from posterior distribution for daily hoverfly species richness. d: climatic parameters. c: seasonal (quadratic effect) parameters, b: trap effects, and log(λ): the log-rate of decline from 1989 to 2014.

	mean	sd	2.5%	97.5%	$\hat{R}$
Intercept	2.748	0.048	2.656	2.846	1.002
log(λ)	-1.671	0.040	-1.750	-1.592	1.001
c_1	-0.036	0.033	-0.101	0.029	1.002
c_2	-0.571	0.041	-0.652	-0.491	1.002
c_3	0.325	0.024	0.277	0.373	1.001
c_4	-0.568	0.029	-0.627	-0.514	1.001
d_1	0.349	0.019	0.311	0.385	1.003
d_2	-0.271	0.030	-0.331	-0.212	1.002
d_3	-0.010	0.023	-0.054	0.035	1.001
b_2	0.031	0.054	-0.076	0.139	1.002
b_3	-0.112	0.053	-0.217	-0.009	1.004
b_4	0.185	0.051	0.081	0.281	1.001
b_5	0.117	0.051	0.019	0.215	1.003
b_6	-0.100	0.059	-0.215	0.016	1.003

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A universal insect trait tool (ITT, v1.0) for statistical analysis and evaluation of biodiversity research data

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We present a unique data set of trait information for 586 insect families in Central Europe, covering the largest known part of described species (over 34,000 species). Life history information and major functional traits were evaluated with fuzzy coding and weighted according to the number of known species in Germany. An overall analysis of the German insect fauna is given and the data set is exemplarily applied to metabarcoding results of malaise trap samples. Due to the high functional and taxonomic diversity in insects, further developments and refinements of traits to be included will be an ongoing process with advancements of upcoming database versions to be subsequently published.

Biodiversity | insects community ecology | functional diversity | taxonomic diversity | metabarcoding | biodiversity monitoring | Central Europe

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Fig. 1. Malaise trap of the Townes model from the Entomological Society Krefeld in a German nature reserve.

Introduction

Biodiversity research in terrestrial ecosystems needs a holistic perspective and a network approach to shed light on interspecific interactions determining the distribution and abundance of species and, ultimately, to understand causes and consequences of biodiversity change. Insects represent the most species-rich animal class in terrestrial ecosystems and have a tremendous effect on allmost all ecosystem processes. However, an overarching database compiling information about traits of most species or families is presently lacking. To understand interspecific interactions such as feeding relationships, it is necessary to take large data sets into account that encompass all families and species described so far for a particular area, rather than isolated information focusing on individual higher taxa. Such up-scaled trait data sets are paramount for the interpretation of all major monitoring efforts that rely on highly diverse composite samples, e.g. as those collected by malaise traps (Fig. 1 and 2). Lists of molecular units (OTUs - Operational Taxonomic Units or ESVs - Exact Sequence Variants) covering thousands of taxa retrieved by DNA metabarcoding without trait annotation, hinder any meaningful ecological interpretation of results. Previously, the only available approach to arrive at trait predictions for such data sets has been semantic language processing, a computation-intensive process potentially prone to misclassification. Here, we provide a trait-based assessment of Central European insect biodiversity covering the majority of currently described German insect species, which allows for retrospective and prospective assessments of changes in functional community composition.

Database development and components

Functional traits and behavioral preferences of species are increasingly used in ecology to understand interactions between organisms (e.g. https://opentraits.org/datasets.html). Our new insects trait tool (ITT) provides opportunity to analyze insect communities at family level and to assign trait values via proportions of absolute species numbers within a family. The ITT approach therefore compensates for incomplete connections between genetic barcodes and scientific species names and the presence of undescribed taxa. This methodical approach thus allows for handling complex insects taxa

lists as those resulting from molecular biodiversity assessments and helps to understand and analyze the composition of insect communities.

The ITT contains trait information on 34,085 species from all of the 586 insect families occurring in Germany. The traits included so far focus on autecological feeding preferences of the larval stages. We focus on larval feeding ecology, as the larval stage reliably characterizes the habitat used for reproduction, and is better known than the diet of adult stages. The databases of the reference library "German Barcode of Life" (GBOL: https://bolgermany.de) served as reference base for total species numbers, and the Global Biodiversity Information Facility (GBIF: https://www.gbif.org) for individual queries in the process of developing the ITT. The systematic classification of the class Insecta in the GBOL reference library follows the definitions of Wheeler (1). We strictly follow this database here in order to take consistent reference data as a basis, even if the state of knowledge would entail revisions of the contents in some cases. The chosen approach in the ITT follows the method of 'fuzzy coding', as the expert assessment of biological information for the family taxa comes from different sources (2). We have compiled information from literature as well as field observations. The comprehensive literature sources are documented in Supplement 3. The classifications of zoophagous feeding types, in particular the classification of predation, micropredation, parasitism and parasitoid lifestyles follow the definition of Lafferty and Kuris (3).

All classifications made at family level are based on species- and genus-level traits that were categorized in 10% intervals within a system of decimal numbers ranging from 0 to 1.0. Smaller numerical proportions, e.g. terrestrial caddisfly larvae within the predominate larval aquatic insect order Trichoptera are not included in this resolution. Degrees of specialization, e.g. mono-, oligo- or polyphagy, have not yet been annotated, and there are uncertainties in categorization, i.e. unique feeding specializations such as in consumers of algae, moss or lichens that make a useful classification for comparative analyses difficult. Psocoptera, for instance, probably have highly specific feeding types, but as detailed information is lacking, they could only be classified as detritus feeders in the current version. Another example of higher taxa that still require classification by experts are Hemiptera (Auchenorrhyncha, Sternorrhyncha) and Thysanoptera, which have therefore also been grouped on a rather general basis.

Development of our insect trait database is to be considered a dynamic and ongoing process. Corrections and adjustments of ITT v1.0 will be continuously included in subsequent versions; in case of extensions or significant additions, a fully updated version of the database will be made publicly available.

Table description, version 1.0. The matrix contains 29 columns in total. It lists all higher taxa at the level of order and suborder (column a) with the associated family taxon (column b) as well as the total number of species occurring in Germany and included in the "German Barcode of Life"

Fig. 2. Bulk sample collected by a malaise trap of the Entomological Society Krefeld in a German nature reserve.

(GBOL: https://bolgermany.de) (column c) in 586 lines of information. Columns t1-t26 contain the specified traits. All columns with traits contain decimal numbers from 0,1-1,0 within one group of columns counting 100% (each t1-t2, t3-t4, t5-t10, t11-t20, and t21-t26) which can be used as factors for each trait classification. Columns t1-t4 contain information on the link to aquatic (t1-t2) or terrestrial (t3-t4) ecosystems in the larval and adult stages. Columns t5-t10 contain information on the larval diet in numerical categories. These categories cover different organismic groups and decomposing material. Subsequently, there is a specification of the categories "phytophagous" and "zoophagous". Phytophagous taxonomic families are broken down into feeding categories in columns t11-t20, zoophagous families in columns t21-t26. Supplement 1 contains the trait tables of the database in various file formats and a detailed explanation of the categories.

Recommendations for use and examples

The insect trait tool refers to the insect fauna of Germany and is therefore predominately useful for taxa lists from Germany or the Central European region. This corresponds to an approximate area of application between the 47th and 57th degrees of latitude. Furthermore, the applicability is designed for comprehensive biodiversity samples as shown in Fig. 2. The ITT enables researchers to work with extensive taxa lists, even if those are not taxonomically standardized. The method is especially suitable for taxa-rich samples which are generated by certain examination techniques, for instance with malaise traps, car nets (4) or flushing samples from river banks (5). It is particularly useful for biodiversity assessments by metabarcoding when not all molecular units have yet been resolved to lower taxonomic levels, i.e. scientific names of genera or species remain unknown. This also concerns morphospecies in the case of classification by microscopic determination or artificial intelligence. The ITT table allows for a factor based classification of arthropod communities into aquatic and terrestrial habitats. In the central application area, larval feeding types can be assigned in the same way. Traits specified under "phytophagous" (t11-t20) and "zoophagous" (t21-t26) represent subordinate categories that should not be used for an overall consideration of communities contained in samples. However, these subordinate categories serve to further specify feeding behavior as if-then functions for taxa or groups of organisms with a primarily phytophagous or zoophagous lifestyle. The decimal numbers of individual traits can simply be used as factors for the resolved family, either directly to weight results or to relate them to the total species numbers in Germany. The latter is recommended when considering metabarcoding datasets and the number of taxa occurring in Germany still exceeds the number of taxa for which a barcode is deposited in reference libraries. Thus, with e.g. 67% coverage of barcodes of the real known number of species of a family in Germany, the result may be more realistic if this information is added as an correction factor.

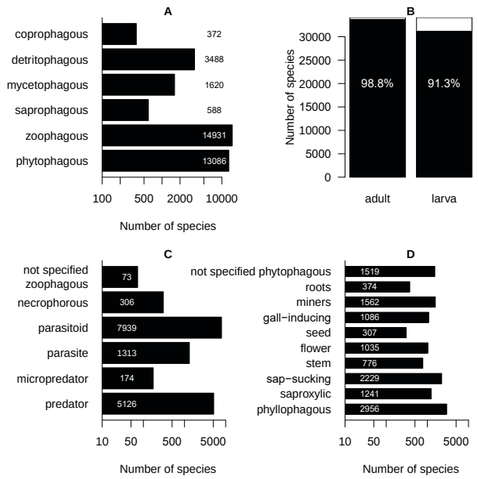

Fig. 3. Distribution of trait categories for all known insect species in Germany. **A** Predominant diet types larvae. **B** Number of species associated with terrestrial habitat in larval and adult life stages. **C** Number of species in sub-classes among zoophagous species. **D** Number of species in sub-classes among phytophagous species.

We recommend the following steps for each application of the ITT:

1. Check your existing data set for suitability to apply the ITT. Your data set must have a reasonable size and should have its origin from the recommended region.

2. Harmonize the family systematics of your data set and the ITT. It does not matter which systematic is adjusted, it must be uniform.

3. An interpretation of your results can only take place within the information pattern of the ITT, as an approximation to reality.

The insect diversity of Germany characterized with the trait tool. The last general overview of the insect fauna of Germany was published in 2003 (6) and further analyses have been based on the total number of 33,466 different insect species known back then. A comprehensive overview of ecological properties of all described species has not been published to date. The total lists generated from the GBOL databases during the development of ITT v1.0 cover 34,085 German insect species known to science. These species numbers within families were compared with the existing traits of the ITT. Due to the fact that the information from the specific feeding traits of the phytophagous (t11-t20) and zoophagous (t21-t26) groups are subsets of the basic diet types (t5, t6) there are deviations in the real species numbers. Calculated species numbers are a results of multiplication with often odd decimal numbers. They are therefore to be regarded as an interpretation. The relative distribution of species numbers is given in Fig. 3. Some patterns within an overall view are now recognisable for the first time. E.g. the proportion of aquatic species is 1.2 % for imagines and 8.7 % for larvae. This reflects the larval fixedness to aquatic habitats and allows the interpretation of high adaptation to mobility of imagines of most species. The most dominant major feeding types are zoophagous species with about 46,7% of the total species number and phytophagous species with about 36%. The further breakdown shows the specialisation of dependencies in the most species-rich organism group.

Evaluation of results from malaise trap samples. A standardized malaise trap of the Townes model from the Entomological Society Krefeld (7, 8) was used to measure insect diversity in the German nature reserve 'Latumer Bruch' near Krefeld at 51.326701N, 6.632973E. The study was carried out over the entire vegetation period in 2019 (March-October) with sample collection intervals of about 7-14 days. We selected five interval samples from late spring and summer (12-18 May, 29 May-8 June, 28 June-7 July, 7-18 July, 18-28 July) to analyze species rich seasonal insect communities with the ITT. Sequences yielded by metabarcoding were clustered into 'Operational Taxonomic Units' (OTUs) and taxonomic names were assigned by matching OTUs with reference databases (BOLD, GBOL and GenBank). The analysis (8) yielded 1,529 OTUs of arthropods, of which 1,355 were assigned to 163 insect families. The OTUs were summarized at the family level and the corresponding OTU table was combined with the ITT. Due to the inconsistent systematics in the family assignment, a harmonization of families was performed for the OTUs of each sample to calculate the share of larval and adult life form and larval feeding behavior in the examined community. The ITT was successfully applied to this metabarcoding results of highly diverse malaise trap samples. For the first time, the entire set of taxa contained in the samples could be analyzed at family level. At the same time, we conducted the most comprehensive analysis of trait

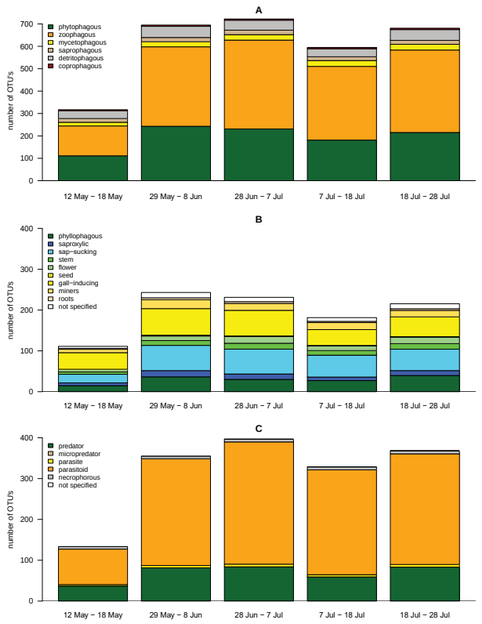

Fig. 4. Distribution of major feeding strategies of insect OTUs along five consecutive malaise trap samples, using data from *Zizka et al.* (8). **A** Distribution of OTU numbers along major feeding strategies. **B** Distribution of OTU numbers in sub-classes among phytophagous species. **C** Distribution of OTU numbers in sub-classes among zoophagous species.

information for malaise trap results. The distribution of the trait properties among the OTUs along considered samples can be found in Fig. 4. The results of the malaise trap samples vary within the trapping intervals. However, it is clearly visible that the patterns of the dominant groups are present even when looking at a short period and thus low species diversity (12-18 May) and similar to those of the longer intervals and thus higher species diversity (29 May-8 June, 28 June-7 July, 7-18 July, 18-28 July). Due to the late spring aspect and the summer aspect, no remarkable phenological patterns are recognizable. However, the May sample shows a higher overall proportion of gall-inducing insects. This fits with their high and species rich presence shortly after the beginning of the vegetation period.

In the species composition are the zoophagous (A) and parasitoid (C) taxa the dominant components along all five samples. Predators and parasitoids represent by far the largest proportions demonstrated in patterns.

Within phytophagous feeding types, which represent the second largest components, sap-sucking and thus the Hemiptera form the largest part within the captured phytophagous species (B). Overall, it is noteworthy that the distribution of traits assigned via the ITT in species-rich malaise trap samples resemble the distribution of dominant groups in the overall fauna of Germany (Fig. 3).

Discussion

The insect trait tool (ITT, v1.0) is the first data set available for an overall trait assessment of Central European insect diversity. It is equally well suited for the analysis of insect communities in aquatic and terrestrial ecosystems. The ITT can be helpful to overcome identification difficulties associated with insect biodiversity studies.

The increase in knowledge is particularly significant for malaise trapping studies. There have already been species trait assesments in research combined with the application of standardized malaise traps used by the Entomological Society Krefeld, but only for partial analyses of selected groups (e.g. Hymenoptera Aculeata (9–11), Syrphidae (12), Lepidoptera (13), Trichoptera (14)).

First general, overall observations resulted in 1987 from the idea of measuring biomass information before sorting the insects contained in samples (15), a standardized method that also allowed for a comparative analysis in 2017 (16). However, the major limitation is still poor taxonomic knowledge and capacities, which is at least partially solved by DNA-based methods, particularly by metabarcoding (17). The detection of dominant structures in examples applied (Fig. 3 and 4) is particularly an interesting result since insects of several of these major feeding types play so far only marginal roles in conservation issues. This points to a serious weakness of many approaches and studies so far, because these taxa make up very large proportions of insect diversity. It concerns both interpretations within examined samples and the overall view of insect diversity. The ITT can therefore serve as an important tool in the analysis of insect diversity data sets for descriptive and applied research, the description of ecosystem functions and services, and nature conservation.

Conclusions

The insect trait tool enables standardized comparisons of highly diverse insect communities with a minimum taxonomic resolution to family level. It is possible to compare patterns of samples, sites, relations to phenology, and correlative patterns in multivariate data sets (e.g. explanatory variables). It enables a comprehensive ecological evaluation of metabarcoding results or other comprehensive data sets like results from e.g. morphospecies approaches, artificial intelligence, and machine learning. An important advantage is that the ITT application compensates for lacking taxonomic knowledge and resolution, i.e. to include undescribed "dark" taxa of the Central European fauna and taxa for which so far no barcodes are assigned. In summary, the ITT can serve as an important tool for descriptive and applied research, the description of ecosystem functions and services, and nature conservation. Due to existing, massive deficits in the state of knowledge of the real overall diversity in the reference area, extended versions of this tool are required and intended in the future.

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Author contributions. TH, MS and CH developed the conceptual framework. TH, MS and AS generated the traits and produced the trait database. VZ developed the examples from metabarcoding results. NN analyzed reference databases. CS contributed to traits and definitions. TH drafted the first version of the manuscript. All authors contributed to the article, approved the version to be published and agreed to be accountable for all aspects of the work.

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Supplement 1
Insect trait tool (ITT) v. 1.0 database .pdf file:
http//entomologica.org/tools/insect-trait-tool-v1-0.pdf
Insect trait tool (ITT) v. 1.0 database .xlsx file:
http//entomologica.org/tools/insect-trait-tool-v1-0.xlsx
Insect trait tool (ITT) v. 1.0 database .pdf file.
Explanations of the trait characters:
http//entomologica.org/tools/S1-explanations.pdf

Supplement 2
Application example for the insect fauna of Germany
database .pdf file:
http//entomologica.org/tools/insect-trait-tool-v1-0-fauna-germany.pdf
database .xlsx file:
http//entomologica.org/tools/insect-trait-tool-v1-0-fauna-germany.xlsx

Supplement 3
Additional references used to classify lower taxa in the family trait categories as expert assessments:
http//entomologica.org/tools/references-ITT-v1-0.pdf

insect trait tool v. 1.0 - Supplement 1

higher_taxon	family	sum_sp.	t1 larva_terrestrial	t2 larva_aquatic	t3 adult_terrestrial	t4 adult_aquatic	t5 phytophagous	t6 zoophagous	t7 mycetophagous	t8 saprophagous	t9 detritophagous	t10 coprophagous	t11 phyllophagous	t12 saproxylic	t13 sap-sucking	t14 stem	t15 flower	t16 seed	t17 gall-inducing	t18 miners	t19 roots	t20 not specified	t21 predator	t22 micropredator	t23 parasite	t24 parasitoid	t25 necrophorous	t26 not specified
Auchenorrhyncha	Achilidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Auchenorrhyncha	Aphrophoridae	13	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Auchenorrhyncha	Caliscelidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Auchenorrhyncha	Cercopidae	4	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Auchenorrhyncha	Cicadellidae	465	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Auchenorrhyncha	Cicadidae	5	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Auchenorrhyncha	Cixiidae	21	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Auchenorrhyncha	Delphacidae	108	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Auchenorrhyncha	Dictyopharidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Auchenorrhyncha	Issidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Auchenorrhyncha	Membracidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Auchenorrhyncha	Tettigometridae	8	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Aderidae	9	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Agyrtidae	4	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Alleculidae	19	1,0	0,0	1,0	0,0	0,5	0,2	0,0	0,0	0,3	0,0	0,0	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,6	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Coleoptera	Anobiidae	77	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Anthicidae	25	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Anthribidae	20	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Apionidae	134	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,4	0,3	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Aspidiphoridae	3	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Attelabidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Biphyllidae	2	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Bostrichidae	17	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Bothrideridae	7	1,0	0,0	1,0	0,0	0,0	0,5	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Coleoptera	Bruchidae	34	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Buprestidae	101	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Byrrhidae	25	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Byturidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Cantharidae	88	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Carabidae	579	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Cerambycidae	197	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Cerophytidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Cerylonidae	9	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Cholevidae	51	1,0	0,0	1,0	0,0	0,0	0,8	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,8	0,2
Coleoptera	Chrysomelidae	517	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,8	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Cimberidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Cisidae	46	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Clambidae	14	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Cleridae	23	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Coccinellidae	81	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Colonidae	19	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Colydiidae	19	1,0	0,0	1,0	0,0	0,7	0,0	0,3	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Corylophidae	19	1,0	0,0	1,0	0,0	0,2	0,0	0,0	0,0	0,8	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Cryptophagidae	131	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Cucujidae	4	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Curculionidae	773	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,4	0,1	0,0	0,1	0,1	0,1	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Cybocephalidae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Dascillidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Dermestidae	50	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,8	0,0
Coleoptera	Derodontidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Drilidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Dryopidae	14	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Dytiscidae	147	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Elateridae	146	1,0	0,0	1,0	0,0	0,5	0,5	0,0	0,0	0,0	0,0	0,0	0,7	0,0	0,0	0,0	0,0	0,0	0,0	0,3	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Elmidae	25	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Endomychidae	13	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Erotylidae	15	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Eucinetidae	2	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Eucnemidae	20	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Georissidae	3	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Geotrupidae	11	1,0	0,0	1,0	0,0	0,0	0,0	0,2	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Gyrinidae	13	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Haliplidae	20	0,0	1,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Heteroceridae	14	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Histeridae	83	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Hydraenidae	63	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Hydrophilidae	116	0,4	0,6	0,4	0,6	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Hygrobiidae	1	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Kateretidae	12	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,9	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Laemophloeidae	21	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,8	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Lagriidae	3	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Lampyridae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Languriidae	4	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

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higher_taxon	family	sum_sp.	t1 larva_terrestrial	t2 larva_aquatic	t3 adult_terrestrial	t4 adult_aquatic	t5 phytophagous	t6 zoophagous	t7 mycetophagous	t8 saprophagous	t9 detritophagous	t10 coprophagous	t11 phyllophagous	t12 saproxylic	t13 sap-sucking	t14 stem	t15 flower	t16 seed	t17 gall-inducing	t18 miners	t19 roots	t20 not specified	t21 predator	t22 micropredator	t23 parasite	t24 parasitoid	t25 necrophorous	t26 not specified
Coleoptera	Latridiidae	84	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Leiodidae	83	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Leptinidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Coleoptera	Limnichidae	3	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Lissomidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Lophocateridae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Lucanidae	7	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Lycidae	7	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Lyctidae	9	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Lymexylonidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Malachiidae	35	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Melandryidae	33	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Meloidae	19	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,8	0,0	0,0	0,0
Coleoptera	Melyridae	25	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Monotomidae	23	1,0	0,0	1,0	0,0	0,5	0,0	0,0	0,0	0,5	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Mordellidae	81	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Mycetophagidae	17	1,0	0,0	1,0	0,0	0,2	0,0	0,8	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Mycteridae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Nemonychidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Nitidulidae	129	1,0	0,0	1,0	0,0	0,6	0,0	0,0	0,4	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Nosodendridae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Noteridae	2	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Oedemeridae	25	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Omalisidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Peltidae	4	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Phalacridae	22	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Phloeostichidae	1	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Phloiophilidae	1	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Platypodidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Prostomidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Pselaphidae	93	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Psephenidae	1	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Ptiliidae	82	1,0	0,0	1,0	0,0	0,2	0,0	0,0	0,2	0,4	0,2	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Ptinidae	28	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Pyrochroidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Pythidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Rhipiphoridae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Coleoptera	Rhynchitidae	25	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Rhysodidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Salpingidae	14	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Scarabaeidae	159	1,0	0,0	1,0	0,0	0,2	0,0	0,0	0,2	0,1	0,5	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Scirtidae	24	0,0	1,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Scolytidae	113	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Scraptiidae	29	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Scydmaenidae	53	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Silphidae	22	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0
Coleoptera	Silvanidae	14	1,0	0,0	1,0	0,0	0,8	0,0	0,0	0,0	0,2	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Spercheidae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Sphaeritidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Sphaerosomatidae	3	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Staphylinidae	1481	1,0	0,0	1,0	0,0	0,1	0,7	0,1	0,0	0,1	0,0	0,0	0,5	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,7	0,0	0,3	0,0	0,0	0,0
Coleoptera	Tenebrionidae	67	1,0	0,0	1,0	0,0	0,6	0,0	0,2	0,0	0,2	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,4	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Tetratomidae	3	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Thorictidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Coleoptera	Throscidae	11	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Trogidae	8	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0
Coleoptera	Trogositidae	5	1,0	0,0	1,0	0,0	0,0	0,4	0,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Coleoptera	Urodonidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Dermaptera	Anisolabididae	1	1,0	0,0	1,0	0,0	0,3	0,4	0,0	0,0	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,8	0,0	0,0	0,0	0,2	0,0
Dermaptera	Forficulidae	8	1,0	0,0	1,0	0,0	0,4	0,3	0,0	0,0	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Dermaptera	Labiduridae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Dermaptera	Spongiphoridae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,5	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Dictyoptera	Blattellidae	10	1,0	0,0	1,0	0,0	0,5	0,0	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Dictyoptera	Blattidae	3	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Dictyoptera	Mantidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0
Dictyoptera	Rhinotermitidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Acartophthalmidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Acroceridae	10	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Diptera	Agromyzidae	553	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Anisopodidae	6	1,0	0,0	1,0	0,0	0,2	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,5	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Anthomyiidae	241	1,0	0,0	1,0	0,0	0,3	0,1	0,3	0,0	0,3	0,0	0,1	0,0	0,0	0,7	0,0	0,0	0,0	0,1	0,0	0,1	0,0	0,0	1,0	0,0	0,0	0,0
Diptera	Anthomyzidae	14	1,0	0,0	1,0	0,0	0,3	0,0	0,3	0,0	0,4	0,0	0,5	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Asilidae	83	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0

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higher_taxon	family	sum_sp.	larva_terrestrial	larva_aquatic	adult_terrestrial	adult_aquatic	phytophagous	zoophagous	mycetophagous	saprophagous	detritophagous	coprophagous	phyllophagous	saproxylic	sap-sucking	stem	flower	seed	gall-inducing	miners	roots	not specified	predator	micropredator	parasite	parasitoid	necrophorous	not specified
			t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11	t12	t13	t14	t15	t16	t17	t18	t19	t20	t21	t22	t23	t24	t25	t26
Diptera	Asteiidae	7	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Atelestidae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Diptera	Athericidae	5	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Aulacigastridae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Bibionidae	19	1,0	0,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,7	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Blephariceridae	7	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Bolitophilidae	23	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Bombyliidae	40	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Diptera	Braulidae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Calliphoridae	62	1,0	0,0	1,0	0,0	0,0	0,8	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0
Diptera	Camillidae	4	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,5	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Campichoetidae	3	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Canacidae	2	1,0	0,0	1,0	0,0	0,5	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Canthyloscelidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Carnidae	11	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Cecidomyiidae	805	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Ceratopogonidae	309	0,1	0,9	1,0	0,0	0,0	0,0	0,0	0,0	0,9	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Chamaemyiidae	33	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Chaoboridae	7	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Chironomidae	700	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Chloropidae	213	1,0	0,0	1,0	0,0	0,7	0,1	0,0	0,0	0,1	0,1	0,0	0,0	0,0	0,8	0,1	0,0	0,1	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Chyromyidae	7	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,5	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Clusiidae	10	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Coelopidae	2	1,0	0,0	1,0	0,0	0,5	0,0	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Coenomyiidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Conopidae	51	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Diptera	Cremifaniidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Diptera	Cryptochetidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Diptera	Culicidae	46	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Cylindrotomidae	4	0,8	0,2	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Diadocidiidae	5	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Diastatidae	6	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Ditomyiidae	4	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Dixidae	16	0,0	1,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Dolichopodidae	359	1,0	0,0	1,0	0,0	0,1	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Drosophilidae	62	1,0	0,0	1,0	0,0	0,2	0,1	0,0	0,7	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,8	0,0	0,2	0,0	0,0	0,0
Diptera	Dryomyzidae	3	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Eginiidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Diptera	Empididae	390	0,7	0,3	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Ephydridae	180	0,3	0,7	1,0	0,0	0,1	0,2	0,0	0,0	0,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,6	0,0	0,1	0,0	0,3	0,0
Diptera	Fanniidae	59	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Gasterophilidae	4	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Diptera	Helcomyzidae	3	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Heleomyzidae	80	1,0	0,0	1,0	0,0	0,1	0,2	0,1	0,0	0,3	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0
Diptera	Hesperinidae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Hilarimorphidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Hippoboscidae	14	1,0	0,0	1,0	0,0	0,0	0,1	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Diptera	Hybotidae	231	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Hypodermatidae	5	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Diptera	Keroplatidae	60	1,0	0,0	1,0	0,0	0,0	0,5	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0
Diptera	Lauxaniidae	75	1,0	0,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,2	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Limoniidae	278	0,5	0,5	1,0	0,0	0,1	0,0	0,1	0,0	0,8	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Lonchaeidae	48	1,0	0,0	1,0	0,0	0,7	0,0	0,0	0,2	0,1	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Lonchopteridae	9	1,0	0,0	1,0	0,0	0,1	0,0	0,2	0,0	0,6	0,1	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Megamerinidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Micropezidae	13	1,0	0,0	1,0	0,0	0,4	0,0	0,2	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,8	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Microphoridae	6	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Milichiidae	14	1,0	0,0	1,0	0,0	0,3	0,0	0,0	0,0	0,7	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Muscidae	324	1,0	0,0	1,0	0,0	0,3	0,1	0,1	0,1	0,2	0,2	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,7	0,0	0,1	0,9	0,0	0,0	0,0	0,1	0,0
Diptera	Mycetobiidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Mycetophilidae	587	1,0	0,0	1,0	0,0	0,0	0,1	0,8	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Neottiophilidae	1	1,0	0,0	1,0	0,0	0,0	0,1	0,8	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0
Diptera	Nycteribiidae	8	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Diptera	Odiniidae	9	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Diptera	Oestridae	6	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Diptera	Opetiidae	1	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Opomyzidae	19	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Otitidae	27	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,2	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Pallopteridae	17	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Pediciidae	36	0,1	0,9	1,0	0,0	0,2	0,0	0,3	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Penthetriidae	2	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Periscelididae	7	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Phaeomyiidae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0

higher_taxon	family	sum_sp.	larva_terrestrial	larva_aquatic	adult_terrestrial	adult_aquatic	phytophagous	zoophagous	mycetophagous	saprophagous	detritophagous	coprophagous	phyllophagous	saproxylic	sap-sucking	stem	flower	seed	gall-inducing	miners	roots	not specified	predator	micropredator	parasite	parasitoid	necrophorous	not specified
			t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11	t12	t13	t14	t15	t16	t17	t18	t19	t20	t21	t22	t23	t24	t25	t26
Diptera	Phoridae	377	1,0	0,0	1,0	0,0	0,0	0,4	0,2	0,0	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,0	0,0	0,5	0,0	0,0
Diptera	Piophilidae	12	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0
Diptera	Pipunculidae	121	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Diptera	Platypezidae	27	1,0	0,0	1,0	0,0	0,2	0,0	0,8	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Platystomatidae	3	1,0	0,0	1,0	0,0	0,4	0,2	0,0	0,0	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Pseudopomyzidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Psilidae	33	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Psychodidae	157	0,3	0,7	1,0	0,0	0,1	0,7	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,8	0,0	0,0	0,0	0,2
Diptera	Ptychopteridae	8	0,0	1,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Pyrgotidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Diptera	Rhagionidae	35	1,0	0,0	1,0	0,0	0,1	0,8	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Rhinophoridae	12	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Diptera	Sarcophagidae	131	1,0	0,0	1,0	0,0	0,0	0,8	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,4	0,4	0,0
Diptera	Scathophagidae	66	1,0	0,0	1,0	0,0	0,3	0,3	0,0	0,0	0,1	0,3	0,0	0,2	0,0	0,2	0,2	0,0	0,2	0,2	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Scatopsidae	45	1,0	0,0	1,0	0,0	0,1	0,0	0,2	0,0	0,1	0,6	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Scenopinidae	3	1,0	0,0	1,0	0,0	0,1	0,8	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Sciaridae	421	1,0	0,0	1,0	0,0	0,1	0,0	0,4	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,2	0,6	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Sciomyzidae	81	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,4	0,0	0,0	0,2	0,2	0,2
Diptera	Sepsidae	31	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,2	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Simuliidae	48	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Sphaeroceridae	135	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Stratiomyidae	67	0,5	0,5	1,0	0,0	0,3	0,0	0,0	0,0	0,7	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Strongylophthalmyiidae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Syrphidae	474	0,8	0,2	1,0	0,0	0,3	0,5	0,0	0,1	0,1	0,0	0,0	0,3	0,0	0,3	0,0	0,0	0,0	0,0	0,3	0,1	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Tabanidae	57	0,0	1,0	1,0	0,0	0,0	0,5	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Tachinidae	496	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Diptera	Tanypezidae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Tephritidae	111	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,4	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Tethinidae	10	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Thaumaleidae	16	0,0	1,0	1,0	0,0	0,2	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Therevidae	32	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Diptera	Thyreophoridae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0
Diptera	Tipulidae	135	0,9	0,1	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Trichoceridae	19	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Trixoscelididae	4	1,0	0,0	1,0	0,0	0,3	0,2	0,2	0,0	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0
Diptera	Ulidiidae	5	1,0	0,0	1,0	0,0	0,1	0,0	0,0	0,1	0,8	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Xylomyidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Diptera	Xylophagidae	4	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Ameletidae	2	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Ametropodidae	1	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Arthropleidae	1	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Baetidae	28	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Caenidae	10	0,0	1,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Ephemerellidae	5	0,0	1,0	1,0	0,0	0,9	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Ephemeridae	4	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Heptageniidae	44	0,0	1,0	1,0	0,0	0,3	0,3	0,0	0,0	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Isonychiidae	1	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Leptophlebiidae	11	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Oligoneuriidae	1	0,0	1,0	1,0	0,0	0,8	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Palingeniidae	1	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Polymitarcyidae	1	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Potamanthidae	1	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Ephemeroptera	Siphlonuridae	5	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Acanthosomatidae	7	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Alydidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Anthocoridae	48	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Aphelocheiridae	1	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Aradidae	25	1,0	0,0	1,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Artheneidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Berytidae	11	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Blissidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Ceratocombidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Cimicidae	5	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0
Heteroptera	Coreidae	19	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Corixidae	36	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Cydnidae	16	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Cymidae	4	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Dipsocoridae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Geocoridae	4	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Gerridae	12	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,2	0,0
Heteroptera	Hebridae	2	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Heterogastridae	5	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Hydrometridae	2	0,0	1,0	0,8	0,2	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,0	0,0	0,0	0,5	0,0

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higher_taxon	family	sum_sp.	t1 larva_terrestrial	t2 larva_aquatic	t3 adult_terrestrial	t4 adult_aquatic	t5 phytophagous	t6 zoophagous	t7 mycetophagous	t8 saprophagous	t9 detritophagous	t10 coprophagous	t11 phyllophagous	t12 saproxylic	t13 sap-sucking	t14 stem	t15 flower	t16 seed	t17 gall-inducing	t18 miners	t19 roots	t20 not specified	t21 predator	t22 micropredator	t23 parasite	t24 parasitoid	t25 necrophorous	t26 not specified
Heteroptera	Leptopodidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Lygaeidae	22	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Mesoveliidae	1	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,0	0,0	0,0	0,5	0,0
Heteroptera	Microphysidae	8	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Miridae	335	1,0	0,0	1,0	0,0	0,8	0,2	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Nabidae	16	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Naucoridae	1	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Nepidae	2	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Notonectidae	6	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Oxycarenidae	13	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Pentatomidae	51	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Piesmatidae	6	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Plataspidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Pleidae	1	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Pyrrhocoridae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Reduviidae	13	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Rhopalidae	15	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Rhyparochromidae	82	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Saldidae	25	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Scutelleridae	10	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Stenocephalidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Tingidae	64	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Heteroptera	Veliidae	5	0,0	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Ampulicidae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Aphelinidae	52	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Apidae	631	1,0	0,0	1,0	0,0	0,9	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Argidae	40	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Aulacidae	6	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Bethylidae	29	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Blasticotomidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Braconidae	1533	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Cephidae	18	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Ceraphronidae	14	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Chalcididae	24	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Chrysididae	137	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Cimbicidae	23	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Crabronidae	287	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,1	0,0	0,0
Hymenoptera	Cynipidae	113	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Diapriidae	275	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Diprionidae	16	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Dryinidae	38	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Embolemidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Encyrtidae	177	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Eucharitidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Eulophidae	464	1,0	0,0	1,0	0,0	0,1	0,9	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Eupelmidae	29	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Eurytomidae	114	1,0	0,0	1,0	0,0	0,5	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Evaniidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Figitidae	100	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Formicidae	187	1,0	0,0	1,0	0,0	0,1	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,9	0,0	0,0	0,1	0,0	0,0
Hymenoptera	Gasteruptiidae	13	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Heloridae	4	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Ibaliidae	5	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Ichneumonidae	3385	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Leucospidae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Megalodontesidae	6	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Megaspilidae	22	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Mutillidae	15	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Mymaridae	106	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Mymarommatidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Ormyridae	14	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Orussidae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Pamphiliidae	52	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Perilampidae	43	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Platygastridae	47	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Pompilidae	102	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Proctotrupidae	43	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Pteromalidae	695	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Sapygidae	4	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Scelionidae	42	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Scoliidae	4	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Signiphoridae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Siricidae	11	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

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higher_taxon	family	sum_sp.	t1 larva_terrestrial	t2 larva_aquatic	t3 adult_terrestrial	t4 adult_aquatic	t5 phytophagous	t6 zoophagous	t7 mycetophagous	t8 saprophagous	t9 detritophagous	t10 coprophagous	t11 phyllophagous	t12 saproxylic	t13 sap-sucking	t14 stem	t15 flower	t16 seed	t17 gall-inducing	t18 miners	t19 roots	t20 not specified	t21 predator	t22 micropredator	t23 parasite	t24 parasitoid	t25 necrophorous	t26 not specified
Hymenoptera	Sphecidae	12	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Stephanidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Tenthredinidae	626	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Tetracampidae	8	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Tiphiidae	9	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Torymidae	99	1,0	0,0	1,0	0,0	0,1	0,9	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Trichogrammatidae	26	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Trigonalidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Hymenoptera	Vespidae	101	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,1	0,0	0,0
Hymenoptera	Xiphydriidae	5	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Hymenoptera	Xyelidae	7	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Adelidae	29	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,6	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Alucitidae	6	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Argyresthiidae	30	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,5	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,3	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Autostichidae	6	1,0	0,0	1,0	0,0	0,3	0,2	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0
Lepidoptera	Batrachedridae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Bedelliidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Blastobasidae	5	1,0	0,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Bombycidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Brachodidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Brahmaeidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Bucculatricidae	19	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Carposinidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Chimabachidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Choreutidae	9	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Coleophoridae	188	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,3	0,0	0,0	0,0	0,3	0,3	0,0	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Cosmopterigidae	20	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,2	0,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Cossidae	5	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Crambidae	178	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,4	0,0	0,0	0,1	0,1	0,1	0,0	0,0	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Douglasiidae	6	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,4	0,0	0,0	0,0	0,5	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Drepanidae	16	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Elachistidae	191	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Endromidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Epermeniidae	15	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,3	0,0	0,0	0,0	0,1	0,1	0,2	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Erebidae	123	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Eriocraniidae	9	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Gelechiidae	270	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Geometridae	437	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Glyphipterigidae	17	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Gracillariidae	127	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Heliodinidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Heliozelidae	7	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Hepialidae	8	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Hesperiidae	25	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Heterogynidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Incurvariidae	8	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Lasiocampidae	22	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Lecithoceridae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Limacodidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Lycaenidae	50	1,0	0,0	1,0	0,0	0,9	0,1	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0
Lepidoptera	Lyonetiidae	15	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Lypusidae	8	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Micropterigidae	11	1,0	0,0	1,0	0,0	0,7	0,0	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Millieridae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Momphidae	15	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,7	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Nepticulidae	112	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,0	0,1	0,1	0,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Noctuidae	503	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Nolidae	21	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Notodontidae	36	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Nymphalidae	92	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Oecophoridae	41	1,0	0,0	1,0	0,0	0,8	0,0	0,0	0,0	0,2	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Opostegidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Papilionidae	6	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,7	0,0	0,0	0,2	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Peleopodidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Pieridae	20	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,8	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Plutellidae	8	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Praydidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Prodoxidae	13	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Psychidae	56	1,0	0,0	1,0	0,0	0,5	0,0	0,0	0,0	0,5	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Pterophoridae	69	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,4	0,0	0,0	0,0	0,2	0,1	0,1	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Pyralidae	109	1,0	0,0	1,0	0,0	0,8	0,1	0,0	0,0	0,1	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	1,0
Lepidoptera	Riodinidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Roeslerstammiidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

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			t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11	t12	t13	t14	t15	t16	t17	t18	t19	t20	t21	t22	t23	t24	t25	t26
higher_taxon	family	sum_sp.	larva_terrestrial	larva_aquatic	adult_terrestrial	adult_aquatic	phytophagous	zoophagous	mycetophagous	saprophagous	detritophagous	coprophagous	phyllophagous	saproxylic	sap-sucking	stem	flower	seed	gall-inducing	miners	roots	not specified	predator	micropredator	parasite	parasitoid	necrophorous	not specified
Lepidoptera	Saturniidae	5	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Schreckensteiniidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Scythrididae	41	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Scythropiidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Sesiidae	36	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,7	0,0	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Sphingidae	20	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Stathmopodidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Thyrididae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Tineidae	73	1,0	0,0	1,0	0,0	0,1	0,1	0,0	0,0	0,8	0,0	0,3	0,0	0,0	0,0	0,1	0,3	0,0	0,0	0,0	0,3	0,0	0,0	0,0	0,0	1,0	0,0
Lepidoptera	Tischeriidae	8	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Tortricidae	534	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Urodidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Yponomeutidae	28	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,4	0,0	0,0	0,2	0,0	0,0	0,0	0,2	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Ypsolophidae	20	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lepidoptera	Zygaenidae	28	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,8	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Mecoptera	Bittacidae	2	1,0	0,0	1,0	0,0	0,0	0,1	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0
Mecoptera	Boreidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Mecoptera	Panorpidae	6	1,0	0,0	1,0	0,0	0,0	0,1	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0
Megaloptera	Sialidae	4	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0
Microcoryphia	Machilidae	15	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Neuroptera	Ascalaphidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Neuroptera	Chrysopidae	29	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Neuroptera	Coniopterygidae	19	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Neuroptera	Hemerobiidae	39	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Neuroptera	Mantispidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0
Neuroptera	Myrmeleontidae	6	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Neuroptera	Osmylidae	1	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Neuroptera	Sisyridae	4	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0
Odonata	Aeshnidae	14	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Odonata	Calopterygidae	2	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Odonata	Coenagrionidae	18	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Odonata	Cordulegastridae	2	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Odonata	Corduliidae	7	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Odonata	Gomphidae	7	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Odonata	Lestidae	8	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Odonata	Libellulidae	22	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Odonata	Platycnemididae	1	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Orthoptera	Acrididae	42	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Orthoptera	Gryllidae	10	1,0	0,0	1,0	0,0	0,7	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,9	0,1	1,0	0,0	0,0	0,0	0,0	0,0
Orthoptera	Gryllotalpidae	1	1,0	0,0	1,0	0,0	0,4	0,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Orthoptera	Raphidophoridae	2	1,0	0,0	1,0	0,0	0,2	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Orthoptera	Tetrigidae	6	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Orthoptera	Tettigoniidae	31	1,0	0,0	1,0	0,0	0,4	0,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Phthiraptera	Bovicoliidae	11	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Echinophthiriidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Enderleinellidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Gliricolidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Goniodidae	18	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Gyropidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Haematopinidae	4	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Hoplopleuridae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Laemobothriidae	5	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Linognathidae	6	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Menoponidae	103	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Pediculidae	2	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Philopteridae	227	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Polyplacidae	8	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Pthiridae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Ricinidae	5	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Trichodectidae	12	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Phthiraptera	Trimenoponidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Plecoptera	Capniidae	6	0,0	1,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Plecoptera	Chloroperlidae	9	0,0	1,0	1,0	0,0	0,1	0,2	0,0	0,0	0,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Plecoptera	Leuctridae	28	0,0	1,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Plecoptera	Nemouridae	33	0,0	1,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Plecoptera	Perlidae	9	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Plecoptera	Perlodidae	22	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Plecoptera	Taeniopterygidae	16	0,0	1,0	1,0	0,0	0,2	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Amphipsocidae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Caeciliusidae	10	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Ectopsocidae	4	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Elipsocidae	12	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Epipsocidae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

			t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11	t12	t13	t14	t15	t16	t17	t18	t19	t20	t21	t22	t23	t24	t25	t26
higher_taxon	family	sum_sp.	larva_terrestrial	larva_aquatic	adult_terrestrial	adult_aquatic	phytophagous	zoophagous	mycetophagous	saprophagous	detritophagous	coprophagous	phyllophagous	saproxylic	sap-sucking	stem	flower	seed	gall-inducing	miners	roots	not specified	predator	micropredator	parasite	parasitoid	necrophorous	not specified
Psocoptera	Lachesillidae	5	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Lepidopsocidae	2	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Liposcelididae	14	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Mesopsocidae	4	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Peripsocidae	5	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Philotarsidae	2	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Prionoglarididae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Psocidae	20	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Psoquillidae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Psyllipsocidae	3	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Sphaeropsocidae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Stenopsocidae	4	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Trichopsocidae	2	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Psocoptera	Trogiidae	6	1,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Raphidioptera	Inocelliidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Raphidioptera	Raphidiidae	9	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Siphonaptera	Ceratophyllidae	30	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0
Siphonaptera	Ctenophthalmidae	17	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0
Siphonaptera	Hystrichopsyllidae	4	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0
Siphonaptera	Ischnopsyllidae	13	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0
Siphonaptera	Pulicidae	5	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0
Siphonaptera	Vermipsyllidae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Adelgidae	17	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Aleyrodidae	14	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Aphididae	702	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Asterolecaniidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Cerococcidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Coccidae	36	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Cryptococcidae	3	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Diaspididae	25	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Eriococcidae	14	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Kermesidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Margarodidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Matsucoccidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Monophlebidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Ortheziidae	4	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Phylloxeridae	8	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Pseudococcidae	50	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Psyllidae	77	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Putoidae	2	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Steingeliidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Triozidae	43	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sternorrhyncha	Xylococcidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Strepsiptera	Corioxenidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Strepsiptera	Elenchidae	1	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Strepsiptera	Halictophagidae	3	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Strepsiptera	Stylopidae	6	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Strepsiptera	Xenidae	4	1,0	0,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0
Thysanoptera	Aeolothripidae	17	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Thysanoptera	Fauriellidae	1	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Thysanoptera	Phlaeothripidae	75	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Thysanoptera	Thripidae	138	1,0	0,0	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Apataniidae	4	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Beraeidae	5	0,0	1,0	1,0	0,0	0,2	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Brachycentridae	7	0,0	1,0	1,0	0,0	0,2	0,0	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Ecnomidae	2	0,0	1,0	1,0	0,0	0,2	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Glossosomatidae	12	0,0	1,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Goeridae	6	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Hydropsychidae	20	0,0	1,0	1,0	0,0	0,2	0,4	0,0	0,0	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,5	0,0	0,0	0,0	0,5	0,0
Trichoptera	Hydroptilidae	36	0,0	1,0	1,0	0,0	0,1	0,1	0,0	0,0	0,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Lepidostomatidae	5	0,0	1,0	1,0	0,0	0,3	0,1	0,0	0,0	0,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	1,0	0,0
Trichoptera	Leptoceridae	41	0,0	1,0	1,0	0,0	0,3	0,1	0,0	0,0	0,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Limnephilidae	100	0,0	1,0	1,0	0,0	0,4	0,0	0,0	0,0	0,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Molannidae	4	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Odontoceridae	1	0,0	1,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Philopotamidae	10	0,0	1,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Phryganeidae	10	0,0	1,0	1,0	0,0	0,1	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Polycentropodidae	18	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Psychomyiidae	14	0,0	1,0	1,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Ptilocolepidae	1	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Rhyacophilidae	28	0,0	1,0	1,0	0,0	0,2	0,3	0,0	0,0	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Sericostomatidae	5	0,0	1,0	1,0	0,0	0,3	0,0	0,0	0,0	0,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0
Trichoptera	Uenoidae	1	0,0	1,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

insect trait tool v. 1.0 - Supplement 1

			t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11	t12	t13	t14	t15	t16	t17	t18	t19	t20	t21	t22	t23	t24	t25	t26
			larva_terrestrial	larva_aquatic	adult_terrestrial	adult_aquatic	phytophagous	zoophagous	mycetophagous	saprophagous	detritophagous	coprophagous	phyllophagous	saproxylic	sap-sucking	stem	flower	seed	gall-inducing	miners	roots	not specified	predator	micropredator	parasite	parasitoid	necrophorous	not specified
higher_taxon	**family**	**sum_sp.**																										
Zygentoma	Lepismatidae	4	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Zygentoma	Nicoletiidae	1	1,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
SUM (species)	source: GBOL Server	34085																										

Content: 587 insect families; 15262 classifications

Explanations

1 – 4	habitats of larvae and adults in proportion to species diversity
5	larvae phytophagous in proportion to species diversity
6	larvae zoophagous in proportion to species diversity
7 – 10	other diet types of the larvae in proportion to species diversity
11 – 20	diet types of phytophagous larvae in proportion to phytophagous species diversity (5)
21 – 26	diet types of zoophagous larvae in proportion to zoophagous species diversity (6)
0,1-1 (=ca. 10-100%)	classification on a ten-point scale based on the behavior of the species in the family, minimum 0, maximum 1

Insect trait tool (ITT) v. 1.0 database

Supplement 1 - Trait categories (t1-t26) used for the expert classification of the family-taxa for the insect trait tool.
Explanations of the trait characters:

Terrestrial or aquatic environment (t1-t4)

larva terrestrial (t1)

Binding of larval stages to a terrestrial ecosystem. The majority of life occurs outside the water, notwithstanding potential brief entries into aquatic habitats to interact with other organisms. Larvae that can enter stems of aquatic plants within their tissue below the water surface are also included in this group as they would not be viable outside these stems due to their feeding requirements and regularly breathe gas mixtures within the stems. This group includes all riparian larvae that partially interact with the aquatic environment.

larva aquatic (t2)

Binding of larval stages to an aquatic ecosystem. These stages may have a complete adaptation of underwater respiration or may seek the water surface for respiration. The way of life and feeding takes place under water. This also includes all larvae that leave the water body as larvae for pupation or overwinter outside the water body. These groups do not include shore-dwelling larval stages that interact with organisms in the water, e.g. for feeding.

adult terrestrial (t3)

Binding of the adult stage to a terrestrial ecosystem. The majority of life occurs outside the water, although brief entry into aquatic habitats to interact with organisms or to lay eggs is possible. This group also includes all riparian insects that partially interact with the aquatic environment in terms of feeding. Included are the rarely appearing subadult flight stages as found in the Ephemeroptera. The group includes feeding modes that involve eating parts of aquatic plants that extend above the water surface (e.g. Pyralidae) or predators that dive to hunt (e.g. Carabidae) or parasitoids with aquatic hosts (e.g. Chalcididae).

adult aquatic (t4)

Adult stage binding to an aquatic ecosystem. Organisms can live permanently below the water surface, both those that leave it to breathe and those that can breathe there. They only leave the water to swarm in rare cases (e.g. Dytiscidae, Notonectidae). The predominant part of life and feeding takes place under water. In addition, this group includes insects that live on the water surface and rarely descend (e.g. Gyrinidae). This group does not include riparian stages that partially interact with the aquatic environment in terms of feeding. These are found in the category "adult-aquatic".

Feeding behavior types of the larvae (t5-t10)

phytophagous (t5)

Feeding behavior based on the consumption of living plant parts, independent of the plant taxon consumed. Taxa such as lower algae, mosses, ferns and higher plants are considered, while the focus (>99%) is on higher plants. All vegetative plant parts are considered. Associated taxa of this group utilize various above-ground or underground plant parts (e.g. cells, juices, leaves, flowers or roots). The group also includes an exception of living plant parts with all life forms that consume woody plants and can be considered as xylophagous or deadwood organisms. The classification requires a more in-depth review, as many organisms are grouped together as xylobionts in the relevant literature. The "saprophagous" way of life is excluded, as fermentation for e.g. sap flows in deciduous trees is mostly caused by microorganisms and direct decomposition.

zoophagous (t6)

Lifestyles with animal-based diets. This category includes all lifestyles that depend on one or more individuals and consume parts or whole animals. This includes a wide variety of parasitic, predatory, and necrophagous lifestyles. Deliberately not included and considered completely separately is the diet of metabolic products such as feces, which is listed under "coprophagous" as a separate category.

mycetophagous (t7)

Diet based on the consumption of fungi. The grouping does not follow a systematic definition of fungi, so that different filamentous fungi are included as well as higher fungi with fruiting bodies. In some cases, the boundaries are fluid to the phytophagous category "saproxylic", as some wood fungi certainly form the actual food of e.g. deadwood beetles. Binding to fungi was therefore only carried out for deadwood insects if the larva explicitly lives in fruiting bodies. For simplification, lichens were also included in this category, since the largest proportion (>99%) does not apply to them and the resolution is not fine enough.

saprophagous (t8)

Feeding behavior using fermenting moist situations such as sap flows on trees. The demarcation to other categories is basically fluid and difficult. We clearly limit ourselves to inhabitants of substrates with alcohol fermentation. These substrates can be, for example, sap flows, wet fermenting detritus situations, fermenting fruit or fermenting rotting mushrooms in leaf litter.

detritophagous (t9)

Feeding behavior in which detritus is decomposed. Here, the role of processing by microorganisms plays a major role. Detritus can be of plant, animal or fungal origin, with the plant part being the largest. The fineness of the substrate does not matter. The grazing of microfilm as well as fine organic material is also included in this category. While the distinction from carrion in the necrophorous category is simple, there is a difficulty in distinguishing it from decomposing foliage or other plant parts. Therefore, where very fresh and coarse structures are ingested, we categorize in the subcategories of "phytophagous".

coprophagous (t10)

All diets that feed on animal feces. The size or systematic position of the animal does not matter. Likewise, it does not matter whether the feces are colonized when fresh or in varying degrees of decomposition. Or whether the droppings are freely available or are built up in nests (as in the case of urban pigeons, for example). A special case is faeces with extensive remains of chitin, hair, and bone parts. This case is classified in this category “necrophorous”.

Phytophagous subtypes (t11-t20)

phyllophagous (t11)

Leaf-feeding mode of life that consumes all living parts of the leaves as well as freshly dead leaves. The group includes both modes of life in which only individual cells of the underside of the leaf are eaten (e.g. Thysanoptera), those that eat whole leaves, and leaf-rolling taxa whose larvae develop in rolls or by eating killed and folded leaf parts, so-called cigars (e.g. Choreutidae, Rhynchitidae). Buds of leaves were also included. The transition is fluid here, especially in the category "detritophagous", as various leaf-eaters, for example, are also found here, which we delimit by the strong interaction of pre-processing microorganisms.

saproxylic (t12)

Feeding behavior in which woody plant parts are eaten, often in combination with fungi. The plant parts can be the woody body itself or bark, branches, woody fruit bodies or seeds. In a few cases, living wood is eaten and dies as a result. The guilds of deadwood organisms are diverse; a rough distinction can be made between wood, bark, mulm, fungal wood and animal nests of cavity colonisers, all of which are grouped under this category here. The systematic classification of plants plays only a subordinate role. Deadwood occurs in both terrestrial and aquatic ecosystems.

sap-sucking (t13)

Special phytophagous way of life of the Hemiptera with unpaired sucking mouthparts, in which plant juices are ingested from a wide variety of plant parts. The distribution on plant parts does not play any further role for the classification. It does not matter whether saps are taken from leaves, stems, or roots. The category thus undifferentiatedly includes both xylem and phloem feeders. This category includes all honeydew producers that play an important ecological role in feeding other insects, especially in interaction with plant surfaces.

stem (t14)

Phytophagous diet that includes all living parts of stems. It does not matter whether the organisms consume outer parts of the stem in parts or completely or develop within them. Which tissues within the stem are consumed is also irrelevant. The boundary is drawn with woody plants such as trees and shrubs, whose stem inhabitants are placed in the "saproxylic" category.

flower (t15)

Diet in which all forms of flowers are consumed. This ranges from the consumption of flower buds to individual flower components (such as petals, sepals, or ovaries) including progressed fruit stalks.

seed (t16)

Diet in which all forms of seeds are consumed. This can be in the form of eating the whole fruit including seeds or eating the seeds within protective components such as pods or nutshells.

gall-inducing (t17)

Feeding type in which, in interaction with the plant, specific galls are formed with tissues in which feeding takes place. This group includes the clearly defined gall-forming insects. Purposely not included in this category are the diverse forms of secondary colonising parasitoids of various degrees of specialisation.

miners (t18)

This category contains mine-forming insects that develop within plant tissue as phytoparasites. In this process, plant tissue is consumed from within and the mine is left for pupation in some cases, in other cases only after hatching of the adult stage. The term "miners" is taken here to mean essentially leaf miners. Whenever a phytoparasitic lifestyle could be assigned to another plant part (e.g. seeds or stems), the classification is found there.

roots (t19)

A type of diet adapted to the consumption of underground plant parts. These may be living or dead roots of varying thickness, and in rare cases reservoirs such as tubers. Explicit deadwood organisms, whose biology essentially takes place in roots, are found within the category "saproxylic" due to their specialisation to wood as well as decomposing fungi.

not specified (phytophagous) (t20)

A summary category for diets that are either not yet fully elucidated or unspecific in terms of dietary intake of plant residues. In addition, all uncertainties that could not be assigned on the basis of the review carried out are also included here. The category thus combines a lack of biological knowledge and an error in processing.

Zoophagous subtypes (t21-t26)

predator (t21)

A diet in which animal prey is killed for food. Feeding is not limited to one specimen of prey. The fitness of the prey animal is 0 after the predator has eaten. The size of the prey organism does not matter and there is only a limited time of co-existence between the prey specimen and the predator across a stadium. The predator is often larger than the prey, but this is only a tendency.

micropredator (t22)

Feeding behavior in which parts of one or more animals are eaten, but the prey is not killed. The fitness of the prey animal is present after the predator has eaten, although it may be weakened. The size of the prey organism does not matter and there is no co-existence between the prey and the predator across a stadium. The micropredator is often smaller than the prey, but this is only a tendency.

parasite (t23)

Feeding behavior in which parts of a single host animal are eaten but the host does not die to complete the life cycle of the parasite or, in rare cases, does so due to secondary debilitation. The death of the host organism is therefore not a necessity for the development of the parasite. The number of parasites can be single or numerous per host. The ways of life are enormously varied. In Central Europe, there are only endoparasites within insects, which usually have a winged adult stage in at least one sex. When feeding, there is co-existence over a longer span between prey specimen and predator, often over one stage. A typical order is represented by the Strepsiptera.

parasitoid (t24)

Feeding behavior in which a single host animal is attacked and dies towards the end of the parasitoid’s life cycle. The death of the host organism is decisive for the classification. The number of parasitoids can be single or numerous per host. The ways of life are enormously varied. For example, there are ectoparasitoids that eat into the host organism to pupate or endoparasitoids that pupate inside or outside the host. When feeding, there is co-existence over a longer time span between host specimen and parasitoid, often over a stadium. In Central Europe, hyperparasitoids and hyperhyperparasitoids have also been documented in the order Hymenoptera, whose host organisms are accordingly parasitoids or hyperparasitoids. An example of such assemblages are galls of the Cynipidae, which are secondarily colonised by various hyperparasitoids.

necrophorous (t25)

Diet in which dead animal material is consumed. This can either be the carrion of dead animals directly or individual components that come from an animal. In the latter case, this can be prey remains, hair remains, feathers, chitinous remains, or built-up material in nests or tunnels. The size of the animal or its systematic position does not matter. A special case is faeces or pellets with extensive remains of chitin, hair, and bone parts. In this case, they are classified in this category and not under "coprophagous".

not specified (zoophagous) (t26)

A summary category for diets that are either not yet fully elucidated or unspecific in terms of dietary intake of animal residues. In addition, all uncertainties that could not be assigned on the basis of the review carried out are also included here. The category thus combines a lack of biological knowledge and an error in processing.

Insect trait tool v. 1.0 - Supplement 3

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Development of an insect sample fractionizer for biodiversity research

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We describe a new mechanical tool for dividing mixed insects and other invertebrate samples into subsamples. The device enables the division to equal parts by means of a movable hemispherical bowl and a separating disc. Due to the complete stainless steel manufacturing, the sample divider is sterilizable by using chemicals or heating and thus suitable for DNA-based methods. The production of equally sized subsamples is of particular importance for biodiversity studies today, especially when using metabarcoding combined with insect homogenisation for species determination of mixed insect samples. The device allows sub-samples to be analyzed separately using the same or different methods, or getting archived for museal preservation and future research.

Biodiversity | insects community ecology | functional diversity | taxonomic diversity | metabarcoding | biodiversity monitoring | Central Europe

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Introduction

Biodiversity research in terrestrial ecosystems needs a holistic overview of its components that characterizes and interacts with a specific habitat. Insects in particular represent the vast majority of the diversity of any terrestrial biotope in most climate zones. These biotopes would simply not be imaginable without their diverse, regulating functions and influences. Because of this high diversity of often several thousand species at a given point of investigation (1), their total species and abundance composition also contains by far the most precise source of information about the local state of nature and the local processes of biodiversity change. Efficient insect trapping techniques such as malaise traps (2) or gressitt traps (3) and similar methods are able to capture large parts of this insect composition acting at a survey point in their samples. Modern species identification methods such as metabarcoding are in principle capable of analyzing the species diversity of these mixed insect samples. However, neither is the entire insect diversity of certain countries taxonomically described, nor are the barcodes of all species comprehensively known. When using destructive laboratory methods for the purpose of metabarcoding via homogenization of mixed species samples, this means the loss of processing and preservation potential for a wide variety of purposes. It is therefore advisable to produce subsamples for a wide variety of purposes and not always to use complete samples for certain laboratory processes to clarify specific questions.

Development and components

The insect sample fractionizer was developed by the Entomological Society Krefeld in cooperation with our coauthors from a technical school for mechanical engineering and a specialist steel construction company over a period of more than one year. After first successful experiments in 2018 with plastic parts, the development of two previous stainless steel prototypes during 2019 was necessary to achieve the final model described here.

Characteristics, material and additional equipment. Base plate with welded supports that carry a semi-hollow divider hemisphere. Four threaded screws (Imbus) for leveling the base plate. Semi-hollow sphere, D = 300mm, custom-made, polished inside. Axle, welded, carries the semi-hollow sphere. Locking pin, screwed on. Locking disc, welded. Two outlet funnels and divider plate, welded on. Whole construction made of stainless steel type 1.4301. The total weight measures 13.5kg. The upper part (semi-hollow sphere) measures 5.8 kg. Detailed descriptions and measurements see supplement 1-2.

Equipment required in addition: Spirit level. Precision scale with a range of 0-500g, accuracy of 0.1g. Allen key, size 2.5 and 6. Squirt bottle suitable for ethyl alcohol/ethanol/EtOH. Collecting vessels (e.g. beakers, heat-resistant laboratory glass, 1000ml - high form). Rounded, heat-resistant metal or glass rods. Sieves made of stainless steel for the determination of the ethanol-moist biomass of the mixed insect samples. Indexing bolts, also known as locking bolts, are used in connection with e.g. welded-on indexing discs. These are structural components that allow moving components to be adjusted quickly and in a defined manner. By using the pull button or the pull ring, a pin is moved out of the counterpart in order to bring components into the appropriate position and fix them.

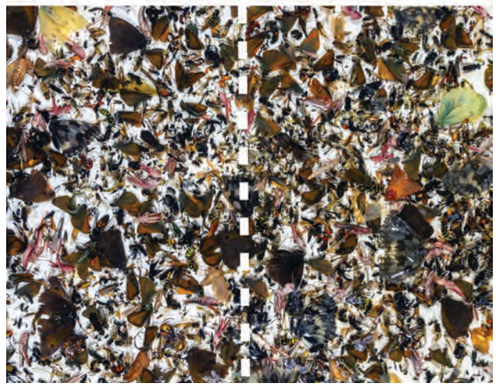

Fig. 1. A malaise trap of the Entomological Society Krefeld (4)(5) and a typical weekly early summer catch result with a drawn line to symbolize the separation of these diverse sample types into two subsamples.

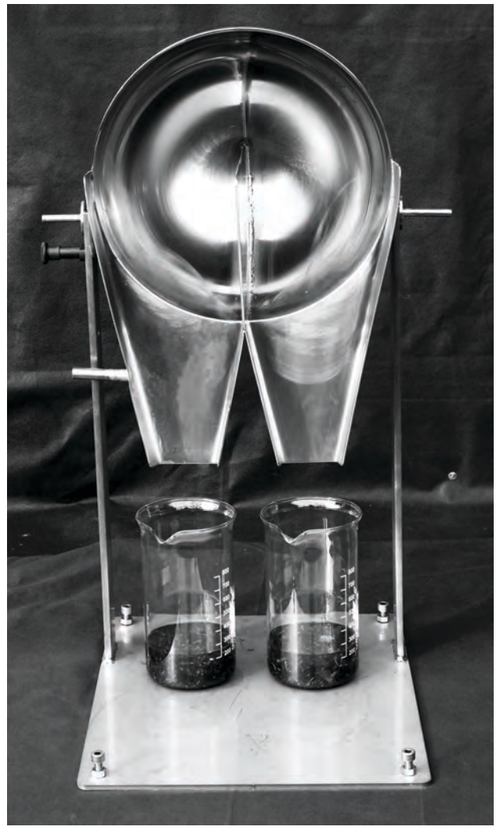

Fig. 2. The sample fractionizer with the locking bolts (a) for fixing the position of the hemispherical dish and height-adjustable screws (b) in the base plate for levelling.

Fig. 3. The insect sample fractionizer in action. Axial rotation distributes the invertebrates in the total volume into equally sized parts.

Recommendations for use

The sample fractionizer was developed especially for biomass-rich (5), high diversity malaise trap samples that needed to be processed DNA-sterile. We recommend to use the sample fractionizer for invertebrate samples preserved in ethanol of high concentration.

Application description. Before the start of each new workflow, the sample fractionizer should be precisely adjusted on the work surface.
For calibration, about 500g of water is weighed out and placed in the rear part of the half-hollow sphere. Two beakers, each with a capacity of 1000ml and a known tare weight, are passed over the two spouts that are to hold the divided sample quantity. The sample fractionizer is now moved forward and downward with a consistentmovement until the drainages are in a vertical position. This position is locked so that the fractionizes water sample can drip completely into the beakers. When the dripping process stops, the weight of both beakers is determined. Subtracting the tare, the divided amount of water shows the precision of the fractionation process for a liquid. A positive result exists if the difference between the two partial quantities is max. 1 gram. If the difference is greater, the set-up should be readjusted.
The amount of insects filled in should be covered by alcohol in a way that the insects easy move around. For malaise trap samples a maximum insect quantity of up to approx. 50g can be used for one dividing process. The capacity maximum amount of insects and alcohol using this device is close to 500ml.

More hints for the separation process:
No contact with the built-in separating plate or e.g. the filled quantity should not touch the separating plate at the beginning of the separating process. The separating plate protrudes 10mm beyond the center of the half hollow sphere, which ensures that the 1:1 separated sample is not mixed again in the rear edge area. The sample divider is free to move forwards and backwards around the axis. In comparison to alcohol, insects behave like an inert mass during the dividing process. By slowly increasing back and forth movement, the alcohol including the insects becomes freely movable. Once such a state is reached, the separation process is carried out by moving the dividing trays downward and forward evenly but decisively. The dividing chutes are locked in a vertical position. The separation result can be as follows:
a) Ideally, the mixture of insects and alcohol is completely divided 1:1 and is available in 2 beakers of 1000ml each.
b) Insects have partly remained in the edge area of the divider and are rinsed into the beakers with alcohol from the spray bottle.
c) Moving too quickly can cause individual insects to get caught on the metal edges in the outer areas and not be split properly..
d) Moving too slowly, leaves possibly many insects in the sample fractionizer. The alcohol consumption is considerably increased by necessary extensive rinsing.
With vertically downward fixed outlets, the sample divider must be rinsed well with help of ethanol in the spray bottle.

Sterilizing of the insect sample fractionizer. After completion of each working procedure, the sample fractionizer is cleaned out with a damp cloth to remove residues such as butterfly scales, these would otherwise burn in as residues if heating is used for the sterilization process. The insect sample fractionizer can be cleaned with sterilizing chemicals. Since the device is made of stainless steel, e. g. a sterilization process after cleaning with ethanol can also be carried out using high temperatures, which prevents the unwanted transfer of DNA traces between samples. This can be done using a gas burner or by igniting a liquid film of ethanol that has been sprayed on. The interior of the divider is for this porpose sprayed with a few strokes of a spray bottle containing high concentration ethanol and the alcohol is lit with a long-handled lighter. The same methodology can be used for the accompanying tools, which are also made of stainless steel or heat-resistant laboratory glass. In order to clearly illustrate the process, short instructional films were produced (see supplement 3).

Safety instructions for sterilization of working equipment by burning ethanol. Do not use in closed rooms and outside appropriately equipped fume hoods. When used outdoors, no flammable material must be accessible in the vicinity. Depending on the amount of ethanol, burning can least for up to several minutes with a flame, e.g. between 30 and 50cm high, which can easily ignite combustible materials in the surrounding area due to crosswinds. The process must be supervised until all flames are completely extinguished. A fire extinguisher should be readily available within reach, and more extensive fire protection measures should be taken. Wear protective goggles when working with ethanol and no-

tice safety data sheets. Never add ethanol to the burning fire or the still heated working tools, this could lead to dangerous deflagrations. At high air temperatures of e.g. over 30 degrees Celsius, slight deflagration will also occur during ignition. We recommend that the executing person should have training and experience in proper laboratory practice for the above-mentioned processes (e.g. chemical laboratory technician) and of course should be familiar with the associated fire protection measures, accident prevention regulations and safety data sheets. In principle, the institutional requirements at the point of execution must be observed. For the sterilization process of the equipment see video-links under supplement 3

Conclusions

The insect sample fractionizer is the first tool that enables for a standardized sample fraction of mixed insect samples, e.g. from the results of biodiversity studies using efficient trap technology. Due to the complete stainless steel manufacturing, the sample fractionizer is sterilizable by chemicals or heating and thus suitable for DNA-based methods for species or operational taxa analyses. The invertebrate sample fractionizer can be used for a variety of research issues in biodiversity research. The design features allow for a splitting of an insect composite sample whose closeness to the equal splitting for the insect biomass can be checked by determining the wet biomass of the subsamples. Of course, species that are randomly distributed in only one or very few individuals before the fractionizing process (so called singletons) can only be present in one of the subsamples. These patterns correspond to the natural distribution pattern within ecological societies of mixed samples as well as the basic ecological features of population ecology. In the case of e.g. malaise traps, however, there are higher numbers of individuals for species that are represented in a habitat with a corresponding activity abundance. If questions of a more complete recording of species with low abundances are in the foreground of an investigation, then of course a decision should be made which sample sizes are required. In these cases, of course, the question arises as to how many trap units per area size are sufficient or more efficient trap techniques are required.

ACKNOWLEDGEMENTS

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Author contributions. TH, MS and HS developed the conceptual framework. HS and MS realized initial concepts in models. HS, JJ, BF, HS and HT designed and produced the prototypes. TH and MS drafted the first version of the manuscript. All authors contributed to the article and approved the version to be published.

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Supplement 1
Technical drawings of the sample fractionizer, .pdf file:
http//entomologica.org/tools/ISF01.pdf

Supplement 2
Full resolution 3D-CAD-model of the sample fractionizer, .pdf file:
http//entomologica.org/tools/ISF02.pdf

Supplement 3
Video documentation of the sterilization process of the equipment:
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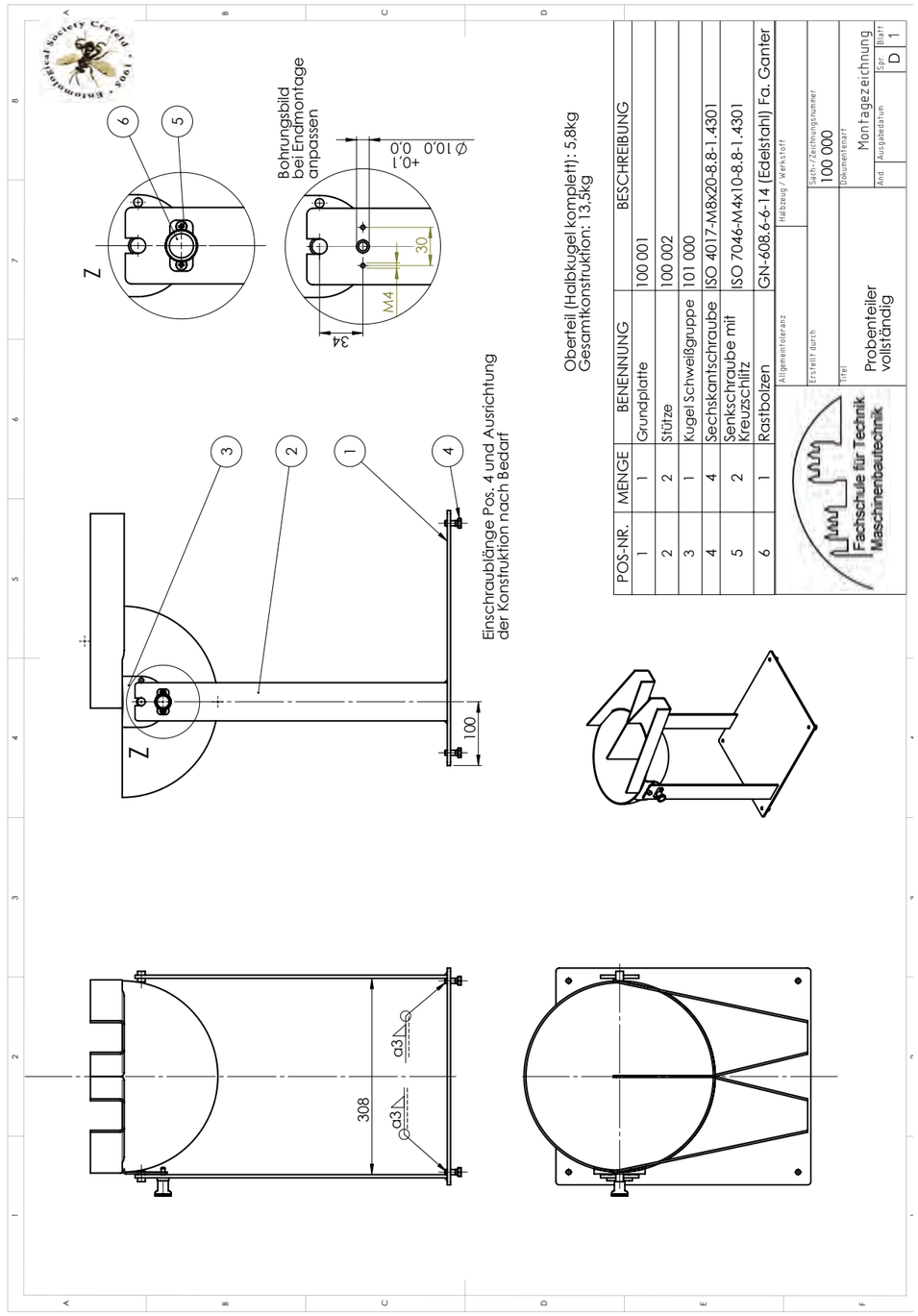
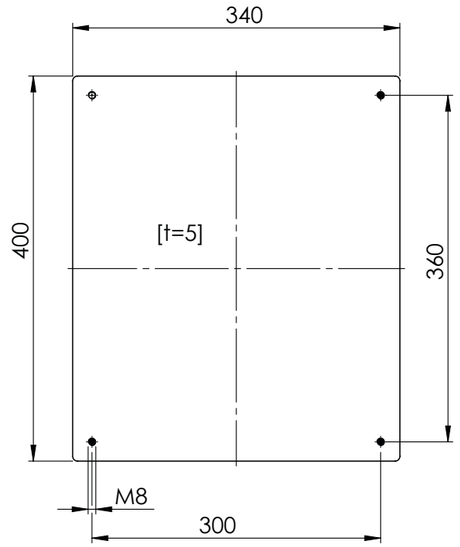
https://youtu.be/RVdPEBPi0y8
https://youtu.be/kA09Mhm2cmw





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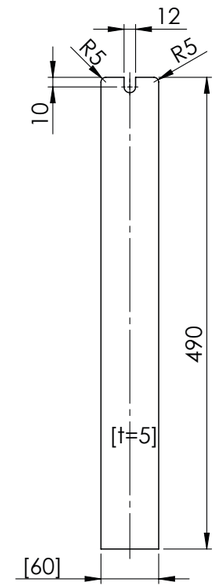

Bohrbild bei rechter Stütze
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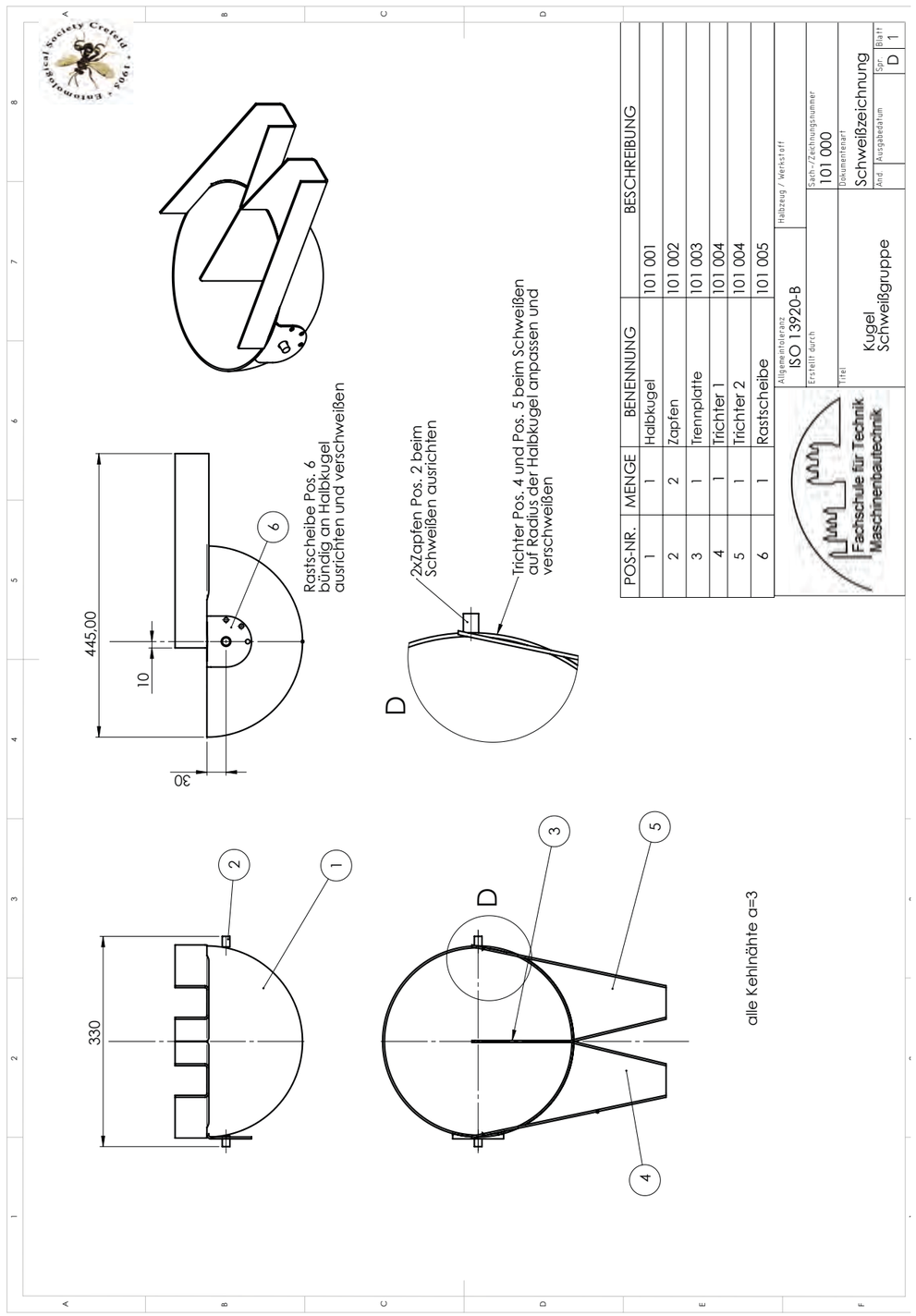

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2	2	Zapfen	101 002
3	1	Trennplatte	101 003
4	1	Trichter 1	101 004
5	1	Trichter 2	101 004
6	1	Rastscheibe	101 005

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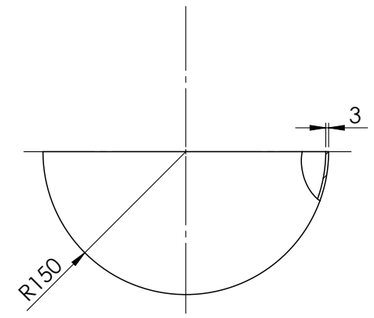

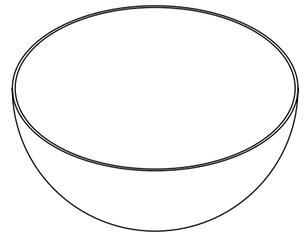

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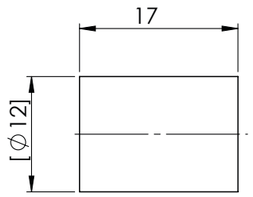

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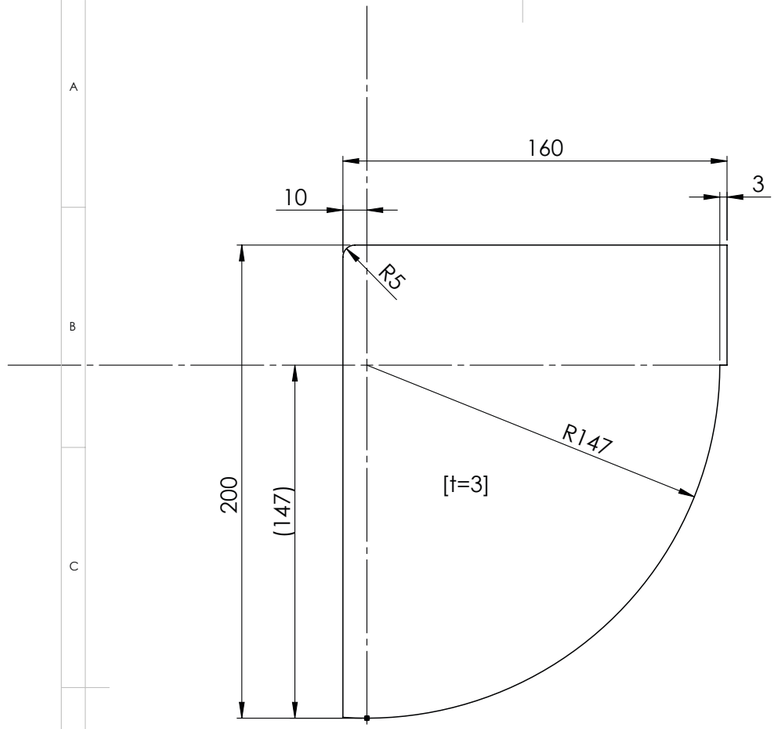

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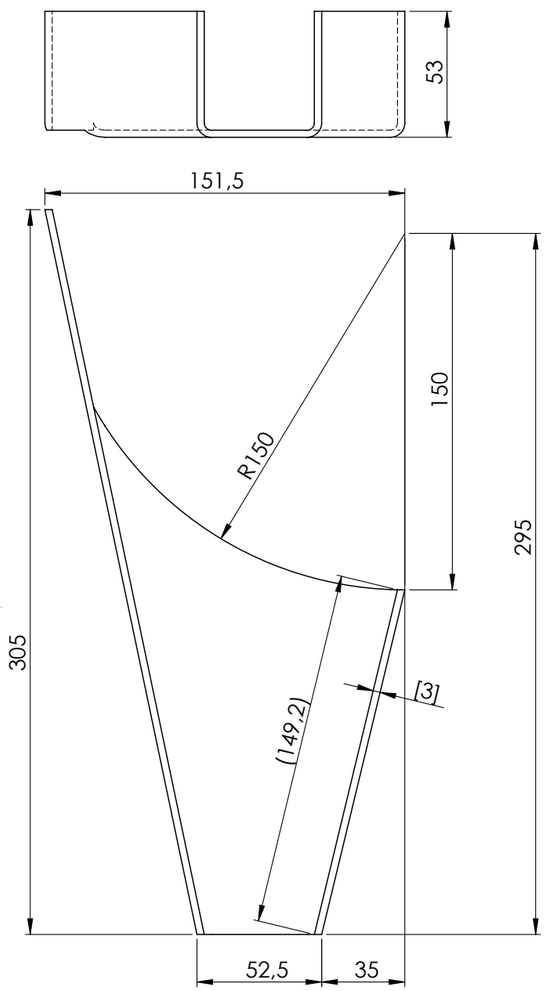

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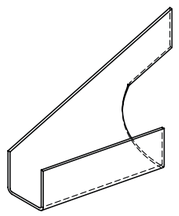

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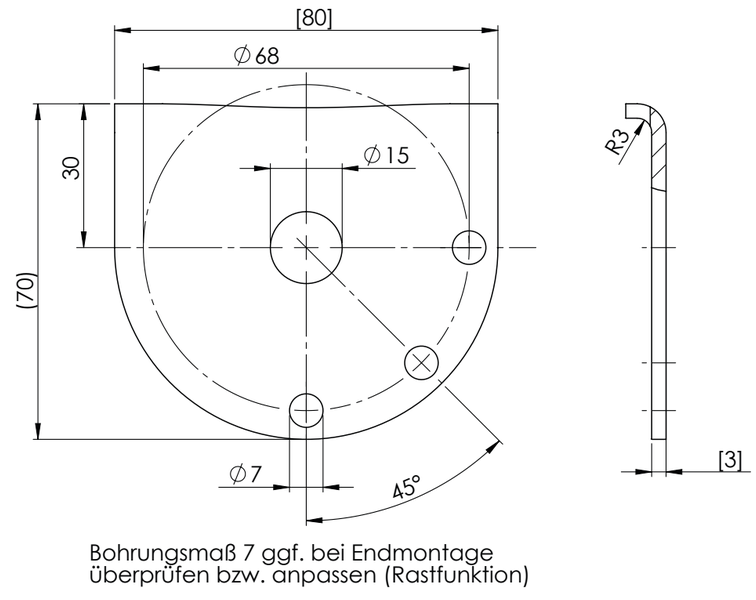

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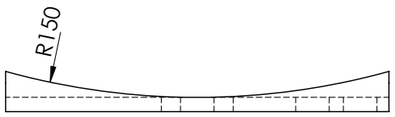

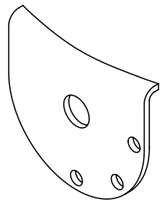

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Spatial, temporal and taxonomic patterns of insect extinction in Germany

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Red lists represent an important instrument for evaluating the decline of species in space and time, for improving decision-making and for guiding conservation planning. However, globally, only a fraction of species has been categorized according to a red list, even in countries where insects are relatively well-studied. Such large knowledge gaps hinder conservation planning and ultimately jeopardize the maintenance of ecosystem functions. Given the recent reports on severe insect decline, it is now more than ever of great importance to obtain a reliable complete picture of the state of insects. We here derive an estimate of extinction rates and of the proportion of threatened species for the total insect community in Germany, and asses spatial and temporal of extinction patterns.

We found a regional extinction rate of 4.5% (1773-1937 species) for the area of Germany. Among extant insect species, 6% are classified as critically endangered (1856-2024 species), while among remaining species, a staggering 36.1% (10758-11086 species) is classified as threatened.

Higher trophic levels of zoophagous insects are often more sensitive to negative environmental changes due to their position in the food web, and at the same time are underrepresented in Red Lists. They are therefore disproportionately affected by these knowledge gaps.

This concerns particularly parasitoids which are taxa of regulatory importance and often higher extinction risk levels due to their trophic position.

Exemplary examination of the spatial scaling of red list categories indicate a far higher rate and risk and exemplary over ten times higher regional extinction rate when the reference area is gradually scaled down.

This illustrates the actual situation regarding the magnitude of regional species extinction events and extirpation risks that we have to assume for certain parts of the reference area.

For a given region, the loss of the gene pool of populations specially adapted to a given region usually represents an irreversible biodiversity loss. In order to avoid further irreparable damage, the species threatened with extinction must be preserved with top priority. There is thus a considerable need for research in order to assess the conservation status of more than 56% of the insect species diversity in Germany and to immediately achieve a more balanced trait group representation in red lists.

Biodiversity | regional extinction | functional diversity | taxonomic diversity | Insects | biodiversity monitoring | Germany

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Introduction

Red lists represent an important instrument for evaluating the decline of species in space and time, for improving decision-making and for guiding conservation planning. However, globally, only a fraction of insect-species have been categorized according to a red list, even in countries where insects are well-studied such as in Germany. This large knowledge gap hinders conservation planning and ultimately jeopardizes effective conservation of species and ecosystem functioning. Given the recent reports on severe insect declines (1–6), obtaining a reliable and complete picture of the conservation status of insects, has become highly urgent.

Insects are an extremely important indicator group for the vast majority of ecosystems, both in aquatic and terrestrial habitats. Owing to their great diversity, they naturally exhibit a myriad of ecological functions. However, many of the ecological functions attached to species characteristics are not well understood. Coupled with an insufficient knowledge on conservation status of species, this lack of understanding further restricts a comprehensive assessment of ecosystem functions at risk, and prohibits targeted conservation strategies.

Furthermore, while arguably the status of several, usually charismatic taxa among insects may be covered at national levels and beyond, knowledge on their status at smaller spatial scales is often even less comprehensive - even though that is the typical spatial scale of management actions. As such, we are in need of a cross-scale analysis of the conservation status of species, in order to identify local conservation priorities, and to provide management recommendations.

We assemble and summarize current knowledge on conservation status of insects in Germany, in order to detect and describe the aforementioned knowledge gaps. Our objectives are x-fold. First, we account for the incompleteness of red list categorization, and provide estimates of the expected (complete) number of regionally extinct, endangered and threatened species, while accounting for family-level species traits (7). Second, we compiled red list data sources across different spatial scales from local district to continent, and examined the scale dependent distribution of extinction rate and number of extinct species. Third, we examine temporal patterns in extinction and cumulative extinction rates at national level. Our work serves to gain an overall overview of the cur-

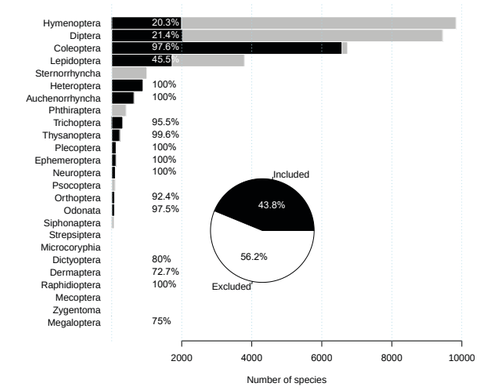

Fig. 1. Number of insect species per order known to exists in Germany, as well as number of species categorized in the red list of Germany.

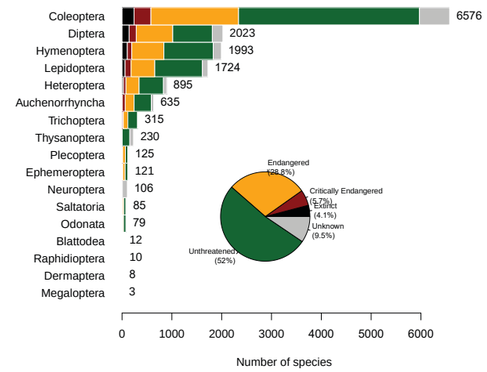

Fig. 2. Simplified distribution of red list categories among ten insect orders in Germany. Critically endangered consists of category 1, Endangered are the combined classes of threat categories 2, 3, R and G, not threatened are the categories V and *, and unknown include the categories data deficient or unclassified species.

rent state of knowledge regarding the conservation status of insects, and to identify knowledge gaps as well as priorities for required actions.

Methods

red list data sources. We consider the sources mentioned in Supplement 1 for national and regional red lists for Germany, North Rhine Westphalia and the lower rhine region. For the smallest study area in the region around the city of Krefeld, were compiled from long term presence-absence records as collected by the Entomological Society of Krefeld.

Species diversity and red lists of Germany. Past accounts (8, 9) have resulted in estimates of number of insects present in Germany to exceed 33,000. Thus, this taxonomic class comprises at least 7-8 times more species that all vertebrates and plants together. The German Barcode of Life (GBOL) reference library curretnly accounts for at least one thousand more insect species (34,085), and is thus regarded a more comprehensive assessment. However, the red list of insects is by far not as comprehensive as those of vertebrates and plants, with include 14,940 species in total (43.8% compared to total species numbers of GBOL). Moreover, the red listing includes only ten out of 25 insect orders known to be present in Germany (Fig. 1), while within orders, species coverage ranges between 0% for species rich insect families and up to 100% for species-poor groups (Fig. 1).
Out of the ten insect orders included in the red list assessment of Germany, there may still be species that do not have an appropriate conservation status because for example they have been classified as data-deficient (Fig. 2). For those species for which a formal red list assessment is given, on average, 4.1% are classified as extinct, 5.7% are classified as threatened with extinction, 8.7% as highly endangered, 10.2% as endangered and 45.8% are classified as non-threatened.

Statistical analysis. First we provide estimates of the numbers of extinct, endangered and threatened species, while accounting for incompleteness of the national red list assesment, as well as trophic and habitat characteristics of the species (at family level). Second, we derive empirical estimates of scale dependent extinction, and scale depended number of extinct species. Third, we derive estimates of temporal extinction at national level.

Models of risk categories. We start by stating that the number of species included in each red list category follow a multinomial distribution, with K number of species categorized (presently 14,940), and cell probabilities $p_k = \frac{k_i}{K}$, where k_i the number of species in each category i. For practical reasons however, it suffices to reduce the problem to two independent binomial models: that of extinction, and that of the threatened versus non-threatened for extant species. The goal is derive the number of species (m) in each category (extinct or threatened) for the full number of species in Germany (M), with corresponding unknown probabilities p_m.
We derive four models to impute red list categories for non-classified insect species. Our first model (the *null-model*) assumes no variation in categorization among species, or other grouping (e.g. taxonomic or functional), in the rate of categories, i.e. $p_k = p_m$. In other words, our null-model assumes that the insect species included in the red list assessment are a representative sample of all insect species present in Germany. The assumption implies that the included species within a particular insect order are representative to all species within that particular order, and that included orders are representative to non-included orders. Our model reads

$$\frac{log(y)}{log(1-y)} = \text{logit}(y) = \mu \qquad \textbf{(1)}$$

In a two subsequent models, we attempt to relax to some degree the assumption of equal p_k probabilities among insect orders by including potential explanatory variables at order of the family level. We allow fraction of species in each category to be species-richness dependent. Here, the assumption is made that the number of species in each order has a deterministic relation to the fraction of species that have gone extinct, or are threatened, besides empirical justification, is presently also motivated by examination of the data at hand (Figure 2). Our second model reads

$$\text{logit}(y) = \alpha + \beta \times N \qquad \textbf{(2)}$$

where N the vector with number of species in each family of the corresponding species.
In a third model, we examine whether number of species in each red list category, and corresponding probabilities, are related to family-level traits, such as diet and habitat preferences. To this end we use a recently compiled database of these traits for all insect families in Germany (7), allowing us to both model extinction and threatened status probabilities for red listed species, as well as to predict status probabilities for non-red listed species. This newly assembled trait-database is categorized using a fuzzy-classification at family level, in essence providing a level of association between a given family with the various trait categories.
We run a number of models. Our full model is expressed as

$$\text{logit}(y) = \mathbf{Xb} + \mathbf{Z_a}\delta_1 + \mathbf{Z_j}\delta_2 \qquad \textbf{(3)}$$

where y the binary response of extinction per species, $\mathbf{X}$ the row-proportionalized matrix (i.e. $\sum X[i,.] = 1$) of larval food preference, $\mathbf{b}$ a vector of corresponding coefficients for the log-odds of association to trait categories with respect to larval food preference, while Z_a and Z_b indicator variables of aquatic life history in adult and larval life stages respectively. In all three models we rely on binomial distributions, with a *logit*-link embeded in a generalized linear model. In a final step, models were compared by Akaikes Information Criterion (AIC) in order to identify the most parsimonious representation.

Spatial scale of categorization. It is widely known that extinction is scale dependent, with regional extinction processes decreasing with larger reference area of assessment. To examine this relationship, we compiled the available data on insect extinctions at different spatial scales, from continent (Europe), to local (municipality), and derived empirical scale dependent estimates of extinction. Next, we derived species accumulation curves (SAR), and integrated them with the scale dependent extinction probabilities, to produce scale dependent estimates of number of extinct species.

- Species area curves (SAR) are usually characterized by a curvi-linear relationship: $S = cA^z$, where S is the number of species, A the area and c and z constants
- Extinction risk of a species is inversely related to population size. That is, for given mean extirpation rate (r) per local population, the extinction probability (over a larger geographical area) decreases with increasing area (and number of populations).
- Population size is linearly dependent on area.

Temporal rate of regional extinction. Red list data for extinct species include the last year of a recording. Under the assumption that the particular year the species is last seen is the year of extirpation, we examined temporal patterns in extinction risk. In particular, we were interested in non-linearity patterns over time.

Results

Distribution of traits. The species distribution of trophic trait categories included in the red list assessment differed considerably compared to the composition of the total list of species known to be present in Germany. In particular, phytophagous species are generally over represented in the red list assessment, contrary to zoophagous and detritophagous species that are under represented (Fig. 3A). Species in aquatic environments are overrepresented in the red list as compared to the national species list (Fig. 3B). Within zoophagous species, red list assessments of species are strongly biased towards predatory species, with a clear under-representation of parasitoid species (Fig. 3C), while within phytophagous species, red-list representation is biased towards phyllophagous species, with a complete absence of gall-inducing species and miners (Fig. 3D).

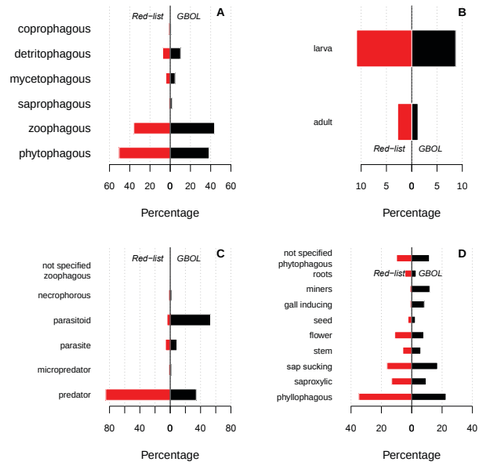

Fig. 3. Comparison of trait distribution representation between red listed species and total known species (GBOL database). A: Relative percentage of larval feeding strategy. B: Percentage species in terrestrial environment for larvae. C: Percentage feeding specialization for zoophagous species. D: Percentage feeding specialization for phytophagous species.

Models for red list extinction, endangerment and threatened status. Among ten competing models, models including subcategories of larval-diet were more supported by the data as compared to models including major diet categories only. This was found to be true across the three re-

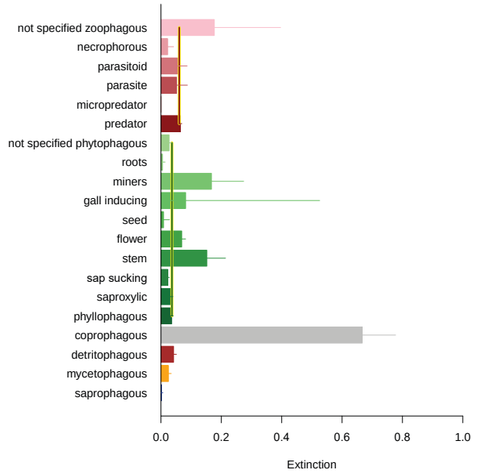

Fig. 4. Estimated fraction of extinct species across different larval feeding strategies. Vertical lines represent the averages across phyllophagous and zoophagous species.

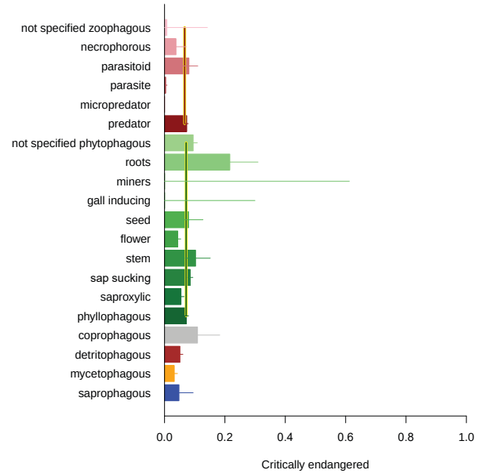

Fig. 5. Estimated fraction of critically endangered species across different larval feeding strategies. Vertical lines represent the averages across phyllophagous and zoophagous species.

sponse variables i.e. fraction extinct, fraction critically endangered, and fraction threatened (Supplementary tables S1-S3). In particular, most parsimonious models were found to be those including subcategories larval diet class and an indicator of association to aquatic vs terrestrial realm for extinction and threatened status categories.

The largest fraction of extinct species was found to be among coprophagous species (Fig. 4), followed by zoophagous species. The highest fraction critically endangered species to be present among phyllophagous species specializing on roots, although on average a higher fraction of coprophagous species was classified as critically endangered, as compared to phyllophagous species (Fig. 5). Estimates of model coefficients of the most parsimonious model for each response variable are given in Supplementary tables S4-S6.

Models of scale dependence. The species-area curve fitted to the present insect data showed results consistent with global results, with best estimates $y = \alpha \times A^z = exp(1.7862 + log(Area) \times 0.2527)$. The exponent coefficient z was found to be well within the reported global $z-$values among other life forms (i.e. 0.2-0.3) (). Among insect species groups, the random intercept effect coefficient was found to be $\epsilon = 1.369$ (on the log scale).

We found a strong scale dependent extinction probability across 30 insect (Fig. 6), with a significantly negative coefficient for log-area ($logit(y) = 2.3180 - 0.4598 \times log(Area)$, t-value=-21.572, p-value < 0.001). Between species random effect variation was estimated at $\epsilon = 0.7361$.

Integrating scale dependent extinction probability with the species area curve, allowed us to examine scale dependent number of extinct species. We found a humped shape relationship of number of species that are extinct as function of scale (Fig. 6), suggesting that most species have gone extinct at above-minimum of the area range considered presently, around 300 km^2.

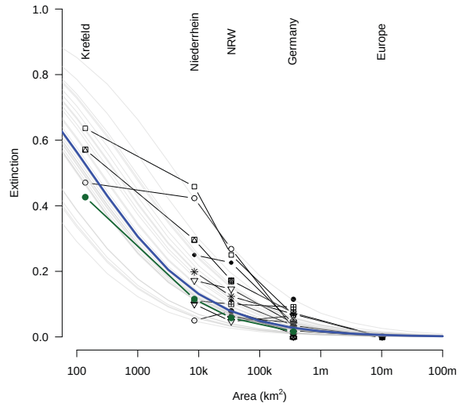

Fig. 6. Estimated mean scale-dependent extinction probability for insects. Points and black lines represent individual insect groups. Grey lines are fitted group-dependent probabilities while blue line represent mean probability across all insect groups. The green line represent scale dependent plant species extinction probabilities.

Temporal rate of regional extinction. We found a highly nonlinear extinction rate over time (1800-1970), with low extinction rates in the period 1800-1940, followed by much higher extinction rates in the following period.

Table 1. Table with estimates of number of extinct, endangered and threatened species, given model formulation, as well as 95% confidence intervals of binomial variation. Values in bold are those of the most parsimonious models.

model	Extinct	Endangered	Threatened
μ	1535(1460-1610)	2131(2044-2219)	10746(10583-10909)
N	1553(1478-1629)	1977(1893-2062)	10225(10064-10386)
Feeding	1614(1538-1691)	2074(1988-2161)	10758(10595-10921)
Feeding + Aq_{ad}	1644(1567-1722)	2062(1976-2148)	10801(10638-10965)
Feeding + Aq_{la}	1647(1570-1725)	2048(1963-2135)	10730(10567-10893)
Feeding + $Aq_{ad} + Aq_{la}$	1645(1567-1723)	2049(1963-2135)	10727(10564-10890)
Extended feeding	1858(1777-1941)	**1940(1856-2024)**	10795(10632-10958)
Extended feeding + Aq_{ad}	**1855(1773-1937)**	1939(1856-2023)	**10803(10640-10966)**
Extended feeding + Aq_{la}	1859(1777-1941)	1938(1854-2022)	10803(10640-10967)
Extended feeding + $Aq_{ad} + Aq_{la}$	1854(1772-1936)	1939(1856-2023)	10782(10619-10946)

Discussion

We found that Red-list categorization is unbalanced with respect to the taxonomic and functional insect diversity in Germany (Fig. 1). In addition, we found that extinction rates, as well as the fraction of critically endangered species, strongly dependent on the trophic position of the species. In turn, extinction and endangerment levels cannot be simply extrapolated to the national species list, based on the red list proportions alone. Among the about 34,000 species known to be or have been present in Germany, and taking into account taxonomic and functional uncertainty, we estimate 1855 species to have gone extinct, and 1940 species to be threatened with extinction, which is the highest endangerment category of the Red List in Germany..

The by far biggest, identified gaps in knowledge with respect to conservation-status assessments, are to be found among the very species-rich parasitoid Hymenoptera, and a larger number of the Diptera families (Fig. 1). For these two orders alone, a remarkable 14,500 species do not presently have a conservation assessment in place.

Knowledge on the status of insects in Germany is therefore far from complete.

For a better understanding of regional and national biodiversity changes in the time line, a comprehensive threat assessment of as many species as possible is needed. Priority in data collection and vulnerability assessment should be given to taxa with the most identified knowledge deficits.

In insects this is especially necessary for species-rich families with parasitoid lifestyles.

We found a strong sclae dependent extinction probability of insect species, resulting in a humped pattern of number of extinct species with increasing area. This humped relationship may theoretically arise as result of contracting species ranges, suggesting habitat loss and fragmentation hindering recolonization.

We found that extinction rates were accelerating over time, with higher total extinction numbers coinciding with the industrialization period after the second world war.

By definition, the Red Lists cannot contribute to the detection of current extinction processes (i.e of recent decades), since a species is considered extinct only in the absence of any record over time period of several decades Hence, present results based on the red-list data at hand, are unable to provide an up to date assessment of current extinction rates within the last decades. However, recently documented insect declines in Germany (1–3) render a decline in extinction rates in recent years highly unlikely. Our estimated extinction rates and numbers of extinct species should therefore be considered a conservative assessment.

Recommendations

Our results refer to a country with relatively high land use intensity, population density and industrialization. On the other hand, there is a comparatively high level of knowledge about insect diversity and nature protection in Germany, based on a long tradition of entomological research, nature conservation policy and research-funding potential.

Owing to the data red lists are build upon, this is a view of the past and not a reflection about events of the last two decades. Our results show the best possible current approximation to the reality of biodiversity loss that has occurred in the reference area and exemplary sub-areas.

We characterize regional extinction events as irreversible damage if they result in the loss of population characteristics anchored in their regional gene pool.

The conservation of stable (meta)populations of species threatened with extinction therefore as a top priority goal.

Insect species in the category threatened with extinction (Category 1 of the red list of Germany) usually have a requirement profile that is no longer met in the "normal landscape" in Germany. As a rule, the last populations of these species are located in nature reserves and especially in the Natura 2000 network of protected areas of the European Union. These species are also often identified as indicators of a higher quality condition of strictly protected habitats of the EU Flora Fauna Habitat Directive.

In order to be able to comprehensively assess biodiversity change and to provide meaningful conservation and management recommendations, we need to be informed about exactly those species. As described earlier, this is is currently not the case at the national level, and even less so at smaller spatial scales.

At least for further exemplary sub-regions, it is therefore necessary to close these knowledge gaps in order to better understand what actually happens in which dimensions when

the area is scaled down. This knowledge should be available for the overall diversity of insects within a network of protected areas selected as representative examples. To this end, thorough investigations should be initiated in order to responsibly build up sufficient knowledge and take targeted protective measures.

Conclusions

Future directions

Closing the knowledge gaps for these higher taxa was hampered in the past by the small or regionally non-existent number of entomologists who are able to identify species of these insect families by conventional taxonomic methodology.
The decline in the total number of flying insects was determined using the methodology of standardized Malaise trapping, which offer opportunity to collect sufficient data for particularly these insect orders (Hymenoptera, Diptera).
The hope of closing existing knowledge gaps additionally lies in the application of genetic methods of species determination (metabarcoding) to the mixed samples of such efficient detection methods. Current knowledge suggests that standardized malaise traps, in combination with genetic methods for species identification, are particularly well suited to fill most of these identified gaps.

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Author contributions. TH, CH and MS developed the conceptual framework. TH and MS collected and compiled the data. CH, TH and MS drafted the first version of the manuscript. All authors contributed to the article, approved the version to be published and agreed to be accountable for all aspects of the work.

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Supplement 1
References of red list publications used .pdf file:
http//entomologica.org/dl/rl-publ.pdf

Supplement 2
Compiled red lists for the insect fauna of Germany .pdf file:
http//entomologica.org/dl/rl-germany.pdf

Supplement 3
Table for comparing the red lists of Germany with the area of North Rhine-Westphalia, the lower Rhineland and the area around Krefeld for selected Taxa .pdf file:
http//entomologica.org/dl/rl-s3.pdf

Supplement 4 - Supplementary tables

Table S1. Table of results of extinction risk for various model formulations. μ is a simple mean, N is number of species in family, Feeding is the larval feeding strategy (See Fig 3A) and Aq_{ad} and Aq_{la} represent effects of adult and larval association to aquatic environment respectively. Extended feeding is the larval feeding strategy whereby the phytophagous and zoophagous strategies are further specified in subclasses (See Figs. 3D and 3E).

model	df	AIC	deviance	Δ AIC	weight
μ	1.00	4968.63	4966.63	90.45	0.00
N	2.00	4970.49	4966.49	92.31	0.00
Feeding	6.00	4913.77	4901.77	35.59	0.00
Feeding + Aq_{ad}	7.00	4905.92	4891.92	27.74	0.00
Feeding + Aq_{la}	7.00	4912.85	4898.85	34.67	0.00
Feeding + $Aq_{ad} + Aq_{la}$	8.00	4907.92	4891.92	29.74	0.00
Extended feeding	20.00	4886.24	4846.24	8.06	0.01
Extended feeding + Aq_{ad}	**21.00**	**4878.18**	**4836.18**	**0.00**	**0.69**
Extended feeding + Aq_{la}	21.00	4886.59	4844.59	8.41	0.01
Extended feeding + $Aq_{ad} + Aq_{la}$	22.00	4879.92	4835.92	1.74	0.29

Table S2. Table of results of endangerement risk for various model formulations. μ is a simple mean, N is number of species in family, Feeding is the larval feeding strategy (See Fig 3A) and Aq_{ad} and Aq_{la} represent effects of adult and larval association to aquatic environment respectively. Extended feeding i sthe larval feeding strategy whereby the phytophagous and zoophagous strategies are further specified in subclasses (See Figs. 3D and 3E).

model	df	AIC	deviance	Δ AIC	weight
μ	1.00	6291.81	6289.81	73.97	0.00
N	2.00	6276.89	6272.89	59.05	0.00
Feeding	6.00	6279.47	6267.47	61.63	0.00
Feeding + Aq_{ad}	7.00	6280.17	6266.17	62.33	0.00
Feeding + Aq_{la}	7.00	6279.67	6265.67	61.83	0.00
Feeding + $Aq_{ad} + Aq_{la}$	8.00	6281.47	6265.47	63.64	0.00
Extended feeding	**20.00**	**6217.84**	**6177.84**	**0.00**	**0.51**
Extended feeding + Aq_{ad}	21.00	6219.55	6177.55	1.71	0.22
Extended feeding + Aq_{la}	21.00	6219.73	6177.73	1.89	0.20
Extended feeding + $Aq_{ad} + Aq_{la}$	22.00	6221.55	6177.55	3.71	0.08

Table S3. Table of results of threatened risk for various model formulations. μ is a simple mean, N is number of species in family, Feeding is the larval feeding strategy (See Fig 3A) and Aq_{ad} and Aq_{la} represent effects of adult and larval association to aquatic environment respectively. Extended feeding i sthe larval feeding strategy whereby the phytophagous and zoophagous strategies are further specified in subclasses (See Figs. 3D and 3E).

model	df	AIC	deviance	Δ AIC	weight
μ	1.00	15715.42	15713.42	170.59	0.00
N	2.00	15676.53	15672.53	131.70	0.00
Feeding	6.00	15671.79	15659.79	126.96	0.00
Feeding + Aq_{ad}	7.00	15669.59	15655.59	124.76	0.00
Feeding + Aq_{la}	7.00	15673.28	15659.28	128.46	0.00
Feeding + $Aq_{ad} + Aq_{la}$	8.00	15666.66	15650.66	121.84	0.00
Extended feeding	20.00	15551.12	15511.12	6.29	0.02
Extended feeding + Aq_{ad}	**21.00**	**15544.83**	**15502.83**	**0.00**	**0.54**
Extended feeding + Aq_{la}	21.00	15552.80	15510.80	7.98	0.01
Extended feeding + $Aq_{ad} + Aq_{la}$	22.00	15545.26	15501.26	0.44	0.43

Table S4. Tabel of GLM-model coefficients for most parsimonious model for extinction risk

	Estimate	Std. Error	z value	Pr(>|z|)
saprophagous	-6.328	1.270	-4.981	0.000
mycetophagous	-3.671	0.329	-11.143	0.000
detritophagous	-3.131	0.213	-14.725	0.000
coprophagous	0.694	0.557	1.246	0.213
phyllophagous	-3.303	0.137	-24.074	0.000
saproxylic	-3.412	0.223	-15.302	0.000
sap sucking	-3.759	0.199	-18.857	0.000
stem	-1.719	0.417	-4.120	0.000
flower	-2.606	0.186	-14.032	0.000
seed	-4.766	1.218	-3.912	0.000
gall inducing	-2.418	2.521	-0.959	0.337
miners	-1.605	0.630	-2.546	0.011
roots	-5.246	0.982	-5.342	0.000
not specified phytophagous	-3.581	0.263	-13.597	0.000
predator	-2.677	0.075	-35.574	0.000
micropredator	-27.285	467.607	-0.058	0.953
parasite	-2.911	0.567	-5.137	0.000
parasitoid	-2.734	0.379	-7.206	0.000
necrophorous	-3.782	0.654	-5.784	0.000
not specified zoophagous	-1.538	1.118	-1.376	0.169
adult_aquatic	-1.005	0.366	-2.745	0.006

Table S5. Tabel of GLM-model coefficients for most parsimonious model for endangerment risk

	Estimate	Std. Error	z value	Pr(>|z|)
saprophagous	-3.000	0.735	-4.080	0.000
mycetophagous	-3.401	0.296	-11.491	0.000
detritophagous	-2.902	0.182	-15.987	0.000
coprophagous	-2.104	0.603	-3.486	0.000
phyllophagous	-2.555	0.105	-24.391	0.000
saproxylic	-2.854	0.180	-15.856	0.000
sap sucking	-2.377	0.111	-21.512	0.000
stem	-2.171	0.443	-4.904	0.000
flower	-3.082	0.218	-14.145	0.000
seed	-2.446	0.523	-4.676	0.000
gall inducing	-10.942	10.092	-1.084	0.278
miners	-9.007	9.463	-0.952	0.341
roots	-1.290	0.486	-2.654	0.008
not specified phytophagous	-2.254	0.150	-15.010	0.000
predator	-2.523	0.070	-36.152	0.000
micropredator	-24.983	283.790	-0.088	0.930
parasite	-5.544	0.753	-7.362	0.000
parasitoid	-2.436	0.345	-7.066	0.000
necrophorous	-3.221	0.667	-4.830	0.000
not specified zoophagous	-4.888	3.076	-1.589	0.112

Table S6. Tabel of GLM-model coefficients for most parsimonious model for threatened risk

	Estimate	Std. Error	z value	Pr(>|z|)
saprophagous	-2.091	0.410	-5.095	0.000
mycetophagous	-0.853	0.117	-7.290	0.000
detritophagous	-0.639	0.091	-6.986	0.000
coprophagous	-0.997	0.396	-2.514	0.012
phyllophagous	-0.750	0.060	-12.577	0.000
saproxylic	-0.663	0.090	-7.331	0.000
sap sucking	-0.688	0.068	-10.123	0.000
stem	0.537	0.258	2.078	0.038
flower	-0.296	0.098	-3.020	0.003
seed	-1.139	0.340	-3.354	0.001
gall inducing	-1.275	1.302	-0.979	0.328
miners	-1.427	0.647	-2.205	0.027
roots	-0.066	0.318	-0.206	0.837
not specified phytophagous	-0.962	0.102	-9.461	0.000
predator	-0.319	0.039	-8.273	0.000
micropredator	-1.406	0.501	-2.806	0.005
parasite	-2.786	0.312	-8.932	0.000
parasitoid	0.018	0.195	0.092	0.927
necrophorous	-1.208	0.308	-3.918	0.000
not specified zoophagous	-0.993	0.944	-1.052	0.293

Supplement 1

References: Taxa, faunistical data, red lists

Insect orders and groups:

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- Coleoptera: Carabidae (Hannig & Kaiser 2021, Schmidt et al. 2016), Coleoptera aquatica (Spitzenberg et al. 2016)
- Dermaptera (Matzke & Köhler 2011)
- Diptera: Asilidae (Wolff 2011), Ceratopogonidae (Havelka 2016), Chaoboridae (Wagner 2016), Dixidae (Wagner 2016), Empidoidea (Meyer & Wagner 2011), Psychodidae (Wagner 2016), Syrphidae (Ssymank et al. 2011), Thaumalidae (Wagner 2016)
- Ephemeroptera (Haybach & Eiseler 2011)
- Hemiptera: Auchenorrhyncha (Nickel et al. 2016)
- Hymenoptera: Apidae (Esser et al. 2011, Westrich et al. 2011), Formicidae (Seifert 2011, Sonnenburg & Sonnenburg 2011), Symphyta (Liston et al. 2011)
- Lepidoptera: Lepidoptera (Schumacher 2011), Bombycoidea (Rennwald et al. 2011), Geometridae et Drepanidae (Trusch et al. 2011), Noctuoidea (Wachlin & Bolz 2011), Pyraloidea (Nuss 2011), Rhopalocera (Reinhardt & Bolz 2011)
- Odonata (AK Libellen NRW 2011, Ott et al. 2015)
- Plecoptera (Enting & Eiseler 2011)
- Saltatoria (Maas et al. 2011, Volpers & Vaut 2011)
- Thysanoptera (zur Strassen 2011)
- Trichoptera (Robert 2016)

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Supplement 3

Order	Blattoptera	Coleoptera	Coleoptera	Coleoptera	Coleoptera	Dermaptera	Diptera	Diptera	Diptera	Diptera	Diptera	Diptera	Diptera	Diptera	Ephemeroptera	Hemiptera	Hymenoptera	Hymenoptera	Hymenoptera	Hymenoptera	Hymenoptera	Hymenoptera	Hymenoptera	Hymenoptera
Group	Blattoptera	Carabidae	Coleoptera aquatica	Saproxylic Coleoptera	Dermaptera	Asilidae	Ceratopogonidae	Chaoboridae, Dixidae	Empidoidea	Psychodidae	Syrphidae	Thaumaleidae	Ephemeroptera	Auchenorrhyncha	Anthophila (Apidae s.l.)	Chrysididae	Ampulicidae, Sphecidae, Crabronidae	Formicidae	Pompilidae	Vespidae, Eumenidae, Masaridae	Mutillidae, Scoliidae, Tiphidae, Sapygidae	Symphyta
European Red List (total species)				688											1942									
Regionally Extinct (0)				0											0									
Critically Endangered (1)				5											7									
Endangered (2)				51											46									
Vulnerable (3)				37											24									
Near Threatened (V)				89											101									
Extremely Rare (R)				0											0									
Endangerment of unknown extent (G)				0											0									
Data Deficient (D)				168											1101									
Unthreatened (*)				338											663									
Not classified (/)				5											0									
German Red List (total species)	12	582	344		8	81	198	22	1089	154	463	16		635	561	98	264	116	96	82	22	754		
Regionally Extinct (0)	0	25	8		0	3	10	0	125	0	5	0		6	39	4	17	1	5	8	2	30		
Critically Endangered (1)	1	42	29		1	4	0	0	86	0	53	0		59	31	8	10	10	14	2	1	13		
Endangered (2)	0	64	36		1	14	0	0	223	0	33	0		73	78	10	17	26	5	8	2	25		
Vulnerable (3)	1	71	33		0	5	4	6	281	1	40	0		81	85	13	36	19	14	8	2	29		
Near Threatened (V)	1	57	27		1	9	9	1	7	10	32	0		69	42	3	13	18	4	0	1	15		
Extremely Rare (R)	0	66	20		1	5	0	0	1	1	22	1		14	26	1	10	4	4	1	0	65		
Endangerment of unknown extent (G)	0	1	1		0	8	21	3	31	14	16	2		9	34	18	15	1	10	8	3	68		
Data Deficient (D)	0	5	15		0	7	34	0	46	56	31	8		37	15	7	3	1	0	1	0	124		
Unthreatened (*)	3	249	175		3	26	112	12	289	51	231	5		276	207	34	143	28	40	46	11	385		
Not classified (/)	6	2	0		1	0	8	0	0	21	0	0		11	4	0	0	8	0	0	0	0		
North Rhine-Westphalia (total species)		375											74		364	53	170	63	61	56	10			
Regionally Extinct (0)		23											5		45	12	8	5	10	12	1			
Critically Endangered (1)		41											4		50	5	21	3	6	4	1			
Endangered (2)		36											6		37	2	21	9	6	2	2			
Vulnerable (3)		57											8		39	6	15	13	6	6	1			
Near Threatened (V)		28											7		18	1	14	7	3	3	0			
Extremely Rare (R)		0											1		15	5	6	0	7	6	0			
Endangerment of unknown extent (G)		0											1		3	1	3	2	4	1	0			
Data Deficient (D)		26											4		15	9	13	5	1	0	0			
Unthreatened (*)		164											38		142	12	69	19	18	22	5			
Not classified (/)		0											0		0	0	0	0	0	0	0			
Lower Rhine Area (total species)															277	28	140		41	42	9			
Regionally Extinct (0)															55	7	14		3	6	1			
Critically Endangered (1)															25	0	17		4	0	0			
Endangered (2)															16	1	9		2	5	2			
Vulnerable (3)															15	0	8		3	3	0			
Near Threatened (V)															9	0	12		2	1	0			
Extremely Rare (R)															25	3	11		4	7	0			
Endangerment of unknown extent (G)															7	3	4		4	1	1			
Data Deficient (D)															9	6	7		0	1	0			
Unthreatened (*)															116	8	58		19	18	5			
Not classified (/)															0	0	0		0	0	0			
Area around Krefeld (total species)																								
Regionally Extinct (0)																								

Order	Lepidoptera	Lepidoptera	Lepidoptera	Lepidoptera	Lepidoptera	Lepidoptera	Lepidoptera	Lepidoptera	Lepidoptera	Odonata	Odonata	Plecoptera	Saltatoria	Thysanoptera	Trichoptera	Insecta		Hymenoptera	Coleoptera
Group	Alucitidae, Pterophoridae	Bombycoidea	Rhopalocera	Geometridae, Drepanidae	Noctuoidea	Psychidae	Pyraloidea	Sesiidae	Torticidae, Choreutidae	Anisoptera	Zygoptera	Plecoptera	Saltatoria	Thysanoptera	Trichoptera	SUM	Ferns and flowering plants	Bombus s.l.	Donaciidae
European Red List (total species)			435							90	47		1075			4277		58	
Regionally Extinct (0)			1							0	0		0			1		0	
Critically Endangered (1)			3							1	2		49			67			
Endangered (2)			12							5	0		120			234			
Vulnerable (3)			22							8	5		107			203			
Near Threatened (V)			44							10	5		149			398			
Extremely Rare (R)			0							0	0		0			0			
Endangerment of unknown extent (G)			0							0	0		0			0			
Data Deficient (D)			4							3	2		107			1385			
Unthreatened (*)			349							63	33		543			1989			
Not classified (/)			0							5	0		0			10			
German Red List (total species)		261	189	448	553		273			52	29		85	230	315	8032	5256	41	30
Regionally Extinct (0)		16	5	10	23		7			1	1		2	0	8	361	85	3	2
Critically Endangered (1)		28	12	35	32		14			4	5		9	0	17	520	241		
Endangered (2)		26	33	30	61		28			4	2		13	0	28	840	438		
Vulnerable (3)		25	25	41	52		36			7	1		5	0	31	952	567		
Near Threatened (V)		32	21	41	29		18			4	2		4	0	62	532	374		
Extremely Rare (R)		12	22	15	33		18			4	1		3	1	6	357	379		
Endangerment of unknown extent (G)		0	2	3	2		11			0	0		1	2	27	311	28		
Data Deficient (D)		1	7	14	13		13			0	0		1	62	1	502	513		
Unthreatened (*)		112	57	251	285		110			27	16		41	154	135	3514	2154		
Not classified (/)		9	5	8	23		18			1	1		6	11	0	143	477		
North Rhine-Westphalia (total species)	45	168	123	334	383	26	172	21	372	46	27	65	51			3059	1920	29	24
Regionally Extinct (0)	11	19	33	36	56	5	25	2	41	3	3	11	4			370	111	5	6
Critically Endangered (1)	7	22	22	34	56	4	33	0	54	9	3	8	6			393	87		
Endangered (2)	7	19	26	37	39	3	27	3	52	4	2	3	7			350	229		
Vulnerable (3)	4	24	9	49	45	5	27	4	30	4	3	5	6			366	314		
Near Threatened (V)	4	21	8	33	43	2	7	5	18	5	4	4	2			237	21		
Extremely Rare (R)	0	5	3	4	9	1	1	0	13	0	0	4	0			80	50		
Endangerment of unknown extent (G)	0	1	0	0	1	0	1	1	0	0	0	0	1			20	17		
Data Deficient (D)	0	0	0	2	2	2	1	0	24	4	1	1	1			111	18		
Unthreatened (*)	12	57	22	139	132	4	50	6	140	15	11	29	24			1130	1073		
Not classified (/)	0	0	0	0	0		0	0	0	2	0	0	0			2	0		
Lower Rhine Area (total species)	20	137	78	270	314	19	135	14	251				40			1815	1387	27	24
Regionally Extinct (0)	2	15	33	15	54	1	8	1	19				2			236	160	8	11
Critically Endangered (1)	2	10	12	9	13	1	19		30				4			146			
Endangered (2)	1	10	5	11	32	3	15		26				7			145			
Vulnerable (3)	3	5	3	41	28	0	18	3	20				1			151			
Near Threatened (V)	1	12	0	11	22	2	13	1	12				3			101			
Extremely Rare (R)	0	8	0	139	7	1	0	0	0				2			207			
Endangerment of unknown extent (G)	0	2	1	6	0	0	9	1	1				0			40			
Data Deficient (D)	4	3	1	10	3	5	1	0	16				0			66			
Unthreatened (*)	7	72	23	28	155	6	52	8	127				21			723			
Not classified (/)	0	0	0	0	0	0	0	0	0				0			0			
Area around Krefeld (total species)			68														1119	21	22
Regionally Extinct (0)			32														477	12	14

Supplement 2

Compiled insect Red Lists of Germany

K - Categories
Explanations of the categories according to the data of: https://www.rote-liste-zentrum.de/en/Threat-Categories-1711.html.
Since 2009, the German Red Lists distinguish ten categories based on the level of threat:

0 - Extinct or Lost (‘Ausgestorben oder verschollen‘)
A species that has disappeared from a defined geographical area or in which no wild population have been reported anymore. Either there is reasonable proof that populations have become extinct, usually as a result of human activity (historic habitats or locations have been transformed to such a degree that makes re-discovery unlikely), or that they are definitely lost. This means that there is no reasonable doubt that the last individuals have disappeared because targeted searches for the species in known historic habitats have been unsuccessful over a longer period of time.

1 - Threatened with Extinction (‘Vom Aussterben bedroht‘)
A species that is endangered to such a degree that it is likely to become extinct in the near future unless appropriate urgent action is taken. Survival of the species within the geographical coverage can only be achieved if the causes of threat are eliminated immediately or if effective protective measures are put in place to support remaining populations.

2 - Highly Threatened (‘Stark gefährdet‘)
A species showing a significant population decline or subject to substantial threat caused by continuous or anticipated human impact. If the current threat to the species is not adequately mitigated, it is likely to be re-classified as ‘Threatened with Extinction‘ in the future.

3 - Threatened (‘Gefährdet‘)
A species showing a significant population decline or one that is probably threatened by human impact. If the current threat to the species is not adequately addressed, it is likely to be re-classified as ‘Highly Threatened‘ in the future.

G - Threat of Unknown Extent (‘Gefährdung unbekannten Ausmaßes‘)
Species in this group are threatened. Research has shown that the species is threatened, but the available information is not sufficient to allow a precise assignment to categories 1 to 3.

R - Extremely Rare (‘Extrem selten’)
Extremely rare species, often with very local populations; total number of populations or individuals within populations do not show a long-term or short-term decline. The species is not immediately threatened, but it is particularly vulnerable to potentially threatening events.

V - Near Threatened (‘Vorwarnliste‘)
Species displaying a substantial population decline but not yet considered as threatened. If the current causes of threat persist, a re-classification into category ’Threatened‘ is likely in the near future.

D - Data Deficient (‘Daten unzureichend’)
Information on the distribution, biology or level of threat to a species is insufficient. Causes of data deficiency are, for example, that a species was not detected or not differentiated from another species in the past; that a species has only recently been assessed taxonomically or has not yet been clearly determined taxonomically; or that the number of specialists is too low to allow for a potential threat assessment.

*** -** Not Threatened (‘Ungefährdet’)
Species are considered as currently ‚Not Threatened‘ if their populations have increased, are stable or have decreased only slightly. They cannot, therefore, be assigned to Category ‘V‘ as yet.

♦ - Not Evaluated (‘Nicht bewertet’)
No threat assessment has been carried out for species in this category.

L - Last record for Germany (Extinct or lost species).

P - Frequency estimation.

S - Data source used:
*1
BfN/Bundesamt für Naturschutz (Hrsg.) (2011): Rote Liste gefährdeter Tiere, Pflanzen und Pilze Deutschlands. Band 3: Wirbellose Tiere (Teil 1).- Naturschutz und Biologische Vielfalt 70(3): 716 S.
BfN/Bundesamt für Naturschutz (Hrsg.) (2016): Rote Liste gefährdeter Tiere, Pflanzen und Pilze Deutschlands. Band 4: Wirbellose Tiere (Teil 2).- Naturschutz und Biologische Vielfalt 70(4): 598 S.
*2
Schmid-Egger, C. (2010): Rote Liste der Wespen Deutschlands. Hymenoptera Aculeata: Grabwespen (Ampulicidae, Crabronidae, Sphecidae), Wegwespen (Pompilidae), Goldwespen (Chrysiddae), Faltenwespen (Vespidae), Spinnenameisen (Mutillidae), Dolchwespen (Scoliidae), Rollwespen (Tiphiidae) und Keulhornwespen (Sapygidae). – Ampulex 1: 5-39.
*3
https://www.rote-liste-zentrum.de/

Order	Family	Species	K	L	P	S
Auchenorrhyncha	Achilidae	Cixidia confinis (Zetterstedt, 1828)	1		es	*1
Auchenorrhyncha	Achilidae	Cixidia lapponica (Zetterstedt, 1840)	*		ss	*1
Auchenorrhyncha	Achilidae	Cixidia pilatoi D'Urso & Guglielmino, 1995	1		es	*1
Auchenorrhyncha	Aphrophoridae	Aphrophora alni (Fallén, 1805)	*		sh	*1
Auchenorrhyncha	Aphrophoridae	Aphrophora corticea Germar, 1821	*		mh	*1
Auchenorrhyncha	Aphrophoridae	Aphrophora major Uhler, 1896	3		s	*1
Auchenorrhyncha	Aphrophoridae	Aphrophora pectoralis Matsumura, 1903	*		mh	*1
Auchenorrhyncha	Aphrophoridae	Aphrophora salicina (Goeze, 1778)	*		mh	*1
Auchenorrhyncha	Aphrophoridae	Lepyronia coleoptrata (Linnaeus, 1758)	V		mh	*1
Auchenorrhyncha	Aphrophoridae	Neophilaenus albipennis (Fabricius, 1798)	*		mh	*1
Auchenorrhyncha	Aphrophoridae	Neophilaenus campestris (Fallén, 1805)	*		mh	*1
Auchenorrhyncha	Aphrophoridae	Neophilaenus exclamationis (Thunberg, 1784)	*		mh	*1
Auchenorrhyncha	Aphrophoridae	Neophilaenus infumatus (Haupt, 1917)	2		s	*1
Auchenorrhyncha	Aphrophoridae	Neophilaenus lineatus (Linnaeus, 1758)	*		sh	*1
Auchenorrhyncha	Aphrophoridae	Neophilaenus minor (Kirschbaum, 1868)	3		mh	*1
Auchenorrhyncha	Aphrophoridae	Philaenus spumarius (Linnaeus, 1758)	*		sh	*1
Auchenorrhyncha	Caliscelidae	Ommatidiotus dissimilis (Fallén, 1806)	2		s	*1
Auchenorrhyncha	Cercopidae	Cercopis arcuata Fieber, 1844	R		es	*1
Auchenorrhyncha	Cercopidae	Cercopis sanguinolenta (Scopoli, 1763)	3		s	*1
Auchenorrhyncha	Cercopidae	Cercopis vulnerata Rossi, 1807	*		h	*1
Auchenorrhyncha	Cercopidae	Haematoloma dorsatum (Ahrens, 1812)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Acericerus heydenii (Kirschbaum, 1868)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Acericerus ribauti Nickel & Remane, 2002	*		h	*1
Auchenorrhyncha	Cicadellidae	Acericerus vittifrons (Kirschbaum, 1868)	*		h	*1
Auchenorrhyncha	Cicadellidae	Adarrus bellevoyei (Puton, 1877)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Adarrus multinotatus (Boheman, 1847)	*		h	*1
Auchenorrhyncha	Cicadellidae	Agallia brachyptera (Boheman, 1847)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Agallia consobrina Curtis, 1833	*		mh	*1
Auchenorrhyncha	Cicadellidae	Aguriahana pictilis (Stål, 1853)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Aguriahana stellulata (Burmeister, 1841)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Alebra albostriella (Fallén, 1826)	*		h	*1
Auchenorrhyncha	Cicadellidae	Alebra coryli Le Quesne, 1977	*		h	*1
Auchenorrhyncha	Cicadellidae	Alebra neglecta W. Wagner, 1940	*		mh	*1
Auchenorrhyncha	Cicadellidae	Alebra viridis Rey, 1894	*		mh	*1
Auchenorrhyncha	Cicadellidae	Alebra wahlbergi (Boheman, 1845)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Allygidius abbreviatus (Lethierry, 1878)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Allygidius atomarius (Fabricius, 1794)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Allygidius commutatus (Fieber, 1872)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Allygus communis (Ferrari, 1882)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Allygus maculatus Ribaut, 1952	3		s	*1
Auchenorrhyncha	Cicadellidae	Allygus mixtus (Fabricius, 1794)	*		h	*1
Auchenorrhyncha	Cicadellidae	Allygus modestus Scott, 1876	*		mh	*1
Auchenorrhyncha	Cicadellidae	Alnetoidia alneti (Dahlbom, 1850)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Anaceratagallia austriaca W. Wagner, 1955	1		es	*1
Auchenorrhyncha	Cicadellidae	Anaceratagallia frisia (W. Wagner, 1939)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Anaceratagallia ribauti (Ossiannilsson, 1938)	*		h	*1
Auchenorrhyncha	Cicadellidae	Anaceratagallia venosa (Geoffroy, 1785)	*		h	*1
Auchenorrhyncha	Cicadellidae	Anoplotettix horvathi Metcalf, 1955	R		es	*1
Auchenorrhyncha	Cicadellidae	Anoscopus albifrons (Linnaeus, 1758)	*		h	*1
Auchenorrhyncha	Cicadellidae	Anoscopus albiger (Germar, 1821)	2		s	*1
Auchenorrhyncha	Cicadellidae	Anoscopus alpinus (W. Wagner, 1955)	2		s	*1
Auchenorrhyncha	Cicadellidae	Anoscopus flavostriatus (Donovan, 1799)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Anoscopus histrionicus (Fabricius, 1794)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Anoscopus limicola (Edwards, 1908)	V		s	*1
Auchenorrhyncha	Cicadellidae	Anoscopus serratulae (Fabricius, 1775)	*		h	*1
Auchenorrhyncha	Cicadellidae	Aphrodes aestuarina (Edwards, 1908)	D		?	*1
Auchenorrhyncha	Cicadellidae	Aphrodes bicincta (Schrank, 1776)	*		h	*1
Auchenorrhyncha	Cicadellidae	Aphrodes diminuta Ribaut, 1952	V		mh	*1
Auchenorrhyncha	Cicadellidae	Aphrodes makarovi Zachvatkin, 1948	*		sh	*1
Auchenorrhyncha	Cicadellidae	Arboridia erecta (Ribaut, 1931)	D		ss	*1
Auchenorrhyncha	Cicadellidae	Arboridia kratochvili (Lang, 1945)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Arboridia parvula (Boheman, 1845)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Arboridia pusilla (Ribaut, 1936)	3		s	*1
Auchenorrhyncha	Cicadellidae	Arboridia ribauti (Ossiannilsson, 1937)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Arboridia simillima (W. Wagner, 1939)	3		s	*1
Auchenorrhyncha	Cicadellidae	Arboridia spathulata (Ribaut, 1931)	0	1937	ex	*1
Auchenorrhyncha	Cicadellidae	Arboridia velata (Ribaut, 1952)	*		s	*1
Auchenorrhyncha	Cicadellidae	Arocephalus languidus (Flor, 1861)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Arocephalus longiceps (Kirschbaum, 1868)	*		h	*1
Auchenorrhyncha	Cicadellidae	Arocephalus punctum (Flor, 1861)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Arocephalus sagittarius Ribaut, 1952	1		es	*1
Auchenorrhyncha	Cicadellidae	Arthaldeus arenarius Remane, 1960	*		mh	*1
Auchenorrhyncha	Cicadellidae	Arthaldeus pascuellus (Fallén, 1826)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Arthaldeus striifrons (Kirschbaum, 1868)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Artianus interstitialis (Germar, 1821)	*		h	*1
Auchenorrhyncha	Cicadellidae	Athysanus argentarius Metcalf, 1955	*		sh	*1
Auchenorrhyncha	Cicadellidae	Athysanus quadrum Boheman, 1845	2		s	*1
Auchenorrhyncha	Cicadellidae	Austroasca vittata (Lethierry, 1884)	3		s	*1
Auchenorrhyncha	Cicadellidae	Balcanocerus larvatus (Herrich-Schäffer, 1835)	*		h	*1
Auchenorrhyncha	Cicadellidae	Balcanocerus pruni (Ribaut, 1952)	D		s	*1

Order	Family	Species	K	L	P	S
Auchenorrhyncha	Cicadellidae	Balclutha boica W. Wagner, 1950	D		?	*1
Auchenorrhyncha	Cicadellidae	Balclutha calamagrostis Ossiannilsson, 1961	*		mh	*1
Auchenorrhyncha	Cicadellidae	Balclutha punctata (Fabricius, 1775)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Balclutha rhenana W. Wagner, 1939	*		h	*1
Auchenorrhyncha	Cicadellidae	Balclutha saltuella (Kirschbaum, 1868)	*		s	*1
Auchenorrhyncha	Cicadellidae	Batracomorphus allionii (Turton, 1802)	3		s	*1
Auchenorrhyncha	Cicadellidae	Batracomorphus irroratus Lewis, 1834	3		mh	*1
Auchenorrhyncha	Cicadellidae	Calamotettix taeniatus (Horváth, 1911)	3		s	*1
Auchenorrhyncha	Cicadellidae	Chlorita dumosa (Ribaut, 1933)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Chlorita paolii (Ossiannilsson, 1939)	*		h	*1
Auchenorrhyncha	Cicadellidae	Chlorita pusilla (Matsumura, 1906)	1		es	*1
Auchenorrhyncha	Cicadellidae	Cicadella lasiocarpae Ossiannilsson, 1981	2		s	*1
Auchenorrhyncha	Cicadellidae	Cicadella viridis (Linnaeus, 1758)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Cicadula albingensis W. Wagner, 1940	V		mh	*1
Auchenorrhyncha	Cicadellidae	Cicadula flori (J. Sahlberg, 1871)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Cicadula frontalis (Herrich-Schäffer, 1835)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Cicadula ornata (Melichar, 1900)	1		es	*1
Auchenorrhyncha	Cicadellidae	Cicadula persimilis (Edwards, 1920)	*		h	*1
Auchenorrhyncha	Cicadellidae	Cicadula placida (Horváth, 1897)	*		s	*1
Auchenorrhyncha	Cicadellidae	Cicadula quadrinotata (Fabricius, 1794)	*		h	*1
Auchenorrhyncha	Cicadellidae	Cicadula quinquenotata (Boheman, 1845)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Cicadula rubroflava Linnavuori, 1952	V		mh	*1
Auchenorrhyncha	Cicadellidae	Cicadula saturata (Edwards, 1915)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Circulifer haematoceps (Mulsant & Rey, 1855)	2		s	*1
Auchenorrhyncha	Cicadellidae	Colladonus torneellus (Zetterstedt, 1828)	D		ss	*1
Auchenorrhyncha	Cicadellidae	Colobotettix morbillosus (Melichar, 1896)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Conosanus obsoletus (Kirschbaum, 1858)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Coryphaelus gyllenhalii (Fallén, 1826)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Cosmotettix aurantiacus (Forel, 1859)	2		s	*1
Auchenorrhyncha	Cicadellidae	Cosmotettix caudatus (Flor, 1861)	2		s	*1
Auchenorrhyncha	Cicadellidae	Cosmotettix costalis (Fallén, 1826)	3		s	*1
Auchenorrhyncha	Cicadellidae	Cosmotettix evanescens Ossiannilsson, 1976	1		es	*1
Auchenorrhyncha	Cicadellidae	Cosmotettix panzeri (Flor, 1861)	2		s	*1
Auchenorrhyncha	Cicadellidae	Deltocephalus maculiceps Boheman, 1847	1		es	*1
Auchenorrhyncha	Cicadellidae	Deltocephalus pulicaris (Fallén, 1806)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Dikraneura variata Hardy, 1850	*		h	*1
Auchenorrhyncha	Cicadellidae	Diplocolenus bohemani (Zetterstedt, 1838)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Doliotettix lunulatus (Zetterstedt, 1838)	D		s	*1
Auchenorrhyncha	Cicadellidae	Doratura exilis Horváth, 1903	2		s	*1
Auchenorrhyncha	Cicadellidae	Doratura homophyla (Flor, 1861)	*		h	*1
Auchenorrhyncha	Cicadellidae	Doratura horvathi W. Wagner, 1939	2		s	*1
Auchenorrhyncha	Cicadellidae	Doratura impudica Horváth, 1897	3		s	*1
Auchenorrhyncha	Cicadellidae	Doratura littoralis Kuntze, 1937	D		?	*1
Auchenorrhyncha	Cicadellidae	Doratura stylata (Boheman, 1847)	*		h	*1
Auchenorrhyncha	Cicadellidae	Dryodurgades antoniae (Melichar, 1907)	3		s	*1
Auchenorrhyncha	Cicadellidae	Dryodurgades reticulatus (Herrich-Schäffer, 1834)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Ebarrius cognatus (Fieber, 1869)	3		s	*1
Auchenorrhyncha	Cicadellidae	Ebarrius interstinctus (Fieber, 1869)	1		es	*1
Auchenorrhyncha	Cicadellidae	Ederranus discolor (J. Sahlberg, 1871)	0	2003	ex	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana alnicola (Edwards, 1924)	*		s	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana ampliata (W. Wagner, 1948)	*		s	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana avellanae (Edwards, 1888)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana bergmani (Tullgren, 1916)	D		s	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana candidula (Kirschbaum, 1868)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana crataegi (Douglas, 1876)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana diversa (Edwards, 1914)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana flavescens (Fabricius, 1794)	*		h	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana frustrator (Edwards, 1908)	*		h	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana geometrica (Schrank, 1801)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana gratiosa (Boheman, 1852)	D		s	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana ishidai (Matsumura, 1932)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana lamellaris (Ribaut, 1931)	D		ss	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana lanternae (W. Wagner, 1937)	D		ss	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana lethierryi (Edwards, 1881)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana nigriloba (Edwards, 1924)	*		s	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana plebeja (Edwards, 1914)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana plurispinosa (W. Wagner, 1935)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana prunicola (Edwards, 1914)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana rhodophila (Cerutti, 1937)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana rosae (Linnaeus, 1758)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana rosaesugans (Cerutti, 1939)	*		s	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana salicicola (Edwards, 1885)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana smreczynskii Dworakowska, 1971	1		es	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana sociabilis (Ossiannilsson, 1936)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana soror (Linnavuori, 1950)	D		s	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana spinigera (Edwards, 1924)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana stehliki Lauterer, 1958	D		ss	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana tersa (Edwards, 1914)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana tshinari Zachvatkin, 1947	nb		nb	*1
Auchenorrhyncha	Cicadellidae	Edwardsiana ulmiphagus Wilson & Claridge, 1999	V		mh	*1

Order	Family	Species	K	L	P	S
Auchenorrhyncha	Cicadellidae	Elymana kozhevnikovi (Zachvatkin, 1938)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Elymana sulphurella (Zetterstedt, 1828)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Emelyanoviana contraria (Ribaut, 1936)	R		es	*1
Auchenorrhyncha	Cicadellidae	Emelyanoviana mollicula (Boheman, 1845)	*		h	*1
Auchenorrhyncha	Cicadellidae	Empoasca affinis Nast, 1937	*		mh	*1
Auchenorrhyncha	Cicadellidae	Empoasca apicalis (Flor, 1861)	D		ss	*1
Auchenorrhyncha	Cicadellidae	Empoasca decedens Paoli, 1932	R		es	*1
Auchenorrhyncha	Cicadellidae	Empoasca decipiens Paoli, 1930	*		sh	*1
Auchenorrhyncha	Cicadellidae	Empoasca ossiannilssoni Nuorteva, 1948	D		ss	*1
Auchenorrhyncha	Cicadellidae	Empoasca pteridis (Dahlbom, 1850)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Empoasca vitis (Göthe, 1875)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Enantiocephalus cornutus (Herrich-Schäffer, 1838)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Endria nebulosa (Ball, 1900)	D		s	*1
Auchenorrhyncha	Cicadellidae	Erotettix cyane (Boheman, 1845)	2		s	*1
Auchenorrhyncha	Cicadellidae	Errastunus leucophaeus (Kirschbaum, 1868)	1		es	*1
Auchenorrhyncha	Cicadellidae	Errastunus ocellaris (Fallén, 1806)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Errhomenus brachypterus Fieber, 1866	*		mh	*1
Auchenorrhyncha	Cicadellidae	Erythria aureola (Fallén, 1806)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Erythria manderstjernii (Kirschbaum, 1868)	*		h	*1
Auchenorrhyncha	Cicadellidae	Erzaleus metrius (Flor, 1861)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Eupelix cuspidata (Fabricius, 1775)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Eupterycyba jucunda (Herrich-Schäffer, 1837)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx adspersa (Herrich-Schäffer, 1838)	3		s	*1
Auchenorrhyncha	Cicadellidae	Eupteryx artemisiae (Kirschbaum, 1868)	V		s	*1
Auchenorrhyncha	Cicadellidae	Eupteryx atropunctata (Goeze, 1778)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx aurata (Linnaeus, 1758)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx austriaca (Metcalf, 1968)	*		s	*1
Auchenorrhyncha	Cicadellidae	Eupteryx calcarata Ossiannilsson, 1936	*		mh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx collina (Flor, 1861)	3		s	*1
Auchenorrhyncha	Cicadellidae	Eupteryx curtisii (Flor, 1861)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx cyclops Matsumura, 1906	*		h	*1
Auchenorrhyncha	Cicadellidae	Eupteryx decemnotata Rey, 1891	*		mh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx filicum (Newman, 1853)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx florida Ribaut, 1952	*		h	*1
Auchenorrhyncha	Cicadellidae	Eupteryx heydenii (Kirschbaum, 1868)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx immaculatifrons (Kirschbaum, 1868)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx lelievrei (Lethierry, 1874)	2		s	*1
Auchenorrhyncha	Cicadellidae	Eupteryx melissae Curtis, 1837	*		mh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx notata Curtis, 1837	*		h	*1
Auchenorrhyncha	Cicadellidae	Eupteryx origani Zachvatkin, 1948	2		s	*1
Auchenorrhyncha	Cicadellidae	Eupteryx salviae Arzone & Vidano, 1994	nb		nb	*1
Auchenorrhyncha	Cicadellidae	Eupteryx signatipennis (Boheman, 1847)	*		h	*1
Auchenorrhyncha	Cicadellidae	Eupteryx stachydearum (Hardy, 1850)	*		h	*1
Auchenorrhyncha	Cicadellidae	Eupteryx tenella (Fallén, 1806)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx thoulessi Edwards, 1926	3		mh	*1
Auchenorrhyncha	Cicadellidae	Eupteryx urticae (Fabricius, 1803)	*		h	*1
Auchenorrhyncha	Cicadellidae	Eupteryx vittata (Linnaeus, 1758)	*		h	*1
Auchenorrhyncha	Cicadellidae	Eurhadina concinna (Germar, 1831)	*		h	*1
Auchenorrhyncha	Cicadellidae	Eurhadina kirschbaumi W. Wagner, 1937	V		mh	*1
Auchenorrhyncha	Cicadellidae	Eurhadina loewii (Then, 1886)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Eurhadina pulchella (Fallén, 1806)	*		h	*1
Auchenorrhyncha	Cicadellidae	Eurhadina ribauti W. Wagner, 1935	*		mh	*1
Auchenorrhyncha	Cicadellidae	Eurhadina saageri W. Wagner, 1937	G		s	*1
Auchenorrhyncha	Cicadellidae	Euscelidius schenckii (Kirschbaum, 1868)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Euscelidius variegatus (Kirschbaum, 1858)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Euscelis distinguendus (Kirschbaum, 1858)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Euscelis incisus (Kirschbaum, 1858)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Euscelis lineolatus Brullé, 1832	D		s	*1
Auchenorrhyncha	Cicadellidae	Euscelis ohausi W. Wagner, 1939	3		s	*1
Auchenorrhyncha	Cicadellidae	Euscelis venosus (Kirschbaum, 1868)	3		s	*1
Auchenorrhyncha	Cicadellidae	Evacanthus acuminatus (Fabricius, 1794)	*		h	*1
Auchenorrhyncha	Cicadellidae	Evacanthus interruptus (Linnaeus, 1758)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Fagocyba carri (Edwards, 1914)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Fagocyba cruenta (Herrich-Schäffer, 1838)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Fieberiella florii (Stål, 1864)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Fieberiella septentrionalis W. Wagner, 1963	*		mh	*1
Auchenorrhyncha	Cicadellidae	Forcipata citrinella (Zetterstedt, 1828)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Forcipata forcipata (Flor, 1861)	*		h	*1
Auchenorrhyncha	Cicadellidae	Fruticidia bisignata (Mulsant & Rey, 1855)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Fruticidia sanguinosa (Rey, 1891)	R		es	*1
Auchenorrhyncha	Cicadellidae	Goniagnathus brevis (Herrich-Schäffer, 1835)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Graphocephala fennahi Young, 1977	nb		nb	*1
Auchenorrhyncha	Cicadellidae	Graphocraerus ventralis (Fallén, 1806)	*		h	*1
Auchenorrhyncha	Cicadellidae	Grypotes puncticollis (Herrich-Schäffer, 1834)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Handianus ignoscus (Melichar, 1896)	1		es	*1
Auchenorrhyncha	Cicadellidae	Hardya melanopsis (Hardy, 1850)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Hardya signifer (Then, 1897)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Hardya tenuis (Germar, 1821)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Hauptidia distinguenda (Kirschbaum, 1868)	*		s	*1
Auchenorrhyncha	Cicadellidae	Hauptidia provincialis (Ribaut, 1931)	nb		nb	*1

Order	Family	Species	K	L	P	S
Auchenorrhyncha	Cicadellidae	Henschia collina (Boheman, 1850)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Hephathus nanus (Herrich-Schäffer, 1835)	2		s	*1
Auchenorrhyncha	Cicadellidae	Hesium domino (Reuter, 1880)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Iassus lanio (Linnaeus, 1761)	*		h	*1
Auchenorrhyncha	Cicadellidae	Iassus scutellaris (Fieber, 1868)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Idiocerus herrichii (Kirschbaum, 1868)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Idiocerus lituratus (Fallén, 1806)	*		h	*1
Auchenorrhyncha	Cicadellidae	Idiocerus similis Kirschbaum, 1868	*		mh	*1
Auchenorrhyncha	Cicadellidae	Idiocerus stigmaticalis Lewis, 1834	*		h	*1
Auchenorrhyncha	Cicadellidae	Idiocerus vicinus Melichar, 1898	*		s	*1
Auchenorrhyncha	Cicadellidae	Idiodonus cruentatus (Panzer, 1799)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Japananus hyalinus (Osborn, 1900)	*		s	*1
Auchenorrhyncha	Cicadellidae	Jassargus allobrogicus (Ribaut, 1936)	*		h	*1
Auchenorrhyncha	Cicadellidae	Jassargus alpinus (Then, 1896)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Jassargus flori (Fieber, 1869)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Jassargus obtusivalvis (Kirschbaum, 1868)	*		h	*1
Auchenorrhyncha	Cicadellidae	Jassargus pseudocellaris (Flor, 1861)	*		h	*1
Auchenorrhyncha	Cicadellidae	Jassargus repletus (Fieber, 1869)	3		s	*1
Auchenorrhyncha	Cicadellidae	Jassargus sursumflexus (Then, 1902)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Kyboasca bipunctata (Oshanin, 1871)	3		s	*1
Auchenorrhyncha	Cicadellidae	Kyboasca maligna (Walsh, 1862)	nb		nb	*1
Auchenorrhyncha	Cicadellidae	Kybos abstrusus (Linnavuori, 1949)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Kybos butleri (Edwards, 1908)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Kybos calyculus (Cerutti, 1939)	R		es	*1
Auchenorrhyncha	Cicadellidae	Kybos digitatus (Ribaut, 1936)	D		ss	*1
Auchenorrhyncha	Cicadellidae	Kybos limpidus (W. Wagner, 1955)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Kybos lindbergi (Linnavuori, 1951)	*		h	*1
Auchenorrhyncha	Cicadellidae	Kybos mucronatus (Ribaut, 1933)	D		ss	*1
Auchenorrhyncha	Cicadellidae	Kybos populi (Edwards, 1908)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Kybos rufescens Melichar, 1896	*		mh	*1
Auchenorrhyncha	Cicadellidae	Kybos smaragdula (Fallén, 1806)	*		h	*1
Auchenorrhyncha	Cicadellidae	Kybos strigilifer (Ossiannilsson, 1941)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Kybos strobli (W. Wagner, 1949)	G		ss	*1
Auchenorrhyncha	Cicadellidae	Kybos virgator (Ribaut, 1933)	*		h	*1
Auchenorrhyncha	Cicadellidae	Laburrus impictifrons (Boheman, 1852)	2		s	*1
Auchenorrhyncha	Cicadellidae	Laburrus pellax (Horváth, 1903)	3		s	*1
Auchenorrhyncha	Cicadellidae	Lamprotettix nitidulus (Fabricius, 1787)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Lebradea calamagrostidis Remane, 1959	1		ss	*1
Auchenorrhyncha	Cicadellidae	Ledra aurita (Linnaeus, 1758)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Liguropia juniperi (Lethierry, 1876)	nb		nb	*1
Auchenorrhyncha	Cicadellidae	Limotettix atricapillus (Boheman, 1845)	1		es	*1
Auchenorrhyncha	Cicadellidae	Limotettix striola (Fallén, 1806)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Lindbergina aurovittata (Douglas, 1875)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Linnavuoriana decempunctata (Fallén, 1806)	D		s	*1
Auchenorrhyncha	Cicadellidae	Linnavuoriana intercedens (Linnavuori, 1949)	D		ss	*1
Auchenorrhyncha	Cicadellidae	Linnavuoriana sexmaculata (Hardy, 1850)	*		h	*1
Auchenorrhyncha	Cicadellidae	Macropsidius sahlbergi (Flor, 1861)	1		es	*1
Auchenorrhyncha	Cicadellidae	Macropsis albae W. Wagner, 1950	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis brabantica W. Wagner, 1964	D		ss	*1
Auchenorrhyncha	Cicadellidae	Macropsis cerea (Germar, 1837)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis elaeagni Emelyanov, 1964	nb		nb	*1
Auchenorrhyncha	Cicadellidae	Macropsis fragilicola Holzinger, Nickel & Remane, 2013	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis fuscinervis (Boheman, 1845)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis fuscula (Zetterstedt, 1828)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis glandacea (Fieber, 1868)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis graminea (Fabricius, 1798)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis gravesteini W. Wagner, 1953	*		s	*1
Auchenorrhyncha	Cicadellidae	Macropsis haupti W. Wagner, 1941	3		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis impura (Boheman, 1847)	2		s	*1
Auchenorrhyncha	Cicadellidae	Macropsis infuscata (J. Sahlberg, 1871)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis marginata (Herrich-Schäffer, 1836)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis megerlei (Fieber, 1868)	3		s	*1
Auchenorrhyncha	Cicadellidae	Macropsis mulsanti (Fieber, 1868)	1		es	*1
Auchenorrhyncha	Cicadellidae	Macropsis najas Nast, 1981	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis notata (Prohaska, 1923)	G		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis prasina (Boheman, 1852)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis remanei Nickel, 1999	2		s	*1
Auchenorrhyncha	Cicadellidae	Macropsis scotti Edwards, 1920	D		ss	*1
Auchenorrhyncha	Cicadellidae	Macropsis scutellata (Boheman, 1845)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macropsis vicina (Horváth, 1897)	*		s	*1
Auchenorrhyncha	Cicadellidae	Macropsis viridinervis W. Wagner, 1950	G		s	*1
Auchenorrhyncha	Cicadellidae	Macrosteles alpinus (Zetterstedt, 1828)	*		s	*1
Auchenorrhyncha	Cicadellidae	Macrosteles cristatus (Ribaut, 1927)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Macrosteles fieberi (Edwards, 1889)	2		s	*1
Auchenorrhyncha	Cicadellidae	Macrosteles frontalis (Scott, 1875)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Macrosteles horvathi (W. Wagner, 1935)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Macrosteles laevis (Ribaut, 1927)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Macrosteles lividus (Edwards, 1894)	2		s	*1
Auchenorrhyncha	Cicadellidae	Macrosteles maculosus (Then, 1897)	D		s	*1
Auchenorrhyncha	Cicadellidae	Macrosteles oshanini Razvjazkina, 1957	1		es	*1

Order	Family	Species	K	L	P	S
Auchenorrhyncha	Cicadellidae	Macrosteles ossiannilssoni Lindberg, 1954	3		mh	*1
Auchenorrhyncha	Cicadellidae	Macrosteles quadripunctulatus (Kirschbaum, 1868)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Macrosteles sardus Ribaut, 1948	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macrosteles septemnotatus (Fallén, 1806)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macrosteles sexnotatus (Fallén, 1806)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Macrosteles sordidipennis (Stål, 1858)	3		s	*1
Auchenorrhyncha	Cicadellidae	Macrosteles variatus (Fallén, 1806)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Macrosteles viridigriseus (Edwards, 1922)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Macustus grisescens (Zetterstedt, 1828)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Maiestas horvathi (Then, 1896)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Maiestas schmidtgeni (W. Wagner, 1939)	D		ss	*1
Auchenorrhyncha	Cicadellidae	Megophthalmus scabripennis Edwards, 1915	R		es	*1
Auchenorrhyncha	Cicadellidae	Megophthalmus scanicus (Fallén, 1806)	*		h	*1
Auchenorrhyncha	Cicadellidae	Mendrausus pauxillus (Fieber, 1869)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Metalimnus formosus (Boheman, 1845)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Metalimnus steini (Fieber, 1869)	*		s	*1
Auchenorrhyncha	Cicadellidae	Metcalfa pruinosa (Say, 1830)	nb		nb	*1
Auchenorrhyncha	Cicadellidae	Metidiocerus elegans (Flor, 1861)	D		s	*1
Auchenorrhyncha	Cicadellidae	Metidiocerus impressifrons (Kirschbaum, 1868)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Metidiocerus rutilans (Kirschbaum, 1868)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Micantulina micantula (Zetterstedt, 1840)	1		es	*1
Auchenorrhyncha	Cicadellidae	Micantulina stigmatipennis (Mulsant & Rey, 1855)	3		s	*1
Auchenorrhyncha	Cicadellidae	Mimallygus lacteinervis (Kirschbaum, 1868)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Mocydia crocea (Herrich-Schäffer, 1837)	*		h	*1
Auchenorrhyncha	Cicadellidae	Mocydiopsis attenuata (Germar, 1821)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Mocydiopsis intermedia Remane, 1961	2		s	*1
Auchenorrhyncha	Cicadellidae	Mocydiopsis longicauda Remane, 1961	3		s	*1
Auchenorrhyncha	Cicadellidae	Mocydiopsis monticola Remane, 1961	V		s	*1
Auchenorrhyncha	Cicadellidae	Mocydiopsis parvicauda Ribaut, 1939	V		mh	*1
Auchenorrhyncha	Cicadellidae	Neoaliturus fenestratus (Herrich-Schäffer, 1834)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Notus flavipennis (Zetterstedt, 1828)	*		h	*1
Auchenorrhyncha	Cicadellidae	Oncopsis alni (Schrank, 1801)	*		h	*1
Auchenorrhyncha	Cicadellidae	Oncopsis appendiculata W. Wagner, 1944	*		mh	*1
Auchenorrhyncha	Cicadellidae	Oncopsis avellanae Edwards, 1920	*		mh	*1
Auchenorrhyncha	Cicadellidae	Oncopsis carpini (J. Sahlberg, 1871)	*		h	*1
Auchenorrhyncha	Cicadellidae	Oncopsis flavicollis (Linnaeus, 1761)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Oncopsis subangulata (J. Sahlberg, 1871)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Oncopsis tristis (Zetterstedt, 1840)	*		h	*1
Auchenorrhyncha	Cicadellidae	Ophiola cornicula (Marshall, 1866)	3		s	*1
Auchenorrhyncha	Cicadellidae	Ophiola decumana (Kontkanen, 1949)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Ophiola russeola (Fallén, 1826)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Ophiola transversa (Fallén, 1826)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Opsius stactogalus Fieber, 1866	1		ss	*1
Auchenorrhyncha	Cicadellidae	Orientus ishidae (Matsumura, 1902)	nb		nb	*1
Auchenorrhyncha	Cicadellidae	Ossiannilssonola callosa (Then, 1886)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Paluda flaveola (Boheman, 1845)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Paralimnus lugens (Horváth, 1897)	1		es	*1
Auchenorrhyncha	Cicadellidae	Paralimnus phragmitis (Boheman, 1847)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Paralimnus rotundiceps (Lethierry, 1885)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Paramesus major Haupt, 1927	3		s	*1
Auchenorrhyncha	Cicadellidae	Paramesus obtusifrons (Stål, 1853)	3		s	*1
Auchenorrhyncha	Cicadellidae	Parapotes reticulatus (Horváth, 1897)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Pediopsis tiliae (Germar, 1831)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Penestragania apicalis (Osborn & Ball, 1898)	nb		nb	*1
Auchenorrhyncha	Cicadellidae	Penthimia nigra (Goeze, 1778)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Perotettix pictus (Lethierry, 1880)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Phlepsius intricatus (Herrich-Schäffer, 1838)	1		es	*1
Auchenorrhyncha	Cicadellidae	Phlepsius ornatus (Perris, 1857)	1		es	*1
Auchenorrhyncha	Cicadellidae	Pinumius areatus (Stål, 1858)	1		es	*1
Auchenorrhyncha	Cicadellidae	Pithyotettix abietinus (Fallén, 1806)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Planaphrodes bifasciata (Linnaeus, 1758)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Planaphrodes nigrita (Kirschbaum, 1868)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Planaphrodes trifasciata (Geoffroy, 1785)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Platymetopius guttatus Fieber, 1869	2		ss	*1
Auchenorrhyncha	Cicadellidae	Platymetopius major (Kirschbaum, 1868)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Platymetopius undatus (De Geer, 1773)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Populicerus albicans (Kirschbaum, 1868)	*		h	*1
Auchenorrhyncha	Cicadellidae	Populicerus confusus (Flor, 1861)	*		h	*1
Auchenorrhyncha	Cicadellidae	Populicerus laminatus (Flor, 1861)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Populicerus nitidissimus (Herrich-Schäffer, 1835)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Populicerus populi (Linnaeus, 1761)	*		h	*1
Auchenorrhyncha	Cicadellidae	Praganus hofferi (Dlabola, 1947)	1		es	*1
Auchenorrhyncha	Cicadellidae	Psammotettix albomarginatus W. Wagner, 1941	1		ss	*1
Auchenorrhyncha	Cicadellidae	Psammotettix alienus (Dahlbom, 1850)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Psammotettix angulatus (Then, 1899)	0	1964	ex	*1
Auchenorrhyncha	Cicadellidae	Psammotettix cephalotes (Herrich-Schäffer, 1834)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Psammotettix confinis (Dahlbom, 1850)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Psammotettix dubius Ossiannilsson, 1974	1		es	*1
Auchenorrhyncha	Cicadellidae	Psammotettix excisus (Matsumura, 1906)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Psammotettix helvolus (Kirschbaum, 1868)	*		h	*1

Order	Family	Species	K	L	P	S
Auchenorrhyncha	Cicadellidae	Psammotettix inexpectatus Remane, 1965	1		es	*1
Auchenorrhyncha	Cicadellidae	Psammotettix kolosvarensis (Matsumura, 1908)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Psammotettix maritimus (Perris, 1857)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Psammotettix nardeti Remane, 1965	1		es	*1
Auchenorrhyncha	Cicadellidae	Psammotettix nodosus (Ribaut, 1925)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Psammotettix notatus (Melichar, 1896)	1		es	*1
Auchenorrhyncha	Cicadellidae	Psammotettix pallidinervis (Dahlbom, 1850)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Psammotettix poecilus (Flor, 1861)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Psammotettix putoni (Then, 1898)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Psammotettix sabulicola (Curtis, 1837)	3		s	*1
Auchenorrhyncha	Cicadellidae	Psammotettix unciger Ribaut, 1938	1		es	*1
Auchenorrhyncha	Cicadellidae	Recilia coronifer (Marshall, 1866)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Rhopalopyx adumbrata (C. Sahlberg, 1842)	V		h	*1
Auchenorrhyncha	Cicadellidae	Rhopalopyx elongata W. Wagner, 1952	2		ss	*1
Auchenorrhyncha	Cicadellidae	Rhopalopyx preyssleri (Herrich-Schäffer, 1838)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Rhopalopyx vitripennis (Flor, 1861)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Rhytidodus decimusquartus (Schrank, 1776)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Rhytistylus proceps (Kirschbaum, 1868)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Ribautiana alces (Ribaut, 1931)	3		s	*1
Auchenorrhyncha	Cicadellidae	Ribautiana cruciata (Ribaut, 1931)	*		ss	*1
Auchenorrhyncha	Cicadellidae	Ribautiana debilis (Douglas, 1876)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Ribautiana ognevi (Zachvatkin, 1948)	D		ss	*1
Auchenorrhyncha	Cicadellidae	Ribautiana scalaris (Ribaut, 1931)	3		s	*1
Auchenorrhyncha	Cicadellidae	Ribautiana tenerrima (Herrich-Schäffer, 1837)	*		h	*1
Auchenorrhyncha	Cicadellidae	Ribautiana ulmi (Linnaeus, 1758)	*		h	*1
Auchenorrhyncha	Cicadellidae	Sagatus punctifrons (Fallén, 1826)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Sardius argus (Marshall, 1866)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Sonronius binotatus (J. Sahlberg, 1871)	R		es	*1
Auchenorrhyncha	Cicadellidae	Sonronius dahlbomi (Zetterstedt, 1840)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Sorhoanus assimilis (Fallén, 1806)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Sorhoanus schmidti (W. Wagner, 1939)	2		s	*1
Auchenorrhyncha	Cicadellidae	Sorhoanus xanthoneurus (Fieber, 1869)	2		s	*1
Auchenorrhyncha	Cicadellidae	Sotanus thenii (P. Löw, 1885)	G		ss	*1
Auchenorrhyncha	Cicadellidae	Speudotettix subfusculus (Fallén, 1806)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Stenidiocerus poecilus (Herrich-Schäffer, 1835)	*		s	*1
Auchenorrhyncha	Cicadellidae	Stictocoris picturatus (C. Sahlberg, 1842)	2		s	*1
Auchenorrhyncha	Cicadellidae	Streptanus aemulans (Kirschbaum, 1868)	*		h	*1
Auchenorrhyncha	Cicadellidae	Streptanus confinis (Reuter, 1880)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Streptanus marginatus (Kirschbaum, 1858)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Streptanus okaensis Zachvatkin, 1948	2		s	*1
Auchenorrhyncha	Cicadellidae	Streptanus sordidus (Zetterstedt, 1828)	*		h	*1
Auchenorrhyncha	Cicadellidae	Stroggylocephalus agrestis (Fallén, 1806)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Stroggylocephalus livens (Zetterstedt, 1840)	2		s	*1
Auchenorrhyncha	Cicadellidae	Synophropsis lauri (Horváth, 1897)	*		s	*1
Auchenorrhyncha	Cicadellidae	Thamnotettix confinis (Zetterstedt, 1828)	*		h	*1
Auchenorrhyncha	Cicadellidae	Thamnotettix dilutior (Kirschbaum, 1868)	*		h	*1
Auchenorrhyncha	Cicadellidae	Tremulicerus distinguendus (Kirschbaum, 1868)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Tremulicerus fulgidus (Fabricius, 1775)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Tremulicerus tremulae (Estlund, 1796)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Tremulicerus vitreus (Fabricius, 1803)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Turrutus socialis (Flor, 1861)	*		h	*1
Auchenorrhyncha	Cicadellidae	Typhlocyba quercus (Fabricius, 1777)	*		h	*1
Auchenorrhyncha	Cicadellidae	Ulopa carneae W. Wagner, 1955	2		ss	*1
Auchenorrhyncha	Cicadellidae	Ulopa reticulata (Fabricius, 1794)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Utecha trivia (Germar, 1821)	2		s	*1
Auchenorrhyncha	Cicadellidae	Verdanus abdominalis (Fabricius, 1803)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Verdanus bensoni (China, 1933)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Verdanus penthopitta (Walker, 1851)	R		es	*1
Auchenorrhyncha	Cicadellidae	Viridicerus ustulatus (Mulsant & Rey, 1855)	*		h	*1
Auchenorrhyncha	Cicadellidae	Wagneriala incisa (Then, 1897)	R		es	*1
Auchenorrhyncha	Cicadellidae	Wagneriala minima (J. Sahlberg, 1871)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Wagneriala sinuata (Then, 1897)	2		ss	*1
Auchenorrhyncha	Cicadellidae	Wagneripteryx germari (Zetterstedt, 1840)	*		h	*1
Auchenorrhyncha	Cicadellidae	Zonocyba bifasciata (Boheman, 1851)	*		h	*1
Auchenorrhyncha	Cicadellidae	Zygina angusta Lethierry, 1874	*		h	*1
Auchenorrhyncha	Cicadellidae	Zygina flammigera (Geoffroy, 1785)	*		h	*1
Auchenorrhyncha	Cicadellidae	Zygina griseombra Remane, 1994	*		mh	*1
Auchenorrhyncha	Cicadellidae	Zygina hyperici (Herrich-Schäffer, 1836)	*		h	*1
Auchenorrhyncha	Cicadellidae	Zygina hypermaculata Remane & Holzinger, 1995	G		s	*1
Auchenorrhyncha	Cicadellidae	Zygina lunaris (Mulsant & Rey, 1855)	*		s	*1
Auchenorrhyncha	Cicadellidae	Zygina nigritarsis Remane, 1994	2		s	*1
Auchenorrhyncha	Cicadellidae	Zygina nivea (Mulsant & Rey, 1855)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Zygina ordinaria (Ribaut, 1936)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Zygina rosea (Flor, 1861)	1		ss	*1
Auchenorrhyncha	Cicadellidae	Zygina rosincola (Cerutti, 1939)	D		s	*1
Auchenorrhyncha	Cicadellidae	Zygina rubrovittata (Lethierry, 1869)	3		mh	*1
Auchenorrhyncha	Cicadellidae	Zygina schneideri (Günthart, 1974)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Zygina suavis Rey, 1891	V		mh	*1
Auchenorrhyncha	Cicadellidae	Zygina tiliae (Fallén, 1806)	*		mh	*1
Auchenorrhyncha	Cicadellidae	Zygina tithide Ferrari, 1882	D		?	*1

Order	Family	Species	K	L	P	S
Auchenorrhyncha	Cicadellidae	Zyginella pulchra P. Löw, 1885	*		mh	*1
Auchenorrhyncha	Cicadellidae	Zyginidia franzi (W. Wagner, 1944)	3		s	*1
Auchenorrhyncha	Cicadellidae	Zyginidia mocsaryi (Horváth, 1910)	V		mh	*1
Auchenorrhyncha	Cicadellidae	Zyginidia pullula (Boheman, 1845)	D		?	*1
Auchenorrhyncha	Cicadellidae	Zyginidia scutellaris (Herrich-Schäffer, 1838)	*		sh	*1
Auchenorrhyncha	Cicadellidae	Zyginidia viaduensis (W. Wagner, 1941)	2		ss	*1
Auchenorrhyncha	Cicadidae	Cicada orni Linnaeus, 1758	R		es	*1
Auchenorrhyncha	Cicadidae	Cicadetta brevipennis Fieber, 1876	G		ss	*1
Auchenorrhyncha	Cicadidae	Cicadetta cantilatrix Sueur & Puissant, 2007	G		ss	*1
Auchenorrhyncha	Cicadidae	Cicadetta montana (Scopoli, 1772)	G		mh	*1
Auchenorrhyncha	Cicadidae	Tibicina haematodes (Scopoli, 1763)	2		ss	*1
Auchenorrhyncha	Cixiidae	Cixius alpestris W. Wagner, 1939	D		s	*1
Auchenorrhyncha	Cixiidae	Cixius beieri W. Wagner, 1939	3		s	*1
Auchenorrhyncha	Cixiidae	Cixius cambricus China, 1935	3		s	*1
Auchenorrhyncha	Cixiidae	Cixius cunicularius (Linnaeus, 1767)	*		mh	*1
Auchenorrhyncha	Cixiidae	Cixius distinguendus Kirschbaum, 1868	V		mh	*1
Auchenorrhyncha	Cixiidae	Cixius dubius W. Wagner, 1939	*		mh	*1
Auchenorrhyncha	Cixiidae	Cixius heydenii Kirschbaum, 1868	*		s	*1
Auchenorrhyncha	Cixiidae	Cixius nervosus (Linnaeus, 1758)	*		sh	*1
Auchenorrhyncha	Cixiidae	Cixius similis Kirschbaum, 1868	2		s	*1
Auchenorrhyncha	Cixiidae	Cixius simplex (Herrich-Schäffer, 1835)	3		s	*1
Auchenorrhyncha	Cixiidae	Cixius sticticus Rey, 1891	3		s	*1
Auchenorrhyncha	Cixiidae	Cixius stigmaticus (Germar, 1818)	2		s	*1
Auchenorrhyncha	Cixiidae	Cixius wagneri China, 1942	D		s	*1
Auchenorrhyncha	Cixiidae	Hyalesthes obsoletus Signoret, 1865	*		mh	*1
Auchenorrhyncha	Cixiidae	Myndus musivus (Germar, 1825)	1		es	*1
Auchenorrhyncha	Cixiidae	Pentastiridius beieri (W. Wagner, 1970)	1		es	*1
Auchenorrhyncha	Cixiidae	Pentastiridius leporinus (Linnaeus, 1761)	3		s	*1
Auchenorrhyncha	Cixiidae	Reptalus panzeri (P. Löw, 1883)	3		s	*1
Auchenorrhyncha	Cixiidae	Reptalus quinquecostatus (Dufour, 1833)	D		s	*1
Auchenorrhyncha	Cixiidae	Tachycixius pilosus (Olivier, 1791)	*		sh	*1
Auchenorrhyncha	Cixiidae	Trigonocranus emmeae Fieber, 1876	D		s	*1
Auchenorrhyncha	Delphacidae	Acanthodelphax denticauda (Boheman, 1847)	V		mh	*1
Auchenorrhyncha	Delphacidae	Acanthodelphax spinosa (Fieber, 1866)	*		h	*1
Auchenorrhyncha	Delphacidae	Achorotile albosignata (Dahlbom, 1850)	0	1955	ex	*1
Auchenorrhyncha	Delphacidae	Anakelisia fasciata (Kirschbaum, 1868)	3		mh	*1
Auchenorrhyncha	Delphacidae	Anakelisia perspicillata (Boheman, 1845)	3		mh	*1
Auchenorrhyncha	Delphacidae	Asiraca clavicornis (Fabricius, 1794)	*		mh	*1
Auchenorrhyncha	Delphacidae	Calligypona reyi (Fieber, 1866)	3		s	*1
Auchenorrhyncha	Delphacidae	Chloriona dorsata Edwards, 1898	3		s	*1
Auchenorrhyncha	Delphacidae	Chloriona glaucescens Fieber, 1866	3		s	*1
Auchenorrhyncha	Delphacidae	Chloriona sicula Matsumura, 1910	*		s	*1
Auchenorrhyncha	Delphacidae	Chloriona smaragdula (Stål, 1853)	V		mh	*1
Auchenorrhyncha	Delphacidae	Chloriona stenoptera (Flor, 1861)	V		mh	*1
Auchenorrhyncha	Delphacidae	Chloriona unicolor (Herrich-Schäffer, 1836)	*		s	*1
Auchenorrhyncha	Delphacidae	Chloriona vasconica Ribaut, 1934	3		s	*1
Auchenorrhyncha	Delphacidae	Chlorionidea flava P. Löw, 1885	3		s	*1
Auchenorrhyncha	Delphacidae	Conomelus anceps (Germar, 1821)	*		sh	*1
Auchenorrhyncha	Delphacidae	Conomelus lorifer Ribaut, 1948	D		s	*1
Auchenorrhyncha	Delphacidae	Criomorphus albomarginatus Curtis, 1833	*		sh	*1
Auchenorrhyncha	Delphacidae	Criomorphus borealis (J. Sahlberg, 1871)	V		mh	*1
Auchenorrhyncha	Delphacidae	Criomorphus moestus (Boheman, 1847)	1		es	*1
Auchenorrhyncha	Delphacidae	Criomorphus williamsi China, 1939	D		ss	*1
Auchenorrhyncha	Delphacidae	Delphacinus mesomelas (Boheman, 1850)	2		mh	*1
Auchenorrhyncha	Delphacidae	Delphacodes capnodes (Scott, 1870)	2		s	*1
Auchenorrhyncha	Delphacidae	Delphacodes venosus (Germar, 1830)	*		mh	*1
Auchenorrhyncha	Delphacidae	Delphax crassicornis (Panzer, 1796)	3		s	*1
Auchenorrhyncha	Delphacidae	Delphax pulchellus (Curtis, 1833)	3		s	*1
Auchenorrhyncha	Delphacidae	Dicranotropis divergens Kirschbaum, 1868	3		mh	*1
Auchenorrhyncha	Delphacidae	Dicranotropis hamata (Boheman, 1847)	*		sh	*1
Auchenorrhyncha	Delphacidae	Dicranotropis montana (Horváth, 1897)	R		es	*1
Auchenorrhyncha	Delphacidae	Ditropis pteridis (Spinola, 1839)	*		h	*1
Auchenorrhyncha	Delphacidae	Ditropsis flavipes (Signoret, 1865)	*		mh	*1
Auchenorrhyncha	Delphacidae	Euconomelus lepidus (Boheman, 1847)	3		mh	*1
Auchenorrhyncha	Delphacidae	Euides basilinea (Germar, 1821)	V		mh	*1
Auchenorrhyncha	Delphacidae	Eurybregma nigrolineata Scott, 1875	*		h	*1
Auchenorrhyncha	Delphacidae	Eurysa lineata (Perris, 1857)	*		mh	*1
Auchenorrhyncha	Delphacidae	Eurysella brunnea (Melichar, 1896)	3		s	*1
Auchenorrhyncha	Delphacidae	Eurysula lurida (Fieber, 1866)	*		mh	*1
Auchenorrhyncha	Delphacidae	Florodelphax leptosoma (Flor, 1861)	3		mh	*1
Auchenorrhyncha	Delphacidae	Florodelphax paryphasma (Flor, 1861)	V		mh	*1
Auchenorrhyncha	Delphacidae	Gravesteiniella boldi (Scott, 1870)	3		s	*1
Auchenorrhyncha	Delphacidae	Hyledelphax elegantula (Boheman, 1847)	*		sh	*1
Auchenorrhyncha	Delphacidae	Jassidaeus lugubris (Signoret, 1865)	2		s	*1
Auchenorrhyncha	Delphacidae	Javesella discolor (Boheman, 1847)	*		mh	*1
Auchenorrhyncha	Delphacidae	Javesella dubia (Kirschbaum, 1868)	*		sh	*1
Auchenorrhyncha	Delphacidae	Javesella forcipata (Boheman, 1847)	V		mh	*1
Auchenorrhyncha	Delphacidae	Javesella obscurella (Boheman, 1847)	*		h	*1
Auchenorrhyncha	Delphacidae	Javesella pellucida (Fabricius, 1794)	*		sh	*1
Auchenorrhyncha	Delphacidae	Javesella salina (Haupt, 1924)	2		s	*1

Order	Family	Species	K	L	P	S
Auchenorrhyncha	Delphacidae	Javesella simillima (Linnavuori, 1948)	1		es	*1
Auchenorrhyncha	Delphacidae	Javesella stali (Metcalf, 1943)	3		s	*1
Auchenorrhyncha	Delphacidae	Kelisia confusa Linnavuori, 1957	2		ss	*1
Auchenorrhyncha	Delphacidae	Kelisia guttula (Germar, 1818)	3		mh	*1
Auchenorrhyncha	Delphacidae	Kelisia guttulifera (Kirschbaum, 1868)	*		mh	*1
Auchenorrhyncha	Delphacidae	Kelisia hagemini Remane & Jung, 1995	2		s	*1
Auchenorrhyncha	Delphacidae	Kelisia halpina Remane & Jung, 1995	R		es	*1
Auchenorrhyncha	Delphacidae	Kelisia haupti W. Wagner, 1939	2		s	*1
Auchenorrhyncha	Delphacidae	Kelisia irregulata Haupt, 1935	V		mh	*1
Auchenorrhyncha	Delphacidae	Kelisia minima Ribaut, 1934	1		ss	*1
Auchenorrhyncha	Delphacidae	Kelisia monoceros Ribaut, 1934	3		s	*1
Auchenorrhyncha	Delphacidae	Kelisia pallidula (Boheman, 1847)	3		mh	*1
Auchenorrhyncha	Delphacidae	Kelisia praecox Haupt, 1935	V		mh	*1
Auchenorrhyncha	Delphacidae	Kelisia punctulum (Kirschbaum, 1868)	V		mh	*1
Auchenorrhyncha	Delphacidae	Kelisia ribauti W. Wagner, 1938	2		s	*1
Auchenorrhyncha	Delphacidae	Kelisia sabulicola W. Wagner, 1952	2		s	*1
Auchenorrhyncha	Delphacidae	Kelisia sima Ribaut, 1934	2		s	*1
Auchenorrhyncha	Delphacidae	Kelisia vittipennis (J. Sahlberg, 1868)	2		s	*1
Auchenorrhyncha	Delphacidae	Kosswigianella exigua (Boheman, 1847)	3		mh	*1
Auchenorrhyncha	Delphacidae	Laodelphax striatella (Fallén, 1826)	*		sh	*1
Auchenorrhyncha	Delphacidae	Litemixia pulchripennis Asche, 1980	R		es	*1
Auchenorrhyncha	Delphacidae	Megadelphax haglundi (J. Sahlberg, 1871)	1		es	*1
Auchenorrhyncha	Delphacidae	Megadelphax sordidula (Stål, 1853)	V		mh	*1
Auchenorrhyncha	Delphacidae	Megamelodes lequesnei W. Wagner, 1963	1		ss	*1
Auchenorrhyncha	Delphacidae	Megamelodes quadrimaculatus (Signoret, 1865)	3		s	*1
Auchenorrhyncha	Delphacidae	Megamelus notula (Germar, 1830)	*		h	*1
Auchenorrhyncha	Delphacidae	Metropis inermis W. Wagner, 1939	2		ss	*1
Auchenorrhyncha	Delphacidae	Metropis latifrons (Kirschbaum, 1868)	3		s	*1
Auchenorrhyncha	Delphacidae	Mirabella albifrons (Fieber, 1879)	*		mh	*1
Auchenorrhyncha	Delphacidae	Muellerianella brevipennis (Boheman, 1847)	*		mh	*1
Auchenorrhyncha	Delphacidae	Muellerianella extrusa (Scott, 1871)	V		mh	*1
Auchenorrhyncha	Delphacidae	Muellerianella fairmairei (Perris, 1857)	*		mh	*1
Auchenorrhyncha	Delphacidae	Muirodelphax aubei (Perris, 1857)	2		s	*1
Auchenorrhyncha	Delphacidae	Nothodelphax albocarinata (Stål, 1858)	1		es	*1
Auchenorrhyncha	Delphacidae	Nothodelphax distincta (Flor, 1861)	2		s	*1
Auchenorrhyncha	Delphacidae	Oncodelphax pullula (Boheman, 1852)	2		s	*1
Auchenorrhyncha	Delphacidae	Paradelphacodes paludosa (Flor, 1861)	2		s	*1
Auchenorrhyncha	Delphacidae	Paraliburnia adela (Flor, 1861)	*		mh	*1
Auchenorrhyncha	Delphacidae	Paraliburnia clypealis (J. Sahlberg, 1871)	2		s	*1
Auchenorrhyncha	Delphacidae	Pseudodelphacodes flaviceps (Fieber, 1866)	1		es	*1
Auchenorrhyncha	Delphacidae	Ribautodelphax albostriata (Fieber, 1866)	*		h	*1
Auchenorrhyncha	Delphacidae	Ribautodelphax angulosa (Ribaut, 1953)	2		ss	*1
Auchenorrhyncha	Delphacidae	Ribautodelphax collina (Boheman, 1847)	3		mh	*1
Auchenorrhyncha	Delphacidae	Ribautodelphax imitans (Ribaut, 1953)	*		mh	*1
Auchenorrhyncha	Delphacidae	Ribautodelphax pungens (Ribaut, 1953)	*		mh	*1
Auchenorrhyncha	Delphacidae	Ribautodelphax vinealis Bieman, 1987	1		es	*1
Auchenorrhyncha	Delphacidae	Scottianella dalei (Scott, 1870)	1		es	*1
Auchenorrhyncha	Delphacidae	Stenocranus fuscovittatus (Stål, 1858)	3		mh	*1
Auchenorrhyncha	Delphacidae	Stenocranus longipennis (Curtis, 1837)	2		ss	*1
Auchenorrhyncha	Delphacidae	Stenocranus major (Kirschbaum, 1868)	*		h	*1
Auchenorrhyncha	Delphacidae	Stenocranus minutus (Fabricius, 1787)	*		sh	*1
Auchenorrhyncha	Delphacidae	Stiroma affinis Fieber, 1866	*		h	*1
Auchenorrhyncha	Delphacidae	Stiroma bicarinata (Herrich-Schäffer, 1835)	*		h	*1
Auchenorrhyncha	Delphacidae	Stiromella obliqua (W. Wagner, 1948)	1		es	*1
Auchenorrhyncha	Delphacidae	Struebingianella lugubrina (Boheman, 1847)	V		mh	*1
Auchenorrhyncha	Delphacidae	Toya propinqua (Fieber, 1866)	*		s	*1
Auchenorrhyncha	Delphacidae	Unkanodes excisa (Melichar, 1898)	2		ss	*1
Auchenorrhyncha	Delphacidae	Xanthodelphax flaveola (Flor, 1861)	1		s	*1
Auchenorrhyncha	Delphacidae	Xanthodelphax straminea (Stål, 1858)	V		mh	*1
Auchenorrhyncha	Delphacidae	Xanthodelphax xantha Vilbaste, 1965	2		s	*1
Auchenorrhyncha	Dictyopharidae	Dictyophara europaea (Linnaeus, 1761)	3		s	*1
Auchenorrhyncha	Issidae	Agalmatium bilobum (Fieber, 1877)	D		?	*1
Auchenorrhyncha	Issidae	Issus coleoptratus (Fabricius, 1781)	*		mh	*1
Auchenorrhyncha	Issidae	Issus muscaeformis (Schrank, 1781)	3		s	*1
Auchenorrhyncha	Membracidae	Centrotus cornutus (Linnaeus, 1758)	*		mh	*1
Auchenorrhyncha	Membracidae	Gargara genistae (Fabricius, 1775)	*		mh	*1
Auchenorrhyncha	Membracidae	Stictocephala bisonia Kopp & Yonke, 1977	nb		nb	*1
Auchenorrhyncha	Tettigometridae	Tettigometra atra Hagenbach, 1825	2		s	*1
Auchenorrhyncha	Tettigometridae	Tettigometra fusca Fieber, 1865	1		ss	*1
Auchenorrhyncha	Tettigometridae	Tettigometra griseola Fieber, 1865	1		ss	*1
Auchenorrhyncha	Tettigometridae	Tettigometra impressopunctata Dufour, 1846	2		s	*1
Auchenorrhyncha	Tettigometridae	Tettigometra laeta Herrich-Schäffer, 1835	0	1830	ex	*1
Auchenorrhyncha	Tettigometridae	Tettigometra leucophaea (Preyssler, 1792)	0	1972	ex	*1
Auchenorrhyncha	Tettigometridae	Tettigometra macrocephala Fieber, 1865	1		ss	*1
Auchenorrhyncha	Tettigometridae	Tettigometra virescens (Panzer, 1799)	2		s	*1
Coleoptera	Aderidae	Aderus populneus (Creutz., 1796)	*		mh	*3
Coleoptera	Aderidae	Anidorus nigrinus (Germ., 1831)	*		mh	*3
Coleoptera	Aderidae	Euglenes nitidifrons (Thoms., 1886)	G		ss	*3
Coleoptera	Aderidae	Euglenes oculatus (Payk., 1798)	3		s	*3
Coleoptera	Aderidae	Euglenes pygmaeus (De Geer, 1774)	3		ss	*3

Order	Family	Species	K	L	P	S
Coleoptera	Aderidae	Otolelus symphoniacus Klinger, 2000	0	1900	ex	*3
Coleoptera	Aderidae	Phytobaenus amabilis Sahlb., 1834	R		es	*3
Coleoptera	Aderidae	Pseudeuglenes pentatomus (Thoms., 1864)	1		es	*3
Coleoptera	Aderidae	Vanonus brevicornis (Perris, 1869)	G		ss	*3
Coleoptera	Agyrtidae	Agyrtes bicolor Cast., 1840	*		s	*3
Coleoptera	Agyrtidae	Agyrtes castaneus (F., 1792)	*		s	*3
Coleoptera	Agyrtidae	Necrophilus subterraneus (Dahl, 1807)	V		s	*3
Coleoptera	Agyrtidae	Pteroloma forsstromii (Gyll., 1810)	3		ss	*3
Coleoptera	Alleculidae	Allecula morio (F., 1787)	3		s	*3
Coleoptera	Alleculidae	Allecula rhenana Bach, 1856	2		ss	*3
Coleoptera	Alleculidae	Cteniopus flavus (Scop., 1763)	*		s	*3
Coleoptera	Alleculidae	Cteniopus sulphuripes (Germ., 1824)	R		es	*3
Coleoptera	Alleculidae	Gonodera luperus (Hbst., 1783)	*		h	*3
Coleoptera	Alleculidae	Hymenalia rufipes (F., 1792)	G		ss	*3
Coleoptera	Alleculidae	Isomira hypocrita Muls., 1856	D		?	*3
Coleoptera	Alleculidae	Isomira icteropa (Küst., 1852)	D		?	*3
Coleoptera	Alleculidae	Isomira murina (L., 1758)	*		mh	*3
Coleoptera	Alleculidae	Isomira semiflava (Küst., 1852)	*		h	*3
Coleoptera	Alleculidae	Mycetochara axillaris (Payk., 1799)	2		ss	*3
Coleoptera	Alleculidae	Mycetochara flavipes (F., 1792)	2		ss	*3
Coleoptera	Alleculidae	Mycetochara humeralis (F., 1787)	2		ss	*3
Coleoptera	Alleculidae	Mycetochara linearis (Ill., 1794)	*		h	*3
Coleoptera	Alleculidae	Omophlus betulae (Hbst., 1783)	G		ss	*3
Coleoptera	Alleculidae	Omophlus lepturoides (F., 1787)	G		ss	*3
Coleoptera	Alleculidae	Omophlus lividipes Muls., 1856	G		ss	*3
Coleoptera	Alleculidae	Prionychus ater (F., 1775)	V		mh	*3
Coleoptera	Alleculidae	Prionychus melanarius (Germ., 1813)	2		ss	*3
Coleoptera	Alleculidae	Pseudocistela ceramboides (L., 1761)	3		s	*3
Coleoptera	Anobiidae	Anitys rubens (Hoffm., 1803)	G		ss	*3
Coleoptera	Anobiidae	Anobium costatum Arrag., 1830	*		h	*3
Coleoptera	Anobiidae	Anobium denticolle (Creutz., 1796)	V		mh	*3
Coleoptera	Anobiidae	Anobium emarginatum Duft., 1825	*		mh	*3
Coleoptera	Anobiidae	Anobium fulvicorne Sturm, 1837	*		h	*3
Coleoptera	Anobiidae	Anobium hederae Ihss., 1949	*		mh	*3
Coleoptera	Anobiidae	Anobium inexspectatum Lohse, 1954	*		s	*3
Coleoptera	Anobiidae	Anobium nitidum F., 1792	*		mh	*3
Coleoptera	Anobiidae	Anobium pertinax (L., 1758)	*		mh	*3
Coleoptera	Anobiidae	Anobium punctatum (De Geer, 1774)	*		sh	*3
Coleoptera	Anobiidae	Anobium rufipenne (Duft., 1825)	R		es	*3
Coleoptera	Anobiidae	Anobium rufipes F., 1792	3		s	*3
Coleoptera	Anobiidae	Anobium thomsoni (Kr., 1881)	R		es	*3
Coleoptera	Anobiidae	Caenocara affinis (Sturm, 1837)	G		ss	*3
Coleoptera	Anobiidae	Caenocara bovistae (Hoffm., 1803)	G		s	*3
Coleoptera	Anobiidae	Caenocara subglobosa Muls. & Rey, 1864	G		ss	*3
Coleoptera	Anobiidae	Dorcatoma ambjoerni Baranowski, 1985	1		es	*3
Coleoptera	Anobiidae	Dorcatoma androgyna Büche, 2001	G		ss	*3
Coleoptera	Anobiidae	Dorcatoma chrysomelina Sturm, 1837	V		mh	*3
Coleoptera	Anobiidae	Dorcatoma dresdensis Hbst., 1792	*		mh	*3
Coleoptera	Anobiidae	Dorcatoma flavicornis (F., 1792)	3		s	*3
Coleoptera	Anobiidae	Dorcatoma minor Zahradnik, 1993	3		ss	*3
Coleoptera	Anobiidae	Dorcatoma punctulata Muls. & Rey, 1864	V		s	*3
Coleoptera	Anobiidae	Dorcatoma robusta Strand, 1938	3		s	*3
Coleoptera	Anobiidae	Dorcatoma setosella Muls. & Rey, 1864	V		s	*3
Coleoptera	Anobiidae	Dorcatoma substriata Hummel, 1829	V		s	*3
Coleoptera	Anobiidae	Dryophilus anobioides Chevr., 1832	*		s	*3
Coleoptera	Anobiidae	Dryophilus pusillus (Gyll., 1808)	*		h	*3
Coleoptera	Anobiidae	Dryophilus rugicollis (Muls. & Rey, 1853)	*		ss	*3
Coleoptera	Anobiidae	Episernus granulatus Weise, 1887	*		ss	*3
Coleoptera	Anobiidae	Episernus striatellus (Bris., 1862)	R		es	*3
Coleoptera	Anobiidae	Ernobius abietinus (Gyll., 1808)	*		mh	*3
Coleoptera	Anobiidae	Ernobius abietis (F., 1792)	*		h	*3
Coleoptera	Anobiidae	Ernobius angusticollis (Ratz., 1847)	*		mh	*3
Coleoptera	Anobiidae	Ernobius kiesenwetteri Schilsky, 1899	R		es	*3
Coleoptera	Anobiidae	Ernobius longicornis (Sturm, 1837)	*		s	*3
Coleoptera	Anobiidae	Ernobius mollis (L., 1758)	*		h	*3
Coleoptera	Anobiidae	Ernobius mulsanti Kiesw., 1877	0	1915	ex	*3
Coleoptera	Anobiidae	Ernobius nigrinus (Sturm, 1837)	*		mh	*3
Coleoptera	Anobiidae	Ernobius pini (Sturm, 1837)	*		s	*3
Coleoptera	Anobiidae	Gastrallus immarginatus (Müll., 1821)	V		s	*3
Coleoptera	Anobiidae	Gastrallus knizeki Zahradnik, 1996	*		ss	*3
Coleoptera	Anobiidae	Gastrallus laevigatus (Ol., 1790)	*		s	*3
Coleoptera	Anobiidae	Grynobius planus (F., 1787)	*		s	*3
Coleoptera	Anobiidae	Hedobia imperialis (L., 1767)	*		h	*3
Coleoptera	Anobiidae	Hedobia pubescens (Ol., 1790)	1		es	*3
Coleoptera	Anobiidae	Hedobia regalis (Duft., 1825)	*		s	*3
Coleoptera	Anobiidae	Lasioderma aterrimum Roub., 1916	D		?	*3
Coleoptera	Anobiidae	Lasioderma redtenbacheri (Bach, 1852)	1		es	*3
Coleoptera	Anobiidae	Lasioderma serricorne (F., 1792)	D		?	*3
Coleoptera	Anobiidae	Mesocoelopus niger (Müll., 1821)	*		h	*3
Coleoptera	Anobiidae	Ochina latreillei (Bon., 1809)	R		es	*3

Order	Family	Species	K	L	P	S
Coleoptera	Anobiidae	Ochina ptinoides (Marsh., 1802)	*		mh	*3
Coleoptera	Anobiidae	Oligomerus brunneus (Ol., 1790)	3		s	*3
Coleoptera	Anobiidae	Priobium carpini (Hbst., 1793)	3		s	*3
Coleoptera	Anobiidae	Ptilinus fuscus (Fourcr., 1785)	*		mh	*3
Coleoptera	Anobiidae	Ptilinus pectinicornis (L., 1758)	*		h	*3
Coleoptera	Anobiidae	Stagetus pilula (Aubé, 1861)	R		es	*3
Coleoptera	Anobiidae	Stegobium paniceum (L., 1758)	*		sh	*3
Coleoptera	Anobiidae	Xestobium austriacum Rtt., 1890	R		es	*3
Coleoptera	Anobiidae	Xestobium plumbeum (Ill., 1801)	*		h	*3
Coleoptera	Anobiidae	Xestobium rufovillosum (De Geer, 1774)	V		mh	*3
Coleoptera	Anobiidae	Xyletinus ater (Creutz., 1796)	3		s	*3
Coleoptera	Anobiidae	Xyletinus fibyensis Lundblad, 1949	*		s	*3
Coleoptera	Anobiidae	Xyletinus hanseni Janss., 1947	0	1930	ex	*3
Coleoptera	Anobiidae	Xyletinus laticollis (Duft., 1825)	1		ss	*3
Coleoptera	Anobiidae	Xyletinus longitarsis Janss., 1942	G		ss	*3
Coleoptera	Anobiidae	Xyletinus pectinatus (F., 1792)	3		s	*3
Coleoptera	Anobiidae	Xyletinus planicollis Lohse, 1957	1		es	*3
Coleoptera	Anobiidae	Xyletinus subrotundatus Lareyn., 1852	0	1890	ex	*3
Coleoptera	Anobiidae	Xyletinus vaederoeensis Lundberg, 1969	D		?	*3
Coleoptera	Anthicidae	Anthicus antherinus (L., 1761)	*		mh	*3
Coleoptera	Anthicidae	Anthicus ater (Panz., 1796)	1		es	*3
Coleoptera	Anthicidae	Anthicus bimaculatus (Ill., 1801)	3		s	*3
Coleoptera	Anthicidae	Anthicus flavipes (Panz., 1797)	V		s	*3
Coleoptera	Anthicidae	Anthicus luteicornis Schm., 1842	G		ss	*3
Coleoptera	Anthicidae	Cordicomus gracilis (Panz., 1797)	V		s	*3
Coleoptera	Anthicidae	Cordicomus instabilis (Schm., 1842)	3		es	*3
Coleoptera	Anthicidae	Cordicomus sellatus (Panz., 1797)	G		s	*3
Coleoptera	Anthicidae	Cyclodinus constrictus (Curt., 1838)	1		es	*3
Coleoptera	Anthicidae	Cyclodinus humilis (Germ., 1824)	G		ss	*3
Coleoptera	Anthicidae	Formicomus pedestris (Rossi, 1790)	*		ss	*3
Coleoptera	Anthicidae	Hirticomus hispidus (Rossi, 1792)	G		ss	*3
Coleoptera	Anthicidae	Mecynotarsus serricornis (Panz., 1796)	1		es	*3
Coleoptera	Anthicidae	Microhoria fasciata Chevr., 1838	R		es	*3
Coleoptera	Anthicidae	Microhoria nectarina (Panz., 1797)	D		?	*3
Coleoptera	Anthicidae	Notoxus appendicinus Desbr., 1875	D		?	*3
Coleoptera	Anthicidae	Notoxus brachycerus (Fald., 1837)	1		es	*3
Coleoptera	Anthicidae	Notoxus monoceros (L., 1761)	*		h	*3
Coleoptera	Anthicidae	Notoxus trifasciatus Rossi, 1794	*		s	*3
Coleoptera	Anthicidae	Omonadus bifasciatus (Rossi, 1792)	*		s	*3
Coleoptera	Anthicidae	Omonadus floralis (L., 1758)	*		sh	*3
Coleoptera	Anthicidae	Omonadus formicarius (Goeze, 1777)	*		h	*3
Coleoptera	Anthicidae	Stricticomus tobias (Mars., 1879)	*		s	*3
Coleoptera	Anthribidae	Allandrus therondi (Temp., 1954)	D		?	*3
Coleoptera	Anthribidae	Allandrus undulatus (Panz., 1795)	3		s	*3
Coleoptera	Anthribidae	Anthribus albinus (L., 1758)	*		h	*3
Coleoptera	Anthribidae	Brachytarsus fasciatus (Forst., 1771)	3		s	*3
Coleoptera	Anthribidae	Brachytarsus nebulosus (Forst., 1771)	*		h	*3
Coleoptera	Anthribidae	Brachytarsus scapularis (Gebl., 1833)	0	1928	ex	*3
Coleoptera	Anthribidae	Choragus horni Wolfr., 1930	G		ss	*3
Coleoptera	Anthribidae	Choragus sheppardi Kirby, 1818	*		mh	*3
Coleoptera	Anthribidae	Dissoleucas niveirostris (F., 1798)	*		mh	*3
Coleoptera	Anthribidae	Enedreutes sepicola (F., 1792)	*		mh	*3
Coleoptera	Anthribidae	Noxius curtirostris (Muls., 1861)	R		es	*3
Coleoptera	Anthribidae	Opanthribus tessellatus (Boh., 1829)	3		ss	*3
Coleoptera	Anthribidae	Phaeochrotes cinctus (Payk., 1800)	*		s	*3
Coleoptera	Anthribidae	Platyrhinus resinosus (Scop., 1763)	*		mh	*3
Coleoptera	Anthribidae	Pseudochoragus piceus (Schaum, 1845)	R		es	*3
Coleoptera	Anthribidae	Rhaphitropis marchicus (Hbst., 1797)	*		s	*3
Coleoptera	Anthribidae	Rhaphitropis oxyacanthae (Bris., 1863)	R		es	*3
Coleoptera	Anthribidae	Tropideres albirostris (Hbst., 1783)	*		mh	*3
Coleoptera	Anthribidae	Tropideres dorsalis (Thunb., 1815)	G		ss	*3
Coleoptera	Apionidae	Acentrotypus brunnipes (Boheman, 1839)	0	1920	ex	*3
Coleoptera	Apionidae	Aizobius sedi (Germar, 1818)	V		mh	*3
Coleoptera	Apionidae	Alocentron curvirostre (Gyllenhal, 1833)	*		ss	*3
Coleoptera	Apionidae	Apion cruentatum Waltl, 1844	*		mh	*3
Coleoptera	Apionidae	Apion frumentarium Linnaeus, 1758	*		h	*3
Coleoptera	Apionidae	Apion haematodes Kirby, 1808	*		mh	*3
Coleoptera	Apionidae	Apion rubens Waltl, 1844	*		mh	*3
Coleoptera	Apionidae	Apion rubiginosum Grill, 1893	*		mh	*3
Coleoptera	Apionidae	Aspidapion aeneum (Fabricius, 1775)	*		mh	*3
Coleoptera	Apionidae	Aspidapion radiolus (Marsham, 1802)	*		h	*3
Coleoptera	Apionidae	Aspidapion validum (Germar, 1817)	*		s	*3
Coleoptera	Apionidae	Betulapion simile (Kirby, 1811)	*		sh	*3
Coleoptera	Apionidae	Catapion koestlini (Dieckmann, 1989)	3		ss	*3
Coleoptera	Apionidae	Catapion meieri (Desbrochers, 1901)	*		h	*3
Coleoptera	Apionidae	Catapion pubescens (Kirby, 1811)	*		mh	*3
Coleoptera	Apionidae	Catapion seniculus (Kirby, 1808)	*		h	*3
Coleoptera	Apionidae	Ceratapion armatum (Gerstaecker, 1854)	2		ss	*3
Coleoptera	Apionidae	Ceratapion austriacum (Wagner, 1904)	2		ss	*3
Coleoptera	Apionidae	Ceratapion basicorne (Illiger, 1807)	1		es	*3

Order	Family	Species	K	L	P	S
Coleoptera	Apionidae	Ceratapion carduorum (Kirby, 1808)	G		s	*3
Coleoptera	Apionidae	Ceratapion gibbirostre (Gyllenhal, 1813)	*		mh	*3
Coleoptera	Apionidae	Ceratapion onopordi (Kirby, 1808)	*		sh	*3
Coleoptera	Apionidae	Ceratapion penetrans caullei (Wencker, 1858)	3		s	*3
Coleoptera	Apionidae	Ceratapion penetrans penetrans (Germar, 1817)	3		s	*3
Coleoptera	Apionidae	Cyanapion afer (Gyllenhal, 1833)	*		mh	*3
Coleoptera	Apionidae	Cyanapion alcyoneum (Germar, 1817)	0	1817	ex	*3
Coleoptera	Apionidae	Cyanapion columbinum (Germar, 1817)	*		mh	*3
Coleoptera	Apionidae	Cyanapion gyllenhalii Kirby, 1808	V		s	*3
Coleoptera	Apionidae	Cyanapion platalea (Germar, 1817)	V		s	*3
Coleoptera	Apionidae	Cyanapion spencii (Kirby, 1808)	*		h	*3
Coleoptera	Apionidae	Diplapion confluens (Kirby, 1808)	V		s	*3
Coleoptera	Apionidae	Diplapion detritum (Mulsant & Rey, 1859)	2		ss	*3
Coleoptera	Apionidae	Diplapion stolidum (Germar, 1817)	V		s	*3
Coleoptera	Apionidae	Eutrichapion ervi (Kirby, 1808)	*		h	*3
Coleoptera	Apionidae	Eutrichapion facetum (Gyllenhal, 1839)	2		ss	*3
Coleoptera	Apionidae	Eutrichapion melancholicum (Wencker, 1864)	2		ss	*3
Coleoptera	Apionidae	Eutrichapion punctiger (Paykull, 1792)	*		mh	*3
Coleoptera	Apionidae	Eutrichapion viciae (Paykull, 1800)	*		h	*3
Coleoptera	Apionidae	Eutrichapion vorax (Herbst, 1797)	*		mh	*3
Coleoptera	Apionidae	Exapion compactum (Desbrochers, 1888)	3		s	*3
Coleoptera	Apionidae	Exapion corniculatum (Germar, 1817)	2		s	*3
Coleoptera	Apionidae	Exapion difficile (Herbst, 1797)	V		mh	*3
Coleoptera	Apionidae	Exapion elongatulum (Desbrochers, 1891)	2		ss	*3
Coleoptera	Apionidae	Exapion formaneki (Wagner, 1929)	V		s	*3
Coleoptera	Apionidae	Exapion fuscirostre (Fabricius, 1775)	*		h	*3
Coleoptera	Apionidae	Exapion inexpertum (Wagner, 1906)	3		ss	*3
Coleoptera	Apionidae	Helianthemapion aciculare (Germar, 1817)	3		ss	*3
Coleoptera	Apionidae	Helianthemapion velatum (Gerstaecker, 1854)	1		es	*3
Coleoptera	Apionidae	Hemitrichapion lanigerum (Gemminger, 1871)	3		ss	*3
Coleoptera	Apionidae	Hemitrichapion pavidum (Germar, 1817)	*		mh	*3
Coleoptera	Apionidae	Hemitrichapion reflexum (Gyllenhal, 1833)	3		s	*3
Coleoptera	Apionidae	Hemitrichapion waltoni (Stephens, 1839)	V		s	*3
Coleoptera	Apionidae	Holotrichapion aethiops (Herbst, 1797)	*		mh	*3
Coleoptera	Apionidae	Holotrichapion gracilicolle (Gyllenhal, 1839)	1		ss	*3
Coleoptera	Apionidae	Holotrichapion ononis (Kirby, 1808)	*		mh	*3
Coleoptera	Apionidae	Holotrichapion pisi (Fabricius, 1801)	*		h	*3
Coleoptera	Apionidae	Ischnopterapion loti (Kirby, 1808)	*		h	*3
Coleoptera	Apionidae	Ischnopterapion modestum (Germar, 1817)	*		mh	*3
Coleoptera	Apionidae	Ischnopterapion virens (Herbst, 1797)	*		h	*3
Coleoptera	Apionidae	Ixapion variegatum (Wencker, 1864)	D		ss	*3
Coleoptera	Apionidae	Kalcapion pallipes (Kirby, 1808)	*		mh	*3
Coleoptera	Apionidae	Kalcapion semivittatum (Gyllenhal, 1833)	*		s	*3
Coleoptera	Apionidae	Malvapion malvae (Fabricius, 1775)	*		h	*3
Coleoptera	Apionidae	Melanapion minimum (Herbst, 1797)	*		mh	*3
Coleoptera	Apionidae	Mesotrichapion punctirostre (Gyllenhal, 1839)	1		es	*3
Coleoptera	Apionidae	Microon sahlbergi (Sahlberg, 1834)	2		ss	*3
Coleoptera	Apionidae	Nanomimus circumscriptus (Aubé, 1864)	2		ss	*3
Coleoptera	Apionidae	Nanomimus hemisphaericus (Olivier, 1807)	0	1951	ex	*3
Coleoptera	Apionidae	Nanophyes brevis Boheman, 1845	*		s	*3
Coleoptera	Apionidae	Nanophyes globiformis Kiesenwetter, 1864	2		ss	*3
Coleoptera	Apionidae	Nanophyes globulus (Germar, 1821)	2		ss	*3
Coleoptera	Apionidae	Nanophyes marmoratus (Goeze, 1777)	*		h	*3
Coleoptera	Apionidae	Omphalapion buddebergi (Bedel, 1885)	2		ss	*3
Coleoptera	Apionidae	Omphalapion dispar (Germar, 1817)	3		s	*3
Coleoptera	Apionidae	Omphalapion hookerorum (Kirby, 1808)	*		sh	*3
Coleoptera	Apionidae	Omphalapion laevigatum (Paykull, 1792)	2		ss	*3
Coleoptera	Apionidae	Oryxolaemus flavifemoratus (Herbst, 1797)	2		s	*3
Coleoptera	Apionidae	Oxystoma cerdo (Gerstaecker, 1854)	*		mh	*3
Coleoptera	Apionidae	Oxystoma craccae (Linnaeus, 1767)	*		h	*3
Coleoptera	Apionidae	Oxystoma dimidiatum (Desbrochers, 1897)	G		s	*3
Coleoptera	Apionidae	Oxystoma ochropus (Germar, 1818)	*		mh	*3
Coleoptera	Apionidae	Oxystoma opeticum (Bach, 1854)	3		s	*3
Coleoptera	Apionidae	Oxystoma pomonae (Fabricius, 1798)	*		mh	*3
Coleoptera	Apionidae	Oxystoma subulatum (Kirby, 1808)	V		s	*3
Coleoptera	Apionidae	Perapion affine (Kirby, 1808)	3		s	*3
Coleoptera	Apionidae	Perapion curtirostre (Germar, 1817)	*		h	*3
Coleoptera	Apionidae	Perapion hydrolapathi (Marsham, 1802)	*		s	*3
Coleoptera	Apionidae	Perapion marchicum (Herbst, 1797)	*		mh	*3
Coleoptera	Apionidae	Perapion oblongum (Gyllenhal, 1839)	*		mh	*3
Coleoptera	Apionidae	Perapion violaceum (Kirby, 1808)	*		sh	*3
Coleoptera	Apionidae	Pericartiellus flavidus (Aubé, 1850)	1		es	*3
Coleoptera	Apionidae	Phrissotrichum rugicolle (Germar, 1817)	3		ss	*3
Coleoptera	Apionidae	Pirapion immune (Kirby, 1808)	V		mh	*3
Coleoptera	Apionidae	Protapion apricans (Herbst, 1797)	*		h	*3
Coleoptera	Apionidae	Protapion assimile Kirby, 1808	*		mh	*3
Coleoptera	Apionidae	Protapion difforme (Germar, 1818)	2		ss	*3
Coleoptera	Apionidae	Protapion dissimile (Germar, 1817)	V		mh	*3
Coleoptera	Apionidae	Protapion filirostre (Kirby, 1808)	*		mh	*3
Coleoptera	Apionidae	Protapion fulvipes (Geoffroy, 1785)	*		sh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Apionidae	Protapion gracilipes (Dietrich, 1857)	V		mh	*3
Coleoptera	Apionidae	Protapion interjectum (Desbrochers, 1895)	3		s	*3
Coleoptera	Apionidae	Protapion nigritarse (Kirby, 1808)	*		h	*3
Coleoptera	Apionidae	Protapion ononidis (Gyllenhal, 1827)	V		s	*3
Coleoptera	Apionidae	Protapion ruficrus (Germar, 1817)	2		s	*3
Coleoptera	Apionidae	Protapion schoenherri (Boheman, 1839)	0	1912	ex	*3
Coleoptera	Apionidae	Protapion trifolii (Linnaeus, 1768)	*		mh	*3
Coleoptera	Apionidae	Protapion varipes (Germar, 1817)	G		ss	*3
Coleoptera	Apionidae	Protopirapion atratulum (Germar, 1817)	D		s	*3
Coleoptera	Apionidae	Pseudapion moschatae (Hoffmann, 1938)	G		s	*3
Coleoptera	Apionidae	Pseudapion rufirostre (Fabricius, 1775)	*		mh	*3
Coleoptera	Apionidae	Pseudaplemonus limonii Kirby, 1808	2		es	*3
Coleoptera	Apionidae	Pseudoperapion brevirostre (Herbst, 1797)	*		h	*3
Coleoptera	Apionidae	Pseudoprotapion astragali (Paykull, 1800)	*		s	*3
Coleoptera	Apionidae	Pseudoprotapion elegantulum (Germar, 1818)	3		s	*3
Coleoptera	Apionidae	Pseudostenapion simum (Germar, 1817)	*		mh	*3
Coleoptera	Apionidae	Rhopalapion longirostre (Olivier, 1807)	*		mh	*3
Coleoptera	Apionidae	Squamapion atomarium (Kirby, 1808)	*		mh	*3
Coleoptera	Apionidae	Squamapion cineraceum (Wencker, 1864)	D		mh	*3
Coleoptera	Apionidae	Squamapion elongatum (Germar, 1817)	3		s	*3
Coleoptera	Apionidae	Squamapion flavimanum (Gyllenhal, 1833)	*		mh	*3
Coleoptera	Apionidae	Squamapion oblivium (Schilsky, 1902)	3		ss	*3
Coleoptera	Apionidae	Squamapion origani (Planet, 1917)	3		s	*3
Coleoptera	Apionidae	Squamapion serpyllicola (Wencker, 1864)	2		ss	*3
Coleoptera	Apionidae	Squamapion vicinum (Kirby, 1808)	2		ss	*3
Coleoptera	Apionidae	Stenopterapion intermedium (Eppelsheim, 1875)	2		s	*3
Coleoptera	Apionidae	Stenopterapion meliloti (Kirby, 1808)	*		h	*3
Coleoptera	Apionidae	Stenopterapion tenue (Kirby, 1808)	*		h	*3
Coleoptera	Apionidae	Synapion ebeninum (Kirby, 1808)	*		mh	*3
Coleoptera	Apionidae	Taeniapion rufulum (Wencker, 1864)	2		ss	*3
Coleoptera	Apionidae	Taeniapion urticarium (Herbst, 1784)	*		mh	*3
Coleoptera	Apionidae	Taphrotopium sulcifrons (Herbst, 1797)	2		s	*3
Coleoptera	Apionidae	Trichopterapion holosericeum (Gyllenhal, 1833)	D		?	*3
Coleoptera	Aspidiphoridae	Arpidiphorus lareyniei Du Val, 1859	R		es	*3
Coleoptera	Aspidiphoridae	Arpidiphorus orbiculatus (Gyll., 1808)	*		mh	*3
Coleoptera	Aspidiphoridae	Sphindus dubius (Gyll., 1808)	*		mh	*3
Coleoptera	Attelabidae	Apoderus coryli (Linnaeus, 1758)	*		mh	*3
Coleoptera	Attelabidae	Attelabus nitens (Scopoli, 1763)	*		h	*3
Coleoptera	Attelabidae	Chonostropheus seminiger (Reitter, 1880)	1		es	*3
Coleoptera	Attelabidae	Chonostropheus tristis (Fabricius, 1794)	3		s	*3
Coleoptera	Biphyllidae	Biphyllus lunatus (F., 1792)	R		es	*3
Coleoptera	Biphyllidae	Diplocoelus fagi Guer., 1844	*		s	*3
Coleoptera	Bostrichidae	Bostrichus capucinus (L., 1758)	V		s	*3
Coleoptera	Bostrichidae	Lichenophanes varius (Ill., 1801)	2		ss	*3
Coleoptera	Bostrichidae	Rhyzopertha dominica (F., 1792)	*		mh	*3
Coleoptera	Bostrichidae	Stephanopachys substriatus (Payk., 1800)	1		es	*3
Coleoptera	Bostrichidae	Xylopertha retusa (Ol., 1790)	*		s	*3
Coleoptera	Bothrideridae	Anommatus diecki Rtt., 1875	*		ss	*3
Coleoptera	Bothrideridae	Anommatus duodecimstriatus (Müll., 1821)	*		s	*3
Coleoptera	Bothrideridae	Anommatus reitteri Ganglb., 1899	*		ss	*3
Coleoptera	Bothrideridae	Bothrideres bipunctatus (Gmel., 1790)	R		es	*3
Coleoptera	Bothrideridae	Oxylaemus cylindricus (Panz., 1796)	G		ss	*3
Coleoptera	Bothrideridae	Oxylaemus variolosus (Duf., 1843)	G		ss	*3
Coleoptera	Bothrideridae	Teredus cylindricus (Ol., 1790)	2		ss	*3
Coleoptera	Bruchidae	Acanthoscelides obtectus (Say, 1831)	nb		nb	*3
Coleoptera	Bruchidae	Acanthoscelides pallidipennis (Motsch., 1849)	nb		nb	*3
Coleoptera	Bruchidae	Bruchidius cisti (F., 1775)	3		s	*3
Coleoptera	Bruchidae	Bruchidius dispar (Gyll., 1833)	1		es	*3
Coleoptera	Bruchidae	Bruchidius imbricornis (Panz., 1795)	R		es	*3
Coleoptera	Bruchidae	Bruchidius lividimanus (Gyll., 1833)	G		s	*3
Coleoptera	Bruchidae	Bruchidius marginalis (F., 1777)	V		mh	*3
Coleoptera	Bruchidae	Bruchidius nanus (Germ., 1824)	D		?	*3
Coleoptera	Bruchidae	Bruchidius pauper (Boh., 1829)	D		?	*3
Coleoptera	Bruchidae	Bruchidius pusillus (Germ., 1824)	D		?	*3
Coleoptera	Bruchidae	Bruchidius seminarius (L., 1767)	2		ss	*3
Coleoptera	Bruchidae	Bruchidius varius (Ol., 1795)	*		h	*3
Coleoptera	Bruchidae	Bruchidius villosus (F., 1792)	*		h	*3
Coleoptera	Bruchidae	Bruchus affinis Fröl., 1799	*		h	*3
Coleoptera	Bruchidae	Bruchus atomarius (L., 1761)	*		h	*3
Coleoptera	Bruchidae	Bruchus brachialis Fahr., 1839	*		s	*3
Coleoptera	Bruchidae	Bruchus emarginatus All., 1868	nb		nb	*3
Coleoptera	Bruchidae	Bruchus griseomaculatus Gyll., 1833	D		?	*3
Coleoptera	Bruchidae	Bruchus loti Payk., 1800	*		mh	*3
Coleoptera	Bruchidae	Bruchus luteicornis Ill., 1794	*		mh	*3
Coleoptera	Bruchidae	Bruchus pisorum (L., 1758)	1		ss	*3
Coleoptera	Bruchidae	Bruchus rufimanus Boh., 1833	*		mh	*3
Coleoptera	Bruchidae	Bruchus rufipes Hbst., 1783	*		s	*3
Coleoptera	Bruchidae	Bruchus venustus Fahr., 1839	R		es	*3
Coleoptera	Bruchidae	Bruchus viciae Ol., 1795	1		es	*3
Coleoptera	Bruchidae	Mimosestes mimosae (F., 1781)	nb		nb	*3

Order	Family	Species	K	L	P	S
Coleoptera	Bruchidae	Pseudopachymerina spinipes (Er., 1833)	nb		nb	*3
Coleoptera	Bruchidae	Spermophagus calystegiae Lukj. & Ter-Min., 1957	D		?	*3
Coleoptera	Bruchidae	Spermophagus sericeus (Geoffr., 1785)	*		mh	*3
Coleoptera	Buprestidae	Acmaeodera degener (Scop., 1763)	1		es	*3
Coleoptera	Buprestidae	Acmaeoderella flavofasciata (Pill. & Mitt., 1783)	1		es	*3
Coleoptera	Buprestidae	Agrilus angustulus (Ill., 1803)	*		h	*3
Coleoptera	Buprestidae	Agrilus antiquus Muls., 1863	0	1957	ex	*3
Coleoptera	Buprestidae	Agrilus ater (L., 1767)	3		ss	*3
Coleoptera	Buprestidae	Agrilus auricollis Kiesw., 1857	2		ss	*3
Coleoptera	Buprestidae	Agrilus betuleti (Ratz., 1837)	*		s	*3
Coleoptera	Buprestidae	Agrilus biguttatus (F., 1777)	*		mh	*3
Coleoptera	Buprestidae	Agrilus cinctus (Ol., 1790)	3		ss	*3
Coleoptera	Buprestidae	Agrilus convexicollis Redt., 1849	*		s	*3
Coleoptera	Buprestidae	Agrilus cuprescens Menetr., 1832	*		mh	*3
Coleoptera	Buprestidae	Agrilus curtulus Muls. & Rey, 1863	R		es	*3
Coleoptera	Buprestidae	Agrilus cyanescens (Ratz., 1837)	*		mh	*3
Coleoptera	Buprestidae	Agrilus derasofasciatus Lacord., 1835	*		s	*3
Coleoptera	Buprestidae	Agrilus graminis Cast. & Gory, 1837	*		s	*3
Coleoptera	Buprestidae	Agrilus guerini Lacord., 1835	*		s	*3
Coleoptera	Buprestidae	Agrilus hastulifer (Ratz., 1837)	D		?	*3
Coleoptera	Buprestidae	Agrilus hyperici (Creutz., 1799)	V		s	*3
Coleoptera	Buprestidae	Agrilus integerrimus (Ratz., 1839)	3		s	*3
Coleoptera	Buprestidae	Agrilus laticornis (Ill., 1803)	*		mh	*3
Coleoptera	Buprestidae	Agrilus mendax Mannh., 1837	R		es	*3
Coleoptera	Buprestidae	Agrilus obscuricollis Kiesw., 1857	*		s	*3
Coleoptera	Buprestidae	Agrilus olivicolor Kiesw., 1857	*		mh	*3
Coleoptera	Buprestidae	Agrilus populneus Schaef., 1946	*		s	*3
Coleoptera	Buprestidae	Agrilus pratensis (Ratz., 1839)	*		mh	*3
Coleoptera	Buprestidae	Agrilus pseudocyaneus Kiesw., 1857	R		es	*3
Coleoptera	Buprestidae	Agrilus ribesi Schaef., 1946	*		s	*3
Coleoptera	Buprestidae	Agrilus roscidus Kiesw., 1857	D		?	*3
Coleoptera	Buprestidae	Agrilus salicis Friv., 1877	D		?	*3
Coleoptera	Buprestidae	Agrilus sinuatus (Ol., 1790)	*		mh	*3
Coleoptera	Buprestidae	Agrilus subauratus (Gebl., 1833)	*		s	*3
Coleoptera	Buprestidae	Agrilus sulcicollis Lacord., 1835	*		h	*3
Coleoptera	Buprestidae	Agrilus viridicaerulans Mars., 1865	R		es	*3
Coleoptera	Buprestidae	Agrilus viridis (L., 1758)	*		h	*3
Coleoptera	Buprestidae	Anthaxia candens (Panz., 1789)	2		s	*3
Coleoptera	Buprestidae	Anthaxia cichorii (Ol., 1790)	0	1950	ex	*3
Coleoptera	Buprestidae	Anthaxia deaurata (Gm., 1788)	2		ss	*3
Coleoptera	Buprestidae	Anthaxia fulgurans (Schrk., 1789)	2		ss	*3
Coleoptera	Buprestidae	Anthaxia godeti Cast. & Gory, 1839	*		mh	*3
Coleoptera	Buprestidae	Anthaxia helvetica Stierl., 1868	*		s	*3
Coleoptera	Buprestidae	Anthaxia manca (L., 1767)	2		s	*3
Coleoptera	Buprestidae	Anthaxia mendizabali Cobos, 1965	*		s	*3
Coleoptera	Buprestidae	Anthaxia millefolii (F., 1801)	1		es	*3
Coleoptera	Buprestidae	Anthaxia nigritula (Ratz., 1837)	0	1950	ex	*3
Coleoptera	Buprestidae	Anthaxia nigrojubata Roub., 1913	R		es	*3
Coleoptera	Buprestidae	Anthaxia nitidula (L., 1758)	*		mh	*3
Coleoptera	Buprestidae	Anthaxia podolica Mannh., 1837	2		es	*3
Coleoptera	Buprestidae	Anthaxia quadripunctata (L., 1758)	*		h	*3
Coleoptera	Buprestidae	Anthaxia salicis (F., 1777)	*		s	*3
Coleoptera	Buprestidae	Anthaxia semicuprea Küst., 1851	R		es	*3
Coleoptera	Buprestidae	Anthaxia sepulchralis (F., 1801)	G		ss	*3
Coleoptera	Buprestidae	Anthaxia similis Saund., 1871	*		s	*3
Coleoptera	Buprestidae	Anthaxia suzannae Thery, 1942	3		s	*3
Coleoptera	Buprestidae	Anthaxia umbellatarum (F., 1787)	D		?	*3
Coleoptera	Buprestidae	Aphanisticus elongatus Villa, 1835	3		s	*3
Coleoptera	Buprestidae	Aphanisticus emarginatus (Ol., 1790)	3		s	*3
Coleoptera	Buprestidae	Aphanisticus pusillus (Ol., 1790)	2		s	*3
Coleoptera	Buprestidae	Buprestis haemorrhoidalis Hbst., 1780	R		es	*3
Coleoptera	Buprestidae	Buprestis novemmaculata L., 1767	3		s	*3
Coleoptera	Buprestidae	Buprestis octoguttata L., 1758	V		s	*3
Coleoptera	Buprestidae	Buprestis rustica L., 1758	*		s	*3
Coleoptera	Buprestidae	Buprestis splendens F., 1775	0	1900	ex	*3
Coleoptera	Buprestidae	Chalcophora mariana (L., 1758)	G		s	*3
Coleoptera	Buprestidae	Chrysobothris affinis (F., 1794)	*		h	*3
Coleoptera	Buprestidae	Chrysobothris chrysostigma (L., 1758)	3		ss	*3
Coleoptera	Buprestidae	Chrysobothris igniventris Rtt., 1895	*		ss	*3
Coleoptera	Buprestidae	Chrysobothris solieri Lap. & Gory, 1837	*		s	*3
Coleoptera	Buprestidae	Coraebus elatus (F., 1787)	2		ss	*3
Coleoptera	Buprestidae	Coraebus florentinus (Hbst., 1801)	G		ss	*3
Coleoptera	Buprestidae	Coraebus rubi (L., 1767)	0	1880	ex	*3
Coleoptera	Buprestidae	Coraebus undatus (F., 1787)	V		s	*3
Coleoptera	Buprestidae	Cylindromorphus filum (Gyll., 1817)	2		ss	*3
Coleoptera	Buprestidae	Dicerca aenea (L., 1761)	0	1900	ex	*3
Coleoptera	Buprestidae	Dicerca alni (Fisch., 1823)	2		ss	*3
Coleoptera	Buprestidae	Dicerca berolinensis (Hbst., 1779)	2		ss	*3
Coleoptera	Buprestidae	Dicerca furcata (Thunb., 1787)	1		es	*3
Coleoptera	Buprestidae	Dicerca moesta (F., 1782)	1		es	*3

Order	Family	Species	K	L	P	S
Coleoptera	Buprestidae	Eurythyrea austriaca (L., 1767)	0	1900	ex	*3
Coleoptera	Buprestidae	Eurythyrea quercus (Hbst., 1780)	1		es	*3
Coleoptera	Buprestidae	Habroloma nana (Payk., 1799)	3		s	*3
Coleoptera	Buprestidae	Melanophila acuminata (De Geer, 1774)	2		ss	*3
Coleoptera	Buprestidae	Nalanda fulgidicollis (Luc., 1846)	R		es	*3
Coleoptera	Buprestidae	Palmar festiva (L., 1758)	3		ss	*3
Coleoptera	Buprestidae	Phaenops cyanea (F., 1775)	*		mh	*3
Coleoptera	Buprestidae	Phaenops formaneki Jacobs., 1913	*		s	*3
Coleoptera	Buprestidae	Poecilonota variolosa (Payk., 1799)	2		ss	*3
Coleoptera	Buprestidae	Ptosima flavoguttata (Ill., 1803)	3		ss	*3
Coleoptera	Buprestidae	Scintillatrix dives Guillb., 1889	*		s	*3
Coleoptera	Buprestidae	Scintillatrix mirifica (Muls., 1855)	1		es	*3
Coleoptera	Buprestidae	Scintillatrix rutilans (F., 1777)	2		ss	*3
Coleoptera	Buprestidae	Trachypteris picta (Pall., 1773)	D		?	*3
Coleoptera	Buprestidae	Trachys fragariae Bris., 1874	3		s	*3
Coleoptera	Buprestidae	Trachys minutus (L., 1758)	*		h	*3
Coleoptera	Buprestidae	Trachys problematicus Obenb., 1916	G		ss	*3
Coleoptera	Buprestidae	Trachys puncticollis Ab., 1900	0	1895	ex	*3
Coleoptera	Buprestidae	Trachys scrobiculatus Kiesw., 1857	*		mh	*3
Coleoptera	Buprestidae	Trachys troglodytes Gyll., 1817	V		s	*3
Coleoptera	Buprestidae	Trachys troglodytiformis Obenb., 1916	1		es	*3
Coleoptera	Byrrhidae	Byrrhus arietinus Steff., 1842	*		s	*3
Coleoptera	Byrrhidae	Byrrhus fasciatus (Forst., 1771)	*		mh	*3
Coleoptera	Byrrhidae	Byrrhus gigas F., 1787	D		ss	*3
Coleoptera	Byrrhidae	Byrrhus glabratus Heer, 1841	*		s	*3
Coleoptera	Byrrhidae	Byrrhus luniger Germ., 1817	*		s	*3
Coleoptera	Byrrhidae	Byrrhus pilula (L., 1758)	*		sh	*3
Coleoptera	Byrrhidae	Byrrhus pustulatus (Forst., 1771)	*		mh	*3
Coleoptera	Byrrhidae	Byrrhus scabripennis Steff., 1843	0	1950	ex	*3
Coleoptera	Byrrhidae	Byrrhus signatus Panz., 1809	*		s	*3
Coleoptera	Byrrhidae	Chaetophora spinosa (Rossi, 1794)	*		mh	*3
Coleoptera	Byrrhidae	Curimopsis austriaca (Franz, 1967)	R		es	*3
Coleoptera	Byrrhidae	Curimopsis monticola (Franz, 1967)	3		s	*3
Coleoptera	Byrrhidae	Curimopsis nigrita (Palm, 1934)	2		s	*3
Coleoptera	Byrrhidae	Curimopsis paleata (Er., 1846)	3		s	*3
Coleoptera	Byrrhidae	Curimopsis setigera (Ill., 1798)	*		h	*3
Coleoptera	Byrrhidae	Curimopsis setosa (Waltl, 1838)	R		es	*3
Coleoptera	Byrrhidae	Curimus erinaceus (Duft., 1825)	R		es	*3
Coleoptera	Byrrhidae	Cytilus sericeus (Forst., 1771)	D		h	*3
Coleoptera	Byrrhidae	Lamprobyrrhulus nitidus (Schall., 1783)	V		mh	*3
Coleoptera	Byrrhidae	Morychus aeneus (F., 1775)	*		mh	*3
Coleoptera	Byrrhidae	Pedilophorus auratus (Duft., 1825)	0	1950	ex	*3
Coleoptera	Byrrhidae	Porcinolus murinus (F., 1794)	V		mh	*3
Coleoptera	Byrrhidae	Simplocaria maculosa Er., 1847	1		es	*3
Coleoptera	Byrrhidae	Simplocaria metallica (Sturm, 1807)	1		es	*3
Coleoptera	Byrrhidae	Simplocaria semistriata (F., 1794)	D		sh	*3
Coleoptera	Byturidae	Byturus ochraceus (Scriba, 1790)	*		sh	*3
Coleoptera	Byturidae	Byturus tomentosus (De Geer, 1774)	*		sh	*3
Coleoptera	Cantharidae	Absidia prolixa (Märk., 1851)	*		ss	*3
Coleoptera	Cantharidae	Absidia rufotestacea (Letzn., 1845)	*		mh	*3
Coleoptera	Cantharidae	Absidia schoenherri (Dej., 1837)	*		mh	*3
Coleoptera	Cantharidae	Ancistronycha abdominalis (F., 1798)	D		?	*3
Coleoptera	Cantharidae	Ancistronycha cyanipennis (Fald., 1835)	*		s	*3
Coleoptera	Cantharidae	Ancistronycha erichsonii (Bach, 1852)	3		s	*3
Coleoptera	Cantharidae	Ancistronycha occipitalis (Rosh., 1847)	D		?	*3
Coleoptera	Cantharidae	Cantharis annularis Menetr., 1836	2		ss	*3
Coleoptera	Cantharidae	Cantharis cryptica Ashe, 1947	*		mh	*3
Coleoptera	Cantharidae	Cantharis decipiens Baudi, 1871	*		h	*3
Coleoptera	Cantharidae	Cantharis figurata Mannh., 1843	*		mh	*3
Coleoptera	Cantharidae	Cantharis fulvicollis F., 1792	*		h	*3
Coleoptera	Cantharidae	Cantharis fusca L., 1758	*		sh	*3
Coleoptera	Cantharidae	Cantharis lateralis L., 1758	*		h	*3
Coleoptera	Cantharidae	Cantharis liburnica Dep., 1912	R		es	*3
Coleoptera	Cantharidae	Cantharis livida L., 1758	*		sh	*3
Coleoptera	Cantharidae	Cantharis montana Stierl., 1889	R		es	*3
Coleoptera	Cantharidae	Cantharis nigricans (Müll., 1776)	*		sh	*3
Coleoptera	Cantharidae	Cantharis obscura L., 1758	*		mh	*3
Coleoptera	Cantharidae	Cantharis pagana Rosh., 1847	*		s	*3
Coleoptera	Cantharidae	Cantharis pallida Goeze, 1777	*		h	*3
Coleoptera	Cantharidae	Cantharis paludosa Fall., 1807	G		mh	*3
Coleoptera	Cantharidae	Cantharis paradoxa Hick., 1960	3		s	*3
Coleoptera	Cantharidae	Cantharis pellucida F., 1792	*		sh	*3
Coleoptera	Cantharidae	Cantharis pulicaria F., 1781	1		ss	*3
Coleoptera	Cantharidae	Cantharis quadripunctata (Müll., 1776)	2		s	*3
Coleoptera	Cantharidae	Cantharis rufa L., 1758	*		h	*3
Coleoptera	Cantharidae	Cantharis rustica Fall., 1807	*		sh	*3
Coleoptera	Cantharidae	Cantharis sudetica Letzn., 1847	3		s	*3
Coleoptera	Cantharidae	Cantharis thoracica (Ol., 1790)	*		mh	*3
Coleoptera	Cantharidae	Cantharis tristis F., 1798	*		ss	*3
Coleoptera	Cantharidae	Cratosilis denticollis (Schumm., 1844)	V		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Cantharidae	Malthinus balteatus Suffr., 1851	V		s	*3
Coleoptera	Cantharidae	Malthinus biguttatus (L., 1758)	*		mh	*3
Coleoptera	Cantharidae	Malthinus facialis Thoms., 1864	V		s	*3
Coleoptera	Cantharidae	Malthinus fasciatus (Ol., 1790)	*		s	*3
Coleoptera	Cantharidae	Malthinus frontalis (Marsh., 1802)	*		mh	*3
Coleoptera	Cantharidae	Malthinus glabellus Kiesw., 1852	3		ss	*3
Coleoptera	Cantharidae	Malthinus punctatus (Fourcr., 1785)	*		h	*3
Coleoptera	Cantharidae	Malthinus seriepunctatus Kiesw., 1851	*		mh	*3
Coleoptera	Cantharidae	Malthodes alpicola Kiesw., 1852	*		ss	*3
Coleoptera	Cantharidae	Malthodes boicus Kiesw., 1863	0	1950	ex	*3
Coleoptera	Cantharidae	Malthodes brevicollis (Payk., 1789)	*		mh	*3
Coleoptera	Cantharidae	Malthodes caudatus Weise, 1892	R		es	*3
Coleoptera	Cantharidae	Malthodes crassicornis (Mäkl., 1846)	3		s	*3
Coleoptera	Cantharidae	Malthodes debilis Kiesw., 1852	V		s	*3
Coleoptera	Cantharidae	Malthodes dimidiaticollis (Rosh., 1847)	0	1900	ex	*3
Coleoptera	Cantharidae	Malthodes dispar (Germ., 1824)	*		mh	*3
Coleoptera	Cantharidae	Malthodes europaeus Wittm., 1970	2		ss	*3
Coleoptera	Cantharidae	Malthodes fibulatus Kiesw., 1852	3		ss	*3
Coleoptera	Cantharidae	Malthodes flavoguttatus Kiesw., 1852	V		s	*3
Coleoptera	Cantharidae	Malthodes fuscus (Waltl, 1838)	*		h	*3
Coleoptera	Cantharidae	Malthodes guttifer Kiesw., 1852	*		h	*3
Coleoptera	Cantharidae	Malthodes hexacanthus Kiesw., 1852	*		h	*3
Coleoptera	Cantharidae	Malthodes holdhausi Kaszab, 1955	*		ss	*3
Coleoptera	Cantharidae	Malthodes liegeli Weise, 1890	R		es	*3
Coleoptera	Cantharidae	Malthodes lobatus Kiesw., 1852	D		?	*3
Coleoptera	Cantharidae	Malthodes marginatus (Latr., 1806)	*		h	*3
Coleoptera	Cantharidae	Malthodes maurus (Cast., 1840)	*		s	*3
Coleoptera	Cantharidae	Malthodes minimus (L., 1758)	*		h	*3
Coleoptera	Cantharidae	Malthodes misellus Kiesw., 1852	D		ss	*3
Coleoptera	Cantharidae	Malthodes montanus Kiesw., 1863	R		es	*3
Coleoptera	Cantharidae	Malthodes mysticus Kiesw., 1852	*		mh	*3
Coleoptera	Cantharidae	Malthodes pumilus (Breb., 1835)	*		mh	*3
Coleoptera	Cantharidae	Malthodes spathifer Kiesw., 1852	*		h	*3
Coleoptera	Cantharidae	Malthodes spretus Kiesw., 1852	3		ss	*3
Coleoptera	Cantharidae	Malthodes subductus Kiesw., 1863	0	1950	ex	*3
Coleoptera	Cantharidae	Malthodes transeuropaeus Wittm., 1970	R		es	*3
Coleoptera	Cantharidae	Malthodes trifurcatus Kiesw., 1852	R		es	*3
Coleoptera	Cantharidae	Metacantharis clypeata (Ill., 1798)	V		s	*3
Coleoptera	Cantharidae	Metacantharis discoidea (Ahr., 1812)	*		s	*3
Coleoptera	Cantharidae	Podabrus alpinus (Payk., 1798)	*		mh	*3
Coleoptera	Cantharidae	Rhagonycha atra (L., 1767)	*		s	*3
Coleoptera	Cantharidae	Rhagonycha elongata (Fall., 1807)	D		ss	*3
Coleoptera	Cantharidae	Rhagonycha fulva (Scop., 1763)	*		sh	*3
Coleoptera	Cantharidae	Rhagonycha gallica Pic, 1923	*		mh	*3
Coleoptera	Cantharidae	Rhagonycha lignosa (Müll., 1764)	*		sh	*3
Coleoptera	Cantharidae	Rhagonycha limbata Thoms., 1864	*		h	*3
Coleoptera	Cantharidae	Rhagonycha lutea (Müll., 1764)	*		mh	*3
Coleoptera	Cantharidae	Rhagonycha nigriceps (Waltl, 1838)	0	1955	ex	*3
Coleoptera	Cantharidae	Rhagonycha nigripes Kiesw., 1851	R		es	*3
Coleoptera	Cantharidae	Rhagonycha testacea (L., 1758)	*		h	*3
Coleoptera	Cantharidae	Rhagonycha translucida (Kryn., 1832)	*		s	*3
Coleoptera	Cantharidae	Silis nitidula (F., 1792)	1		es	*3
Coleoptera	Cantharidae	Silis ruficollis (F., 1775)	V		mh	*3
Coleoptera	Carabidae	Abax carinatus carinatus (Duftschmid, 1812)	V		s	*1
Coleoptera	Carabidae	Abax ovalis (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Abax parallelepipedus parallelepipedus (Piller & Mitt., 1783)	*		h	*1
Coleoptera	Carabidae	Abax parallelus parallelus (Duftschmid, 1812)	*		h	*1
Coleoptera	Carabidae	Acupalpus brunnipes (Sturm, 1825)	2		ss	*1
Coleoptera	Carabidae	Acupalpus dubius Schilsky, 1888	V		mh	*1
Coleoptera	Carabidae	Acupalpus elegans (Dejean, 1829)	2		ss	*1
Coleoptera	Carabidae	Acupalpus exiguus Dejean, 1829	*		mh	*1
Coleoptera	Carabidae	Acupalpus flavicollis (Sturm, 1825)	*		h	*1
Coleoptera	Carabidae	Acupalpus interstitialis Reitter, 1884	R		es	*1
Coleoptera	Carabidae	Acupalpus luteatus (Duftschmid, 1812)	R		es	*1
Coleoptera	Carabidae	Acupalpus maculatus (Schaum, 1860)	*		ss	*1
Coleoptera	Carabidae	Acupalpus meridianus (Linnaeus, 1760)	*		h	*1
Coleoptera	Carabidae	Acupalpus parvulus (Sturm, 1825)	*		h	*1
Coleoptera	Carabidae	Agonum antennarium (Duftschmid, 1812)	R		es	*1
Coleoptera	Carabidae	Agonum dolens (C.R. Sahlberg, 1827)	2		ss	*1
Coleoptera	Carabidae	Agonum duftschmidi J. Schmidt, 1994	3		s	*1
Coleoptera	Carabidae	Agonum emarginatum (Gyllenhal, 1827)	*		sh	*1
Coleoptera	Carabidae	Agonum ericeti (Panzer, 1809)	2		s	*1
Coleoptera	Carabidae	Agonum fuliginosum (Panzer, 1809)	*		sh	*1
Coleoptera	Carabidae	Agonum gracile Sturm, 1824	V		mh	*1
Coleoptera	Carabidae	Agonum gracilipes (Duftschmid, 1812)	*		ss	*1
Coleoptera	Carabidae	Agonum hypocrita (Apfelbeck, 1904)	1		es	*1
Coleoptera	Carabidae	Agonum impressum (Panzer, 1796)	1		es	*1
Coleoptera	Carabidae	Agonum lugens (Duftschmid, 1812)	3		s	*1
Coleoptera	Carabidae	Agonum marginatum (Linnaeus, 1758)	*		h	*1
Coleoptera	Carabidae	Agonum micans Nicolai, 1822	*		h	*1

Order	Family	Species	K	L	P	S
Coleoptera	Carabidae	Agonum monachum monachum (Duftschmid, 1812)	1		es	*1
Coleoptera	Carabidae	Agonum muelleri (Herbst, 1784)	*		h	*1
Coleoptera	Carabidae	Agonum munsteri (Hellén, 1935)	1		es	*1
Coleoptera	Carabidae	Agonum nigrum Dejean, 1828	R		es	*1
Coleoptera	Carabidae	Agonum piceum (Linnaeus, 1758)	3		s	*1
Coleoptera	Carabidae	Agonum scitulum Dejean, 1828	2		ss	*1
Coleoptera	Carabidae	Agonum sexpunctatum (Linnaeus, 1758)	*		mh	*1
Coleoptera	Carabidae	Agonum thoreyi Dejean, 1828	*		h	*1
Coleoptera	Carabidae	Agonum versutum Sturm, 1824	3		s	*1
Coleoptera	Carabidae	Agonum viduum (Panzer, 1796)	*		h	*1
Coleoptera	Carabidae	Agonum viridicupreum (Goeze, 1777)	3		ss	*1
Coleoptera	Carabidae	Amara aenea (De Geer, 1774)	*		sh	*1
Coleoptera	Carabidae	Amara anthobia A. & J.B. Villa, 1833	*		s	*1
Coleoptera	Carabidae	Amara apricaria (Paykull, 1790)	*		mh	*1
Coleoptera	Carabidae	Amara aulica (Panzer, 1796)	*		mh	*1
Coleoptera	Carabidae	Amara bifrons (Gyllenhal, 1810)	*		h	*1
Coleoptera	Carabidae	Amara brunnea (Gyllenhal, 1810)	*		s	*1
Coleoptera	Carabidae	Amara chaudoiri incognita Fassati, 1946	0	1960	ex	*1
Coleoptera	Carabidae	Amara communis (Panzer, 1797)	*		sh	*1
Coleoptera	Carabidae	Amara concinna C. Zimmermann, 1832	1		es	*1
Coleoptera	Carabidae	Amara consularis (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Amara convexior Stephens, 1828	*		mh	*1
Coleoptera	Carabidae	Amara convexiuscula (Marsham, 1802)	*		s	*1
Coleoptera	Carabidae	Amara crenata Dejean, 1828	2		es	*1
Coleoptera	Carabidae	Amara cursitans C. Zimmermann, 1832	V		s	*1
Coleoptera	Carabidae	Amara curta Dejean, 1828	*		mh	*1
Coleoptera	Carabidae	Amara equestris (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Amara erratica (Duftschmid, 1812)	3		ss	*1
Coleoptera	Carabidae	Amara eurynota (Panzer, 1796)	*		mh	*1
Coleoptera	Carabidae	Amara famelica C. Zimmermann, 1832	2		ss	*1
Coleoptera	Carabidae	Amara familiaris (Duftschmid, 1812)	*		sh	*1
Coleoptera	Carabidae	Amara fulva (O.F. Müller, 1776)	*		mh	*1
Coleoptera	Carabidae	Amara fulvipes (Audinet-Serville, 1821)	2		es	*1
Coleoptera	Carabidae	Amara fusca Dejean, 1828	*		s	*1
Coleoptera	Carabidae	Amara gebleri Dejean, 1831	*		ss	*1
Coleoptera	Carabidae	Amara infima (Duftschmid, 1812)	3		s	*1
Coleoptera	Carabidae	Amara ingenua (Duftschmid, 1812)	*		s	*1
Coleoptera	Carabidae	Amara kulti Fassati, 1947	*		ss	*1
Coleoptera	Carabidae	Amara littorea C.G. Thomson, 1857	*		ss	*1
Coleoptera	Carabidae	Amara lucida (Duftschmid, 1812)	V		s	*1
Coleoptera	Carabidae	Amara lunicollis Schiödte, 1837	*		mh	*1
Coleoptera	Carabidae	Amara majuscula (Chaudoir, 1850)	*		s	*1
Coleoptera	Carabidae	Amara makolskii Roubal, 1923	*		ss	*1
Coleoptera	Carabidae	Amara messae Baliani, 1924	R		es	*1
Coleoptera	Carabidae	Amara montivaga Sturm, 1825	V		mh	*1
Coleoptera	Carabidae	Amara municipalis (Duftschmid, 1812)	*		s	*1
Coleoptera	Carabidae	Amara nigricornis C.G. Thomson, 1857	R		es	*1
Coleoptera	Carabidae	Amara nitida Sturm, 1825	V		s	*1
Coleoptera	Carabidae	Amara ovata (Fabricius, 1792)	*		mh	*1
Coleoptera	Carabidae	Amara plebeja (Gyllenhal, 1810)	*		h	*1
Coleoptera	Carabidae	Amara praetermissa (C.R. Sahlberg, 1827)	2		ss	*1
Coleoptera	Carabidae	Amara proxima Putzeys, 1866	R		es	*1
Coleoptera	Carabidae	Amara pulpani Kult, 1949	R		es	*1
Coleoptera	Carabidae	Amara quenseli quenseli (Schönherr, 1806)	D		?	*1
Coleoptera	Carabidae	Amara quenseli silvicola C. Zimmermann, 1832	3		s	*1
Coleoptera	Carabidae	Amara sabulosa (Audinet-Serville, 1821)	3		ss	*1
Coleoptera	Carabidae	Amara schimperi Wencker, 1866	1		es	*1
Coleoptera	Carabidae	Amara similata (Gyllenhal, 1810)	*		sh	*1
Coleoptera	Carabidae	Amara spreta Dejean, 1831	*		mh	*1
Coleoptera	Carabidae	Amara strandi Lutshnik, 1933	3		ss	*1
Coleoptera	Carabidae	Amara strenua C. Zimmermann, 1832	*		s	*1
Coleoptera	Carabidae	Amara tibialis (Paykull, 1798)	*		mh	*1
Coleoptera	Carabidae	Amara tricuspidata Dejean, 1831	V		ss	*1
Coleoptera	Carabidae	Anchomenus cyaneus Dejean, 1828	2		es	*1
Coleoptera	Carabidae	Anchomenus dorsalis (Pontoppidan, 1763)	*		h	*1
Coleoptera	Carabidae	Anillus caecus Jacquelin du Val, 1851	nb		nb	*1
Coleoptera	Carabidae	Anisodactylus binotatus (Fabricius, 1787)	*		sh	*1
Coleoptera	Carabidae	Anisodactylus nemorivagus (Duftschmid, 1812)	2		ss	*1
Coleoptera	Carabidae	Anisodactylus poeciloides (Stephens, 1828)	2		ss	*1
Coleoptera	Carabidae	Anisodactylus signatus (Panzer, 1796)	V		ss	*1
Coleoptera	Carabidae	Anthracus consputus (Duftschmid, 1812)	V		mh	*1
Coleoptera	Carabidae	Apristus europaeus Mateu, 1980	D		?	*1
Coleoptera	Carabidae	Aptinus bombarda (Illiger, 1800)	R		es	*1
Coleoptera	Carabidae	Asaphidion austriacum Schweiger, 1975	*		s	*1
Coleoptera	Carabidae	Asaphidion caraboides (Schrank, 1781)	2		ss	*1
Coleoptera	Carabidae	Asaphidion curtum (Heyden, 1870)	*		mh	*1
Coleoptera	Carabidae	Asaphidion cyanicorne tyrolense Schweiger, 1975	0	1976	ex	*1
Coleoptera	Carabidae	Asaphidion flavipes (Linnaeus, 1760)	*		h	*1
Coleoptera	Carabidae	Asaphidion pallipes (Duftschmid, 1812)	V		mh	*1
Coleoptera	Carabidae	Asaphidion stierlini (Heyden, 1880)	R		es	*1

Order	Family	Species	K	L	P	S
Coleoptera	Carabidae	Badister bullatus (Schrank, 1798)	*		h	*1
Coleoptera	Carabidae	Badister collaris Motschulsky, 1844	*		h	*1
Coleoptera	Carabidae	Badister dilatatus Chaudoir, 1837	*		h	*1
Coleoptera	Carabidae	Badister dorsiger (Duftschmid, 1812)	2		ss	*1
Coleoptera	Carabidae	Badister lacertosus Sturm, 1815	*		mh	*1
Coleoptera	Carabidae	Badister meridionalis Puel, 1925	3		s	*1
Coleoptera	Carabidae	Badister peltatus (Panzer, 1796)	3		s	*1
Coleoptera	Carabidae	Badister sodalis (Duftschmid, 1812)	*		h	*1
Coleoptera	Carabidae	Badister unipustulatus Bonelli, 1813	3		s	*1
Coleoptera	Carabidae	Bembidion aeneum Germar, 1824	V		s	*1
Coleoptera	Carabidae	Bembidion argenteolum Ahrens, 1812	3		s	*1
Coleoptera	Carabidae	Bembidion articulatum (Panzer, 1796)	*		sh	*1
Coleoptera	Carabidae	Bembidion ascendens K. Daniel, 1902	3		s	*1
Coleoptera	Carabidae	Bembidion aspericolle (Germar, 1829)	2		ss	*1
Coleoptera	Carabidae	Bembidion assimile Gyllenhal, 1810	*		h	*1
Coleoptera	Carabidae	Bembidion atrocaeruleum (Stephens, 1828)	2		s	*1
Coleoptera	Carabidae	Bembidion azurescens Dalla Torre, 1877	V		s	*1
Coleoptera	Carabidae	Bembidion biguttatum (Fabricius, 1779)	*		h	*1
Coleoptera	Carabidae	Bembidion bipunctatum bipunctatum (Linnaeus, 1760)	3		s	*1
Coleoptera	Carabidae	Bembidion bipunctatum nivale Heer, 1837	V		s	*1
Coleoptera	Carabidae	Bembidion bruxellense Wesmael, 1835	*		mh	*1
Coleoptera	Carabidae	Bembidion clarkii (Dawson, 1849)	R		es	*1
Coleoptera	Carabidae	Bembidion complanatum Heer, 1837	2		es	*1
Coleoptera	Carabidae	Bembidion conforme (Dejean, 1831)	*		ss	*1
Coleoptera	Carabidae	Bembidion cruciatum baenningeri Netolitzky, 1926	R		es	*1
Coleoptera	Carabidae	Bembidion cruciatum bualei Jacquelin du Val, 1852	3		ss	*1
Coleoptera	Carabidae	Bembidion cruciatum polonicum Müller, 1930	*		ss	*1
Coleoptera	Carabidae	Bembidion decorum (Panzer, 1799)	*		mh	*1
Coleoptera	Carabidae	Bembidion deletum Audinet-Serville, 1821	*		mh	*1
Coleoptera	Carabidae	Bembidion dentellum (Thunberg, 1787)	*		mh	*1
Coleoptera	Carabidae	Bembidion distinguendum distinguendum Jac. du Val, 1852	1		es	*1
Coleoptera	Carabidae	Bembidion doris (Panzer, 1796)	V		mh	*1
Coleoptera	Carabidae	Bembidion ephippium (Marsham, 1802)	1		es	*1
Coleoptera	Carabidae	Bembidion eques Sturm, 1825	0	1934	ex	*1
Coleoptera	Carabidae	Bembidion fasciolatum (Duftschmid, 1812)	3		ss	*1
Coleoptera	Carabidae	Bembidion femoratum Sturm, 1825	*		sh	*1
Coleoptera	Carabidae	Bembidion fluviatile Dejean, 1831	2		ss	*1
Coleoptera	Carabidae	Bembidion foraminosum Sturm, 1825	1		es	*1
Coleoptera	Carabidae	Bembidion fulvipes Sturm, 1827	1		es	*1
Coleoptera	Carabidae	Bembidion fumigatum (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Bembidion genei illigeri Netolitzky, 1914	*		mh	*1
Coleoptera	Carabidae	Bembidion geniculatum Heer, 1837	V		s	*1
Coleoptera	Carabidae	Bembidion gilvipes Sturm, 1825	*		mh	*1
Coleoptera	Carabidae	Bembidion glaciale Heer, 1837	1		es	*1
Coleoptera	Carabidae	Bembidion guttula (Fabricius, 1792)	*		h	*1
Coleoptera	Carabidae	Bembidion humerale Sturm, 1825	2		s	*1
Coleoptera	Carabidae	Bembidion incognitum G. Müller, 1931	R		es	*1
Coleoptera	Carabidae	Bembidion iricolor Bedel, 1879	3		ss	*1
Coleoptera	Carabidae	Bembidion lampros (Herbst, 1784)	*		sh	*1
Coleoptera	Carabidae	Bembidion laticolle (Duftschmid, 1812)	0	1915	ex	*1
Coleoptera	Carabidae	Bembidion latinum Netolitzky, 1911	R		es	*1
Coleoptera	Carabidae	Bembidion litorale (Olivier, 1790)	3		s	*1
Coleoptera	Carabidae	Bembidion longipes K. Daniel, 1902	1		es	*1
Coleoptera	Carabidae	Bembidion lunatum (Duftschmid, 1812)	3		s	*1
Coleoptera	Carabidae	Bembidion lunulatum (Geoffroy, 1785)	*		mh	*1
Coleoptera	Carabidae	Bembidion mannerheimii C.R. Sahlberg, 1827	*		h	*1
Coleoptera	Carabidae	Bembidion maritimum (Stephens, 1839)	1		es	*1
Coleoptera	Carabidae	Bembidion milleri carpathicum Müller, 1918	*		s	*1
Coleoptera	Carabidae	Bembidion milleri milleri Jacquelin du Val, 1852	V		s	*1
Coleoptera	Carabidae	Bembidion minimum (Fabricius, 1792)	*		mh	*1
Coleoptera	Carabidae	Bembidion modestum (Fabricius, 1801)	3		s	*1
Coleoptera	Carabidae	Bembidion monticola Sturm, 1825	3		s	*1
Coleoptera	Carabidae	Bembidion neresheimeri J. Müller, 1929	*		mh	*1
Coleoptera	Carabidae	Bembidion nigricorne Gyllenhal, 1827	2		ss	*1
Coleoptera	Carabidae	Bembidion normannum Dejean, 1831	V		s	*1
Coleoptera	Carabidae	Bembidion obliquum Sturm, 1825	*		mh	*1
Coleoptera	Carabidae	Bembidion obtusum Audinet-Serville, 1821	*		mh	*1
Coleoptera	Carabidae	Bembidion octomaculatum (Goeze, 1777)	3		s	*1
Coleoptera	Carabidae	Bembidion pallidipenne (Illiger, 1802)	1		ss	*1
Coleoptera	Carabidae	Bembidion prasinum (Duftschmid, 1812)	2		ss	*1
Coleoptera	Carabidae	Bembidion properans (Stephens, 1828)	*		sh	*1
Coleoptera	Carabidae	Bembidion pseudascendens Manderbach & M.-Motzfeld, 2004	2		ss	*1
Coleoptera	Carabidae	Bembidion punctulatum Drapiez, 1820	*		mh	*1
Coleoptera	Carabidae	Bembidion pygmaeum (Fabricius, 1792)	V		mh	*1
Coleoptera	Carabidae	Bembidion quadrimaculatum (Linnaeus, 1760)	*		sh	*1
Coleoptera	Carabidae	Bembidion quadripustulatum Audinet-Serville, 1821	*		mh	*1
Coleoptera	Carabidae	Bembidion ruficolle (Panzer, 1796)	*		ss	*1
Coleoptera	Carabidae	Bembidion saxatile Gyllenhal, 1827	*		s	*1
Coleoptera	Carabidae	Bembidion scapulare tergluense Netolitzky, 1918	1		es	*1
Coleoptera	Carabidae	Bembidion schueppelii Dejean, 1831	V		s	*1

Order	Family	Species	K	L	P	S
Coleoptera	Carabidae	Bembidion semipunctatum (Donovan, 1806)	*		mh	*1
Coleoptera	Carabidae	Bembidion splendidum Sturm, 1825	R		es	*1
Coleoptera	Carabidae	Bembidion starkii Schaum, 1860	1		es	*1
Coleoptera	Carabidae	Bembidion stephensii Crotch, 1869	*		mh	*1
Coleoptera	Carabidae	Bembidion striatum (Fabricius, 1792)	1		ss	*1
Coleoptera	Carabidae	Bembidion tenellum Erichson, 1837	3		ss	*1
Coleoptera	Carabidae	Bembidion terminale Heer, 1841	1		es	*1
Coleoptera	Carabidae	Bembidion testaceum (Duftschmid, 1812)	3		s	*1
Coleoptera	Carabidae	Bembidion tetracolum Say, 1823	*		sh	*1
Coleoptera	Carabidae	Bembidion tibiale (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Bembidion transparens (Gebler, 1830)	*		ss	*1
Coleoptera	Carabidae	Bembidion varicolor Fabricius, 1803	V		s	*1
Coleoptera	Carabidae	Bembidion varium (Olivier, 1795)	*		h	*1
Coleoptera	Carabidae	Bembidion velox (Linnaeus, 1760)	2		ss	*1
Coleoptera	Carabidae	Blemus discus (Fabricius, 1792)	*		mh	*1
Coleoptera	Carabidae	Blethisa multipunctata (Linnaeus, 1758)	3		s	*1
Coleoptera	Carabidae	Brachinus crepitans (Linnaeus, 1758)	V		s	*1
Coleoptera	Carabidae	Brachinus explodens Duftschmid, 1812	V		s	*1
Coleoptera	Carabidae	Bradycellus caucasicus (Chaudoir, 1846)	V		s	*1
Coleoptera	Carabidae	Bradycellus csikii Laczó, 1912	*		mh	*1
Coleoptera	Carabidae	Bradycellus harpalinus (Audinet-Serville, 1821)	*		h	*1
Coleoptera	Carabidae	Bradycellus ruficollis (Stephens, 1828)	3		s	*1
Coleoptera	Carabidae	Bradycellus sharpi Joy, 1912	R		es	*1
Coleoptera	Carabidae	Bradycellus verbasci (Duftschmid, 1812)	*		h	*1
Coleoptera	Carabidae	Broscus cephalotes (Linnaeus, 1758)	*		mh	*1
Coleoptera	Carabidae	Calathus ambiguus (Paykull, 1790)	*		mh	*1
Coleoptera	Carabidae	Calathus cinctus Motschulsky, 1850	*		mh	*1
Coleoptera	Carabidae	Calathus erratus (C.R. Sahlberg, 1827)	*		mh	*1
Coleoptera	Carabidae	Calathus fuscipes (Goeze, 1777)	*		sh	*1
Coleoptera	Carabidae	Calathus melanocephalus (Linnaeus, 1758)	*		sh	*1
Coleoptera	Carabidae	Calathus micropterus (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Calathus mollis (Marsham, 1802)	2		ss	*1
Coleoptera	Carabidae	Calathus rotundicollis Dejean, 1828	*		mh	*1
Coleoptera	Carabidae	Callisthenes reticulatus reticulatus (Fabricius, 1787)	1		es	*1
Coleoptera	Carabidae	Callistus lunatus (Fabricius, 1775)	3		s	*1
Coleoptera	Carabidae	Calodromius bifasciatus (Dejean, 1825)	R		es	*1
Coleoptera	Carabidae	Calodromius spilotus (Illiger, 1798)	*		sh	*1
Coleoptera	Carabidae	Calosoma inquisitor (Linnaeus, 1758)	3		s	*1
Coleoptera	Carabidae	Calosoma investigator (Illiger, 1798)	nb		nb	*1
Coleoptera	Carabidae	Calosoma maderae auropunctatum (Herbst, 1784)	V		s	*1
Coleoptera	Carabidae	Calosoma sycophanta (Linnaeus, 1758)	2		ss	*1
Coleoptera	Carabidae	Carabus alpestris alpestris Sturm, 1815	R		es	*1
Coleoptera	Carabidae	Carabus arvensis arvensis Herbst, 1784	V		mh	*1
Coleoptera	Carabidae	Carabus arvensis noricus Sokolar, 1910	*		ss	*1
Coleoptera	Carabidae	Carabus arvensis sylvaticus Dejean, 1826	3		s	*1
Coleoptera	Carabidae	Carabus auratus auratus Linnaeus, 1760	*		mh	*1
Coleoptera	Carabidae	Carabus auronitens auronitens Fabricius, 1792	*		mh	*1
Coleoptera	Carabidae	Carabus cancellatus cancellatus Illiger, 1798	V		mh	*1
Coleoptera	Carabidae	Carabus cancellatus fusus Palliardi, 1825	3		s	*1
Coleoptera	Carabidae	Carabus clatratus clatratus Linnaeus, 1760	2		s	*1
Coleoptera	Carabidae	Carabus convexus convexus Fabricius, 1775	V		mh	*1
Coleoptera	Carabidae	Carabus coriaceus coriaceus Linnaeus, 1758	*		h	*1
Coleoptera	Carabidae	Carabus fabricii fabricii Panzer, 1810	R		es	*1
Coleoptera	Carabidae	Carabus germarii germarii Sturm, 1815	R		es	*1
Coleoptera	Carabidae	Carabus glabratus glabratus Paykull, 1790	*		mh	*1
Coleoptera	Carabidae	Carabus granulatus granulatus Linnaeus, 1758	*		sh	*1
Coleoptera	Carabidae	Carabus hortensis Linnaeus, 1758	*		h	*1
Coleoptera	Carabidae	Carabus intricatus Linnaeus, 1760	3		s	*1
Coleoptera	Carabidae	Carabus irregularis irregularis Fabricius, 1792	3		s	*1
Coleoptera	Carabidae	Carabus linnei Panzer, 1810	*		ss	*1
Coleoptera	Carabidae	Carabus marginalis Fabricius, 1794	0	1968	ex	*1
Coleoptera	Carabidae	Carabus menetriesi Hummel, 1827	1		es	*1
Coleoptera	Carabidae	Carabus monilis monilis Fabricius, 1792	V		s	*1
Coleoptera	Carabidae	Carabus nemoralis nemoralis O.F. Müller, 1764	*		sh	*1
Coleoptera	Carabidae	Carabus nitens Linnaeus, 1758	1		ss	*1
Coleoptera	Carabidae	Carabus problematicus problematicus Herbst, 1786	*		mh	*1
Coleoptera	Carabidae	Carabus scheidleri scheidleri Panzer, 1799	R		es	*1
Coleoptera	Carabidae	Carabus sylvestris Panzer, 1793	*		ss	*1
Coleoptera	Carabidae	Carabus ulrichii fastuosus Palliardi, 1825	V		s	*1
Coleoptera	Carabidae	Carabus ulrichii ulrichii Germar, 1824	2		ss	*1
Coleoptera	Carabidae	Carabus variolosus nodulosus Creutzer, 1799	1		es	*1
Coleoptera	Carabidae	Carabus violaceus purpurascens Fabricius, 1787	*		mh	*1
Coleoptera	Carabidae	Carabus violaceus salisburgensis Kraatz, 1879	*		s	*1
Coleoptera	Carabidae	Carabus violaceus violaceus Linnaeus, 1758	*		mh	*1
Coleoptera	Carabidae	Chlaenius costulatus (Motschulsky, 1859)	1		es	*1
Coleoptera	Carabidae	Chlaenius nigricornis (Fabricius, 1787)	*		mh	*1
Coleoptera	Carabidae	Chlaenius nitidulus (Schrank, 1781)	3		s	*1
Coleoptera	Carabidae	Chlaenius olivieri Crotch, 1871	0	1904	ex	*1
Coleoptera	Carabidae	Chlaenius quadrisulcatus (Paykull, 1790)	0	1921	ex	*1
Coleoptera	Carabidae	Chlaenius spoliatus (Rossi, 1792)	R		es	*1

Order	Family	Species	K	L	P	S
Coleoptera	Carabidae	Chlaenius sulcicollis (Paykull, 1798)	1		es	*1
Coleoptera	Carabidae	Chlaenius tibialis Dejean, 1826	3		ss	*1
Coleoptera	Carabidae	Chlaenius tristis (Schaller, 1783)	3		s	*1
Coleoptera	Carabidae	Chlaenius velutinus (Duftschmid, 1812)	0	1855	ex	*1
Coleoptera	Carabidae	Chlaenius vestitus (Paykull, 1790)	*		mh	*1
Coleoptera	Carabidae	Cicindela campestris Linnaeus, 1758	*		h	*1
Coleoptera	Carabidae	Cicindela hybrida Linnaeus, 1758	*		h	*1
Coleoptera	Carabidae	Cicindela maritima maritima Dejean, 1822	1		ss	*1
Coleoptera	Carabidae	Cicindela sylvatica Linnaeus, 1758	2		s	*1
Coleoptera	Carabidae	Cicindela sylvicola Dejean, 1822	3		s	*1
Coleoptera	Carabidae	Cillenus lateralis Samouelle, 1819	2		ss	*1
Coleoptera	Carabidae	Clivina collaris (Herbst, 1784)	*		mh	*1
Coleoptera	Carabidae	Clivina fossor (Linnaeus, 1758)	*		sh	*1
Coleoptera	Carabidae	Cychrus angustatus Hoppe & Hornschuch, 1825	R		es	*1
Coleoptera	Carabidae	Cychrus attenuatus (Fabricius, 1792)	*		s	*1
Coleoptera	Carabidae	Cychrus caraboides (Linnaeus, 1758)	*		h	*1
Coleoptera	Carabidae	Cylindera arenaria arenaria (Fuesslin, 1775)	0	1800	ex	*1
Coleoptera	Carabidae	Cylindera arenaria viennensis (Schrank, 1781)	2		ss	*1
Coleoptera	Carabidae	Cylindera germanica (Linnaeus, 1758)	2		ss	*1
Coleoptera	Carabidae	Cymindis angularis Gyllenhal, 1810	V		s	*1
Coleoptera	Carabidae	Cymindis axillaris (Fabricius, 1794)	2		ss	*1
Coleoptera	Carabidae	Cymindis humeralis (Geoffroy, 1785)	3		s	*1
Coleoptera	Carabidae	Cymindis macularis Fischer von Waldheim, 1824	2		ss	*1
Coleoptera	Carabidae	Cymindis vaporariorum (Linnaeus, 1758)	2		ss	*1
Coleoptera	Carabidae	Demetrias atricapillus (Linnaeus, 1758)	*		mh	*1
Coleoptera	Carabidae	Demetrias imperialis (Germar, 1824)	*		mh	*1
Coleoptera	Carabidae	Demetrias monostigma Samouelle, 1819	*		h	*1
Coleoptera	Carabidae	Diachromus germanus (Linnaeus, 1758)	*		s	*1
Coleoptera	Carabidae	Dicheirotrichus gustavii Crotch, 1871	V		s	*1
Coleoptera	Carabidae	Dicheirotrichus obsoletus (Dejean, 1829)	2		es	*1
Coleoptera	Carabidae	Dicheirotrichus rufithorax (C.R. Sahlberg, 1827)	3		ss	*1
Coleoptera	Carabidae	Dolichus halensis (Schaller, 1783)	2		s	*1
Coleoptera	Carabidae	Dromius agilis (Fabricius, 1787)	*		h	*1
Coleoptera	Carabidae	Dromius angustus Brullé, 1834	*		mh	*1
Coleoptera	Carabidae	Dromius fenestratus (Fabricius, 1794)	*		mh	*1
Coleoptera	Carabidae	Dromius kuntzei Polentz, 1939	R		es	*1
Coleoptera	Carabidae	Dromius meridionalis Dejean, 1825	R		es	*1
Coleoptera	Carabidae	Dromius quadraticollis A. Morawitz, 1862	R		es	*1
Coleoptera	Carabidae	Dromius quadrimaculatus (Linnaeus, 1758)	*		sh	*1
Coleoptera	Carabidae	Dromius schneideri Crotch, 1871	*		s	*1
Coleoptera	Carabidae	Drypta dentata (Rossi, 1790)	*		ss	*1
Coleoptera	Carabidae	Dyschirius abditus Fedorenko, 1993	2		ss	*1
Coleoptera	Carabidae	Dyschirius aeneus (Dejean, 1825)	*		sh	*1
Coleoptera	Carabidae	Dyschirius agnatus Motschulsky, 1844	2		ss	*1
Coleoptera	Carabidae	Dyschirius angustatus (Ahrens, 1830)	V		s	*1
Coleoptera	Carabidae	Dyschirius bonellii Putzeys, 1846	2		ss	*1
Coleoptera	Carabidae	Dyschirius chalceus Erichson, 1837	2		ss	*1
Coleoptera	Carabidae	Dyschirius digitatus (Dejean, 1825)	0	1907	ex	*1
Coleoptera	Carabidae	Dyschirius extensus Putzeys, 1846	1		es	*1
Coleoptera	Carabidae	Dyschirius globosus (Herbst, 1784)	*		sh	*1
Coleoptera	Carabidae	Dyschirius gracilis (Heer, 1837)	0	1936	ex	*1
Coleoptera	Carabidae	Dyschirius impunctipennis Dawson, 1854	2		ss	*1
Coleoptera	Carabidae	Dyschirius intermedius Putzeys, 1846	*		mh	*1
Coleoptera	Carabidae	Dyschirius laeviusculus Putzeys, 1846	2		ss	*1
Coleoptera	Carabidae	Dyschirius neresheimeri Wagner, 1915	0	2006	ex	*1
Coleoptera	Carabidae	Dyschirius nitidus (Dejean, 1825)	2		ss	*1
Coleoptera	Carabidae	Dyschirius obscurus (Gyllenhal, 1827)	V		mh	*1
Coleoptera	Carabidae	Dyschirius politus (Dejean, 1825)	*		mh	*1
Coleoptera	Carabidae	Dyschirius salinus salinus Schaum, 1843	V		s	*1
Coleoptera	Carabidae	Dyschirius semistriatus (Dejean, 1825)	D		?	*1
Coleoptera	Carabidae	Dyschirius substriatus (Duftschmid, 1812)	R		es	*1
Coleoptera	Carabidae	Dyschirius thoracicus (Rossi, 1790)	*		mh	*1
Coleoptera	Carabidae	Dyschirius tristis Stephens, 1828	*		h	*1
Coleoptera	Carabidae	Elaphropus diabrachys (Kolenati, 1845)	*		ss	*1
Coleoptera	Carabidae	Elaphropus haemorrhoidalis (Dejean, 1831)	R		es	*1
Coleoptera	Carabidae	Elaphropus parvulus (Dejean, 1831)	*		mh	*1
Coleoptera	Carabidae	Elaphropus quadrisignatus (Duftschmid, 1812)	*		s	*1
Coleoptera	Carabidae	Elaphropus sexstriatus (Duftschmid, 1812)	2		ss	*1
Coleoptera	Carabidae	Elaphropus walkerianus (Sharp, 1913)	R		es	*1
Coleoptera	Carabidae	Elaphrus aureus P. Müller, 1821	V		s	*1
Coleoptera	Carabidae	Elaphrus cupreus Duftschmid, 1812	*		sh	*1
Coleoptera	Carabidae	Elaphrus riparius (Linnaeus, 1758)	*		sh	*1
Coleoptera	Carabidae	Elaphrus uliginosus Fabricius, 1792	2		s	*1
Coleoptera	Carabidae	Elaphrus ullrichii W. Redtenbacher, 1842	1		es	*1
Coleoptera	Carabidae	Epaphius rivularis (Gyllenhal, 1810)	3		s	*1
Coleoptera	Carabidae	Epaphius secalis (Paykull, 1790)	*		h	*1
Coleoptera	Carabidae	Harpalus affinis (Schrank, 1781)	*		sh	*1
Coleoptera	Carabidae	Harpalus albanicus Reitter, 1900	R		es	*1
Coleoptera	Carabidae	Harpalus anxius (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Harpalus atratus Latreille, 1804	*		s	*1

Order	Family	Species	K	L	P	S
Coleoptera	Carabidae	Harpalus attenuatus Stephens, 1828	*		ss	*1
Coleoptera	Carabidae	Harpalus autumnalis (Duftschmid, 1812)	3		s	*1
Coleoptera	Carabidae	Harpalus calceatus (Duftschmid, 1812)	*		s	*1
Coleoptera	Carabidae	Harpalus caspius (Steven, 1806)	1		es	*1
Coleoptera	Carabidae	Harpalus cephalotes Fairmaire & Laboulbène, 1854	0	1955	ex	*1
Coleoptera	Carabidae	Harpalus cupreus Dejean, 1829	R		es	*1
Coleoptera	Carabidae	Harpalus dimidiatus (Rossi, 1790)	3		s	*1
Coleoptera	Carabidae	Harpalus distinguendus (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Harpalus flavescens (Piller & Mitterpacher, 1783)	3		s	*1
Coleoptera	Carabidae	Harpalus froelichii Sturm, 1818	*		s	*1
Coleoptera	Carabidae	Harpalus fuscicornis Ménétriés, 1832	R		es	*1
Coleoptera	Carabidae	Harpalus griseus (Panzer, 1796)	*		mh	*1
Coleoptera	Carabidae	Harpalus hirtipes (Panzer, 1796)	3		s	*1
Coleoptera	Carabidae	Harpalus honestus (Duftschmid, 1812)	V		s	*1
Coleoptera	Carabidae	Harpalus laevipes Zetterstedt, 1828	*		mh	*1
Coleoptera	Carabidae	Harpalus latus (Linnaeus, 1758)	*		h	*1
Coleoptera	Carabidae	Harpalus luteicornis (Duftschmid, 1812)	*		s	*1
Coleoptera	Carabidae	Harpalus melancholicus Dejean, 1829	2		ss	*1
Coleoptera	Carabidae	Harpalus modestus Dejean, 1829	3		ss	*1
Coleoptera	Carabidae	Harpalus neglectus Audinet-Serville, 1821	2		ss	*1
Coleoptera	Carabidae	Harpalus picipennis (Duftschmid, 1812)	3		s	*1
Coleoptera	Carabidae	Harpalus politus Dejean, 1829	1		es	*1
Coleoptera	Carabidae	Harpalus progrediens Schauberger, 1922	2		ss	*1
Coleoptera	Carabidae	Harpalus pumilus Sturm, 1818	*		mh	*1
Coleoptera	Carabidae	Harpalus rubripes (Duftschmid, 1812)	*		h	*1
Coleoptera	Carabidae	Harpalus rufipalpis Sturm, 1818	*		mh	*1
Coleoptera	Carabidae	Harpalus rufipes (De Geer, 1774)	*		sh	*1
Coleoptera	Carabidae	Harpalus serripes (Quensel, 1806)	3		s	*1
Coleoptera	Carabidae	Harpalus servus (Duftschmid, 1812)	3		s	*1
Coleoptera	Carabidae	Harpalus signaticornis (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Harpalus smaragdinus (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Harpalus solitaris Dejean, 1829	3		s	*1
Coleoptera	Carabidae	Harpalus subcylindricus Dejean, 1829	G		s	*1
Coleoptera	Carabidae	Harpalus sulphuripes Germar, 1824	0	1874	ex	*1
Coleoptera	Carabidae	Harpalus tardus (Panzer, 1796)	*		mh	*1
Coleoptera	Carabidae	Harpalus tenebrosus Dejean, 1829	3		ss	*1
Coleoptera	Carabidae	Harpalus xanthopus winkleri Schauberger, 1923	*		s	*1
Coleoptera	Carabidae	Harpalus zabroides Dejean, 1829	2		ss	*1
Coleoptera	Carabidae	Laemostenus terricola (Herbst, 1784)	*		mh	*1
Coleoptera	Carabidae	Lebia chlorocephala (J.J. Hoffmann et al., 1803)	V		mh	*1
Coleoptera	Carabidae	Lebia cruxminor (Linnaeus, 1758)	3		s	*1
Coleoptera	Carabidae	Lebia cyanocephala (Linnaeus, 1758)	2		ss	*1
Coleoptera	Carabidae	Lebia humeralis Dejean, 1825	0	1910	ex	*1
Coleoptera	Carabidae	Lebia marginata (Geoffroy, 1785)	2		ss	*1
Coleoptera	Carabidae	Lebia scapularis (Geoffroy, 1785)	0	1909	ex	*1
Coleoptera	Carabidae	Leistus ferrugineus (Linnaeus, 1758)	*		h	*1
Coleoptera	Carabidae	Leistus fulvibarbis Dejean, 1826	*		ss	*1
Coleoptera	Carabidae	Leistus montanus kultianus Farkac & Fassati, 1999	R		es	*1
Coleoptera	Carabidae	Leistus montanus rhaeticus Heer, 1837	R		es	*1
Coleoptera	Carabidae	Leistus nitidus (Duftschmid, 1812)	3		ss	*1
Coleoptera	Carabidae	Leistus piceus Froelich, 1799	3		ss	*1
Coleoptera	Carabidae	Leistus rufomarginatus (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Leistus spinibarbis (Fabricius, 1775)	V		s	*1
Coleoptera	Carabidae	Leistus terminatus (Panzer, 1793)	*		sh	*1
Coleoptera	Carabidae	Licinus cassideus (Fabricius, 1792)	1		ss	*1
Coleoptera	Carabidae	Licinus depressus (Paykull, 1790)	V		s	*1
Coleoptera	Carabidae	Licinus hoffmannseggii (Panzer, 1797)	3		ss	*1
Coleoptera	Carabidae	Licinus punctatulus granulatus Dejean, 1826	0	1934	ex	*1
Coleoptera	Carabidae	Limodromus assimilis (Paykull, 1790)	*		sh	*1
Coleoptera	Carabidae	Limodromus krynickii (Sperk, 1835)	1		es	*1
Coleoptera	Carabidae	Limodromus longiventris (Mannerheim, 1825)	2		ss	*1
Coleoptera	Carabidae	Lionychus quadrillum (Duftschmid, 1812)	*		s	*1
Coleoptera	Carabidae	Loricera pilicornis (Fabricius, 1775)	*		sh	*1
Coleoptera	Carabidae	Masoreus wetterhallii (Gyllenhal, 1813)	*		mh	*1
Coleoptera	Carabidae	Microlestes fissuralis (Reitter, 1901)	R		es	*1
Coleoptera	Carabidae	Microlestes maurus (Sturm, 1827)	*		mh	*1
Coleoptera	Carabidae	Microlestes minutulus (Goeze, 1777)	*		mh	*1
Coleoptera	Carabidae	Miscodera arctica (Paykull, 1798)	2		ss	*1
Coleoptera	Carabidae	Molops elatus (Fabricius, 1801)	*		mh	*1
Coleoptera	Carabidae	Molops piceus austriacus Ganglbauer, 1889	R		es	*1
Coleoptera	Carabidae	Molops piceus piceus (Panzer, 1793)	*		mh	*1
Coleoptera	Carabidae	Nebria brevicollis (Fabricius, 1792)	*		sh	*1
Coleoptera	Carabidae	Nebria germarii germarii Heer, 1837	1		es	*1
Coleoptera	Carabidae	Nebria germarii norica Schauberger, 1927	R		es	*1
Coleoptera	Carabidae	Nebria hellwigii (Panzer, 1803)	R		es	*1
Coleoptera	Carabidae	Nebria jockischii Sturm, 1815	3		ss	*1
Coleoptera	Carabidae	Nebria livida (Linnaeus, 1758)	3		s	*1
Coleoptera	Carabidae	Nebria picicornis (Fabricius, 1792)	3		s	*1
Coleoptera	Carabidae	Nebria praegensis Huber & Molenda, 2004	R		es	*1
Coleoptera	Carabidae	Nebria rufescens (Stroem, 1768)	*		ss	*1

Order	Family	Species	K	L	P	S
Coleoptera	Carabidae	Nebria salina Fairmaire & Laboulbène, 1854	*		mh	*1
Coleoptera	Carabidae	Notiophilus aestuans Dejean, 1826	V		mh	*1
Coleoptera	Carabidae	Notiophilus aquaticus (Linnaeus, 1758)	*		mh	*1
Coleoptera	Carabidae	Notiophilus biguttatus (Fabricius, 1779)	*		sh	*1
Coleoptera	Carabidae	Notiophilus germinyi Fauvel, 1863	*		mh	*1
Coleoptera	Carabidae	Notiophilus laticollis Chaudoir, 1850	0	1956	ex	*1
Coleoptera	Carabidae	Notiophilus palustris (Duftschmid, 1812)	*		h	*1
Coleoptera	Carabidae	Notiophilus quadripunctatus Dejean, 1826	R		es	*1
Coleoptera	Carabidae	Notiophilus rufipes Curtis, 1829	*		s	*1
Coleoptera	Carabidae	Notiophilus substriatus Waterhouse, 1833	*		s	*1
Coleoptera	Carabidae	Ocys harpaloides (Audinet-Serville, 1821)	3		s	*1
Coleoptera	Carabidae	Ocys quinquestriatus (Gyllenhal, 1810)	3		s	*1
Coleoptera	Carabidae	Odacantha melanura (Linnaeus, 1767)	*		mh	*1
Coleoptera	Carabidae	Olisthopus rotundatus (Paykull, 1790)	V		mh	*1
Coleoptera	Carabidae	Olisthopus sturmii (Duftschmid, 1812)	1		es	*1
Coleoptera	Carabidae	Omoglymmius germari (Ganglbauer, 1891)	0	1840	ex	*1
Coleoptera	Carabidae	Omophron limbatum (Fabricius, 1777)	V		mh	*1
Coleoptera	Carabidae	Oodes gracilis A. & J.B. Villa, 1833	3		ss	*1
Coleoptera	Carabidae	Oodes helopioides (Fabricius, 1792)	*		h	*1
Coleoptera	Carabidae	Ophonus ardosiacus (Lutshnik, 1922)	*		s	*1
Coleoptera	Carabidae	Ophonus azureus (Fabricius, 1775)	*		mh	*1
Coleoptera	Carabidae	Ophonus brevicollis (Audinet-Serville, 1821)	R		es	*1
Coleoptera	Carabidae	Ophonus cordatus (Duftschmid, 1812)	3		s	*1
Coleoptera	Carabidae	Ophonus diffinis (Dejean, 1829)	1		es	*1
Coleoptera	Carabidae	Ophonus laticollis Mannerheim, 1825	*		mh	*1
Coleoptera	Carabidae	Ophonus melletii (Heer, 1837)	V		s	*1
Coleoptera	Carabidae	Ophonus parallelus (Dejean, 1829)	2		es	*1
Coleoptera	Carabidae	Ophonus puncticeps Stephens, 1828	*		mh	*1
Coleoptera	Carabidae	Ophonus puncticollis (Paykull, 1798)	V		s	*1
Coleoptera	Carabidae	Ophonus rufibarbis (Fabricius, 1792)	*		sh	*1
Coleoptera	Carabidae	Ophonus rupicola (Sturm, 1818)	V		s	*1
Coleoptera	Carabidae	Ophonus sabulicola (Panzer, 1796)	2		ss	*1
Coleoptera	Carabidae	Ophonus schaubergerianus (Puel, 1937)	V		s	*1
Coleoptera	Carabidae	Ophonus stictus Stephens, 1828	2		ss	*1
Coleoptera	Carabidae	Ophonus subsinuatus Rey, 1886	R		es	*1
Coleoptera	Carabidae	Oreonebria austriaca (Ganglbauer, 1889)	R		es	*1
Coleoptera	Carabidae	Oreonebria boschi Winkler, 1949	R		es	*1
Coleoptera	Carabidae	Oreonebria bremii (Germar, 1831)	1		es	*1
Coleoptera	Carabidae	Oreonebria castanea castanea (Bonelli, 1810)	R		es	*1
Coleoptera	Carabidae	Oreonebria castanea raetzeri (Bänninger, 1932)	R		es	*1
Coleoptera	Carabidae	Oreonebria picea (Dejean, 1826)	R		es	*1
Coleoptera	Carabidae	Oxypselaphus obscurus (Herbst, 1784)	*		h	*1
Coleoptera	Carabidae	Panagaeus bipustulatus (Fabricius, 1775)	*		mh	*1
Coleoptera	Carabidae	Panagaeus cruxmajor (Linnaeus, 1758)	*		mh	*1
Coleoptera	Carabidae	Paradromius linearis (Olivier, 1795)	*		h	*1
Coleoptera	Carabidae	Paradromius longiceps (Dejean, 1826)	3		s	*1
Coleoptera	Carabidae	Paranchus albipes (Fabricius, 1796)	*		h	*1
Coleoptera	Carabidae	Parophonus maculicornis (Duftschmid, 1812)	*		s	*1
Coleoptera	Carabidae	Patrobus assimilis Chaudoir, 1844	1		ss	*1
Coleoptera	Carabidae	Patrobus atrorufus (Stroem, 1768)	*		h	*1
Coleoptera	Carabidae	Patrobus australis J. Sahlberg, 1875	3		s	*1
Coleoptera	Carabidae	Perigona nigriceps (Dejean, 1831)	*		ss	*1
Coleoptera	Carabidae	Perileptus areolatus (Creutzer, 1799)	2		ss	*1
Coleoptera	Carabidae	Philorhizus crucifer (Lucas, 1846)	R		es	*1
Coleoptera	Carabidae	Philorhizus melanocephalus (Dejean, 1825)	*		mh	*1
Coleoptera	Carabidae	Philorhizus notatus (Stephens, 1827)	*		mh	*1
Coleoptera	Carabidae	Philorhizus quadrisignatus (Dejean, 1825)	D		ss	*1
Coleoptera	Carabidae	Philorhizus sigma (Rossi, 1790)	*		h	*1
Coleoptera	Carabidae	Platynus livens (Gyllenhal, 1810)	3		s	*1
Coleoptera	Carabidae	Platynus scrobiculatus (Fabricius, 1801)	2		es	*1
Coleoptera	Carabidae	Poecilus cupreus (Linnaeus, 1758)	*		sh	*1
Coleoptera	Carabidae	Poecilus kugelanni (Panzer, 1797)	1		ss	*1
Coleoptera	Carabidae	Poecilus lepidus (Leske, 1785)	*		mh	*1
Coleoptera	Carabidae	Poecilus punctulatus (Schaller, 1783)	3		ss	*1
Coleoptera	Carabidae	Poecilus sericeus Fischer von Waldheim, 1824	0	1945	ex	*1
Coleoptera	Carabidae	Poecilus versicolor (Sturm, 1824)	*		sh	*1
Coleoptera	Carabidae	Pogonus chalceus (Marsham, 1802)	V		s	*1
Coleoptera	Carabidae	Pogonus iridipennis Nicolai, 1822	1		es	*1
Coleoptera	Carabidae	Pogonus luridipennis (Germar, 1823)	2		ss	*1
Coleoptera	Carabidae	Polistichus connexus (Geoffroy, 1785)	2		es	*1
Coleoptera	Carabidae	Porotachys bisulcatus (Nicolai, 1822)	*		s	*1
Coleoptera	Carabidae	Pterostichus aethiops (Panzer, 1796)	*		s	*1
Coleoptera	Carabidae	Pterostichus anthracinus (Illiger, 1798)	*		h	*1
Coleoptera	Carabidae	Pterostichus aterrimus (Herbst, 1784)	1		ss	*1
Coleoptera	Carabidae	Pterostichus burmeisteri burmeisteri Heer, 1838	*		mh	*1
Coleoptera	Carabidae	Pterostichus cristatus (Dufour, 1820)	V		s	*1
Coleoptera	Carabidae	Pterostichus cursor (Dejean, 1828)	0	1902	ex	*1
Coleoptera	Carabidae	Pterostichus diligens (Sturm, 1824)	*		h	*1
Coleoptera	Carabidae	Pterostichus fasciatopunctatus (Creutzer, 1799)	*		ss	*1
Coleoptera	Carabidae	Pterostichus gracilis (Dejean, 1828)	V		mh	*1

Order	Family	Species	K	L	P	S
Coleoptera	Carabidae	Pterostichus hagenbachii (Sturm, 1824)	R		es	*1
Coleoptera	Carabidae	Pterostichus jurinei (Panzer, 1803)	R		es	*1
Coleoptera	Carabidae	Pterostichus kokeilii Miller, 1850	R		es	*1
Coleoptera	Carabidae	Pterostichus leonisi Apfelbeck, 1904	D		?	*1
Coleoptera	Carabidae	Pterostichus longicollis (Duftschmid, 1812)	3		ss	*1
Coleoptera	Carabidae	Pterostichus macer (Marsham, 1802)	V		mh	*1
Coleoptera	Carabidae	Pterostichus madidus (Fabricius, 1775)	*		mh	*1
Coleoptera	Carabidae	Pterostichus melanarius (Illiger, 1798)	*		sh	*1
Coleoptera	Carabidae	Pterostichus melas (Creutzer, 1799)	*		mh	*1
Coleoptera	Carabidae	Pterostichus minor (Gyllenhal, 1827)	*		sh	*1
Coleoptera	Carabidae	Pterostichus multipunctatus (Dejean, 1828)	R		es	*1
Coleoptera	Carabidae	Pterostichus negligens (Sturm, 1824)	R		es	*1
Coleoptera	Carabidae	Pterostichus niger (Schaller, 1783)	*		sh	*1
Coleoptera	Carabidae	Pterostichus nigrita (Paykull, 1790)	*		sh	*1
Coleoptera	Carabidae	Pterostichus oblongopunctatus (Fabricius, 1787)	*		sh	*1
Coleoptera	Carabidae	Pterostichus ovoideus (Sturm, 1824)	*		mh	*1
Coleoptera	Carabidae	Pterostichus panzeri panzeri (Panzer, 1803)	*		ss	*1
Coleoptera	Carabidae	Pterostichus pumilio (Dejean, 1828)	*		s	*1
Coleoptera	Carabidae	Pterostichus quadrifoveolatus Letzner, 1852	V		mh	*1
Coleoptera	Carabidae	Pterostichus rhaeticus Heer, 1837	*		mh	*1
Coleoptera	Carabidae	Pterostichus selmanni roubali Schauberger, 1927	R		es	*1
Coleoptera	Carabidae	Pterostichus strenuus (Panzer, 1796)	*		sh	*1
Coleoptera	Carabidae	Pterostichus subsinuatus (Dejean, 1828)	R		es	*1
Coleoptera	Carabidae	Pterostichus taksonyis Csiki, 1930	0	1951	ex	*1
Coleoptera	Carabidae	Pterostichus transversalis (Duftschmid, 1812)	R		es	*1
Coleoptera	Carabidae	Pterostichus unctulatus (Duftschmid, 1812)	*		ss	*1
Coleoptera	Carabidae	Pterostichus vernalis (Panzer, 1796)	*		sh	*1
Coleoptera	Carabidae	Rhysodes sulcatus (Fabricius, 1787)	0	1851	ex	*1
Coleoptera	Carabidae	Sericoda bogemannii (Gyllenhal, 1813)	0	1930	ex	*1
Coleoptera	Carabidae	Sericoda quadripunctata (De Geer, 1774)	R		es	*1
Coleoptera	Carabidae	Sinechostictus decoratus (Duftschmid, 1812)	V		s	*1
Coleoptera	Carabidae	Sinechostictus doderoi (Ganglbauer, 1891)	3		ss	*1
Coleoptera	Carabidae	Sinechostictus elongatus (Dejean, 1831)	V		s	*1
Coleoptera	Carabidae	Sinechostictus inustus (Jacquelin du Val, 1857)	*		s	*1
Coleoptera	Carabidae	Sinechostictus millerianus (Heyden, 1883)	2		ss	*1
Coleoptera	Carabidae	Sinechostictus ruficornis (Sturm, 1825)	3		s	*1
Coleoptera	Carabidae	Sinechostictus stomoides (Dejean, 1831)	V		s	*1
Coleoptera	Carabidae	Sphodrus leucophthalmus (Linnaeus, 1758)	1		es	*1
Coleoptera	Carabidae	Stenolophus mixtus (Herbst, 1784)	*		h	*1
Coleoptera	Carabidae	Stenolophus skrimshiranus Stephens, 1828	3		s	*1
Coleoptera	Carabidae	Stenolophus teutonus (Schrank, 1781)	*		h	*1
Coleoptera	Carabidae	Stomis pumicatus (Panzer, 1796)	*		h	*1
Coleoptera	Carabidae	Syntomus foveatus (Geoffroy, 1785)	*		h	*1
Coleoptera	Carabidae	Syntomus obscuroguttatus (Duftschmid, 1812)	2		es	*1
Coleoptera	Carabidae	Syntomus pallipes (Dejean, 1825)	3		es	*1
Coleoptera	Carabidae	Syntomus truncatellus (Linnaeus, 1760)	*		h	*1
Coleoptera	Carabidae	Synuchus vivalis (Illiger, 1798)	*		mh	*1
Coleoptera	Carabidae	Tachys bistriatus (Duftschmid, 1812)	*		s	*1
Coleoptera	Carabidae	Tachys fulvicollis (Dejean, 1831)	2		ss	*1
Coleoptera	Carabidae	Tachys micros (Fischer von Waldheim, 1828)	V		s	*1
Coleoptera	Carabidae	Tachys scutellaris Stephens, 1828	1		es	*1
Coleoptera	Carabidae	Tachyta nana (Gyllenhal, 1810)	*		mh	*1
Coleoptera	Carabidae	Thalassophilus longicornis (Sturm, 1825)	2		ss	*1
Coleoptera	Carabidae	Trechoblemus micros (Herbst, 1784)	*		mh	*1
Coleoptera	Carabidae	Trechus alpicola Sturm, 1825	R		es	*1
Coleoptera	Carabidae	Trechus austriacus Dejean, 1831	R		es	*1
Coleoptera	Carabidae	Trechus fulvus Dejean, 1831	0	1962	ex	*1
Coleoptera	Carabidae	Trechus glacialis Heer, 1837	*		ss	*1
Coleoptera	Carabidae	Trechus hampei Ganglbauer, 1891	R		es	*1
Coleoptera	Carabidae	Trechus latibuli Jeannel, 1948	R		es	*1
Coleoptera	Carabidae	Trechus montanellus Gemminger & Harold, 1868	R		es	*1
Coleoptera	Carabidae	Trechus nigrinus Putzeys, 1847	R		es	*1
Coleoptera	Carabidae	Trechus obtusus Erichson, 1837	*		h	*1
Coleoptera	Carabidae	Trechus pilisensis Csiki, 1918	*		s	*1
Coleoptera	Carabidae	Trechus pinkeri Ganglbauer, 1891	R		es	*1
Coleoptera	Carabidae	Trechus pulchellus Putzeys, 1845	R		es	*1
Coleoptera	Carabidae	Trechus quadristriatus (Schrank, 1781)	*		sh	*1
Coleoptera	Carabidae	Trechus rotundipennis (Duftschmid, 1812)	R		es	*1
Coleoptera	Carabidae	Trechus rubens (Fabricius, 1792)	V		s	*1
Coleoptera	Carabidae	Trechus splendens Gemminger & Harold, 1868	*		ss	*1
Coleoptera	Carabidae	Trichocellus cognatus (Gyllenhal, 1827)	1		ss	*1
Coleoptera	Carabidae	Trichocellus placidus (Gyllenhal, 1827)	*		mh	*1
Coleoptera	Carabidae	Trichotichnus laevicollis (Duftschmid, 1812)	*		mh	*1
Coleoptera	Carabidae	Trichotichnus nitens (Heer, 1837)	*		mh	*1
Coleoptera	Carabidae	Zabrus tenebrioides (Goeze, 1777)	*		mh	*1
Coleoptera	Cerambycidae	Acanthocinus aedilis (L., 1758)	*		mh	*3
Coleoptera	Cerambycidae	Acanthocinus griseus (F., 1792)	*		s	*3
Coleoptera	Cerambycidae	Acanthocinus reticulatus (Razm., 1789)	2		ss	*3
Coleoptera	Cerambycidae	Acanthoderes clavipes (Schrk., 1781)	3		s	*3
Coleoptera	Cerambycidae	Acmaeops marginatus (F., 1781)	3		ss	*3

Order	Family	Species	K	L	P	S
Coleoptera	Cerambycidae	Acmaeops pratensis (Laich., 1784)	0	1939	ex	*3
Coleoptera	Cerambycidae	Acmaeops septentrionis (Thoms., 1866)	R		es	*3
Coleoptera	Cerambycidae	Agapanthia dahli (Richt., 1821)	0	1898	ex	*3
Coleoptera	Cerambycidae	Agapanthia intermedia Ganglb., 1884	3		s	*3
Coleoptera	Cerambycidae	Agapanthia pannonica Kratochvil, 1985	*		s	*3
Coleoptera	Cerambycidae	Agapanthia villosoviridescens (De Geer, 1775)	*		h	*3
Coleoptera	Cerambycidae	Akimerus schaefferi (Laich., 1784)	1		es	*3
Coleoptera	Cerambycidae	Alosterna tabacicolor (De Geer, 1775)	*		h	*3
Coleoptera	Cerambycidae	Anaesthetis testacea (F., 1781)	V		s	*3
Coleoptera	Cerambycidae	Anaglyptus mysticus (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Anastrangalia dubia (Scop., 1763)	*		mh	*3
Coleoptera	Cerambycidae	Anastrangalia reyi (Heyden, 1889)	*		ss	*3
Coleoptera	Cerambycidae	Anastrangalia sanguinolenta (L., 1761)	*		mh	*3
Coleoptera	Cerambycidae	Anisarthron barbipes (Schrk., 1781)	3		s	*3
Coleoptera	Cerambycidae	Anoplodera rufipes (Schall., 1783)	V		s	*3
Coleoptera	Cerambycidae	Anoplodera sexguttata (F., 1775)	*		mh	*3
Coleoptera	Cerambycidae	Arhopalus ferus (Muls., 1839)	D		?	*3
Coleoptera	Cerambycidae	Arhopalus rusticus (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Aromia moschata (L., 1758)	V		mh	*3
Coleoptera	Cerambycidae	Asemum striatum (L., 1758)	*		mh	*3
Coleoptera	Cerambycidae	Axinopalpis gracilis (Kryn., 1832)	R		es	*3
Coleoptera	Cerambycidae	Brachyta interrogationis (L., 1758)	G		ss	*3
Coleoptera	Cerambycidae	Calamobius filum (Rossi, 1790)	*		s	*3
Coleoptera	Cerambycidae	Callidium aeneum (De Geer, 1775)	*		mh	*3
Coleoptera	Cerambycidae	Callidium coriaceum (Payk., 1800)	*		s	*3
Coleoptera	Cerambycidae	Callidium violaceum (L., 1758)	*		sh	*3
Coleoptera	Cerambycidae	Callimus angulatus (Schrk., 1789)	2		ss	*3
Coleoptera	Cerambycidae	Cerambyx cerdo L., 1758	1		s	*3
Coleoptera	Cerambycidae	Cerambyx scopolii Fuessl., 1775	3		mh	*3
Coleoptera	Cerambycidae	Chlorophorus figuratus (Scop., 1763)	3		s	*3
Coleoptera	Cerambycidae	Chlorophorus herbstii (Brahm, 1790)	G		ss	*3
Coleoptera	Cerambycidae	Chlorophorus sartor (Müll., 1766)	V		s	*3
Coleoptera	Cerambycidae	Chlorophorus varius (Müll., 1766)	G		ss	*3
Coleoptera	Cerambycidae	Clytus arietis (L., 1758)	*		sh	*3
Coleoptera	Cerambycidae	Clytus lama Muls., 1847	*		s	*3
Coleoptera	Cerambycidae	Clytus rhamni Germ., 1817	R		es	*3
Coleoptera	Cerambycidae	Clytus tropicus Panz., 1795	3		s	*3
Coleoptera	Cerambycidae	Cornumutila quadrivittata (Gebl., 1830)	R		es	*3
Coleoptera	Cerambycidae	Cortodera femorata (F., 1787)	*		s	*3
Coleoptera	Cerambycidae	Cortodera humeralis (Schall., 1783)	*		s	*3
Coleoptera	Cerambycidae	Corymbia cordigera (Fuessl., 1775)	0	1900	ex	*3
Coleoptera	Cerambycidae	Corymbia erythroptera (Hagenb., 1822)	1		es	*3
Coleoptera	Cerambycidae	Corymbia fulva (De Geer, 1775)	*		s	*3
Coleoptera	Cerambycidae	Corymbia maculicornis (De Geer, 1775)	*		h	*3
Coleoptera	Cerambycidae	Corymbia rubra (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Corymbia scutellata (F., 1781)	3		s	*3
Coleoptera	Cerambycidae	Cyrtoclytus capra (Germ., 1824)	R		es	*3
Coleoptera	Cerambycidae	Dinoptera collaris (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Dorcadion fuliginator (L., 1758)	3		s	*3
Coleoptera	Cerambycidae	Ergates faber (L., 1767)	3		s	*3
Coleoptera	Cerambycidae	Evodinus clathratus (F., 1792)	*		s	*3
Coleoptera	Cerambycidae	Exocentrus adspersus Muls., 1846	*		mh	*3
Coleoptera	Cerambycidae	Exocentrus lusitanus (L., 1767)	*		mh	*3
Coleoptera	Cerambycidae	Exocentrus punctipennis Muls.& Guillb., 1856	V		s	*3
Coleoptera	Cerambycidae	Gaurotes virginea (L., 1758)	*		mh	*3
Coleoptera	Cerambycidae	Grammoptera abdominalis (Steph., 1831)	*		s	*3
Coleoptera	Cerambycidae	Grammoptera ruficornis (F., 1781)	*		h	*3
Coleoptera	Cerambycidae	Grammoptera ustulata (Schall., 1783)	*		s	*3
Coleoptera	Cerambycidae	Hylotrupes bajulus (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Judolia sexmaculata (L., 1758)	*		ss	*3
Coleoptera	Cerambycidae	Lamia textor (L., 1758)	3		s	*3
Coleoptera	Cerambycidae	Leioderes kollari Redt., 1849	R		es	*3
Coleoptera	Cerambycidae	Leiopus femoratus Fairm., 1859	nb		nb	*3
Coleoptera	Cerambycidae	Leiopus nebulosus (L., 1758)	*		sh	*3
Coleoptera	Cerambycidae	Leiopus punctulatus (Payk., 1800)	R		es	*3
Coleoptera	Cerambycidae	Leptura aethiops (Poda, 1761)	*		mh	*3
Coleoptera	Cerambycidae	Leptura arcuata (Panz., 1793)	3		s	*3
Coleoptera	Cerambycidae	Leptura aurulenta (F., 1792)	3		s	*3
Coleoptera	Cerambycidae	Leptura maculata (Poda, 1761)	*		h	*3
Coleoptera	Cerambycidae	Leptura quadrifasciata (L., 1758)	*		mh	*3
Coleoptera	Cerambycidae	Lepturobosca virens (L., 1758)	3		ss	*3
Coleoptera	Cerambycidae	Megopis scabricornis (Scop., 1763)	1		ss	*3
Coleoptera	Cerambycidae	Menesia bipunctata (Zoubk., 1829)	*		s	*3
Coleoptera	Cerambycidae	Mesosa curculionoides (L., 1761)	2		ss	*3
Coleoptera	Cerambycidae	Mesosa nebulosa (F., 1781)	*		mh	*3
Coleoptera	Cerambycidae	Molorchus marmottani Bris., 1863	R		es	*3
Coleoptera	Cerambycidae	Molorchus minor (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Molorchus umbellatarum (Schreb., 1759)	*		mh	*3
Coleoptera	Cerambycidae	Monochamus galloprovincialis (Ol., 1795)	*		mh	*3
Coleoptera	Cerambycidae	Monochamus saltuarius Gebl., 1830	R		es	*3

Order	Family	Species	K	L	P	S
Coleoptera	Cerambycidae	Monochamus sartor (F., 1787)	*		ss	*3
Coleoptera	Cerambycidae	Monochamus sutor (L., 1758)	*		s	*3
Coleoptera	Cerambycidae	Necydalis major L., 1758	2		ss	*3
Coleoptera	Cerambycidae	Necydalis ulmi Chevr., 1838	1		es	*3
Coleoptera	Cerambycidae	Neoclytus acuminatus F., 1775	nb		nb	*3
Coleoptera	Cerambycidae	Nivellia sanguinosa (Gyll., 1827)	R		es	*3
Coleoptera	Cerambycidae	Nothorhina punctata (F., 1798)	2		es	*3
Coleoptera	Cerambycidae	Oberea erythrocephala (Schrk., 1776)	2		ss	*3
Coleoptera	Cerambycidae	Oberea linearis (L., 1761)	*		mh	*3
Coleoptera	Cerambycidae	Oberea oculata (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Oberea pupillata (Gyll., 1817)	*		s	*3
Coleoptera	Cerambycidae	Obrium brunneum (F., 1792)	*		h	*3
Coleoptera	Cerambycidae	Obrium cantharinum (L., 1767)	V		s	*3
Coleoptera	Cerambycidae	Oplosia fennica (Payk., 1800)	3		ss	*3
Coleoptera	Cerambycidae	Oxymirus cursor (L., 1758)	*		mh	*3
Coleoptera	Cerambycidae	Pachyta lamed (L., 1758)	R		es	*3
Coleoptera	Cerambycidae	Pachyta quadrimaculata (L., 1758)	*		s	*3
Coleoptera	Cerambycidae	Pachytodes cerambyciformis (Schrk., 1781)	*		h	*3
Coleoptera	Cerambycidae	Pachytodes erraticus (Dalm., 1817)	R		es	*3
Coleoptera	Cerambycidae	Parandra brunnea (F., 1798)	nb		nb	*3
Coleoptera	Cerambycidae	Parmena balteus (L., 1767)	R		es	*3
Coleoptera	Cerambycidae	Pedostrangalia pubescens (F., 1787)	3		ss	*3
Coleoptera	Cerambycidae	Pedostrangalia revestita (L., 1767)	3		s	*3
Coleoptera	Cerambycidae	Phymatodes alni (L., 1767)	*		mh	*3
Coleoptera	Cerambycidae	Phymatodes glabratus (Charp., 1825)	3		s	*3
Coleoptera	Cerambycidae	Phymatodes pusillus (F., 1787)	*		s	*3
Coleoptera	Cerambycidae	Phymatodes rufipes (F., 1776)	V		s	*3
Coleoptera	Cerambycidae	Phymatodes testaceus (L., 1758)	*		sh	*3
Coleoptera	Cerambycidae	Phytoecia coerulescens (Scop., 1763)	*		mh	*3
Coleoptera	Cerambycidae	Phytoecia cylindrica (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Phytoecia icterica (Schall., 1783)	3		s	*3
Coleoptera	Cerambycidae	Phytoecia nigricornis (F., 1781)	V		mh	*3
Coleoptera	Cerambycidae	Phytoecia nigripes (Voet, 1778)	*		mh	*3
Coleoptera	Cerambycidae	Phytoecia pustulata (Schrk., 1776)	3		ss	*3
Coleoptera	Cerambycidae	Phytoecia rubropunctata (Goeze, 1777)	0	1920	ex	*3
Coleoptera	Cerambycidae	Phytoecia uncinata (Redt., 1842)	1		es	*3
Coleoptera	Cerambycidae	Phytoecia virgula (Charp., 1825)	2		es	*3
Coleoptera	Cerambycidae	Pidonia lurida (F., 1792)	*		mh	*3
Coleoptera	Cerambycidae	Plagiogonus arenarius (Olivier, 1789)	3		s	*3
Coleoptera	Cerambycidae	Plagionotus arcuatus (L., 1758)	V		mh	*3
Coleoptera	Cerambycidae	Plagionotus detritus (L., 1758)	V		s	*3
Coleoptera	Cerambycidae	Pogonocherus decoratus Fairm., 1855	*		s	*3
Coleoptera	Cerambycidae	Pogonocherus fasciculatus (De Geer, 1775)	*		h	*3
Coleoptera	Cerambycidae	Pogonocherus hispidulus (Pill. & Mitt., 1783)	*		h	*3
Coleoptera	Cerambycidae	Pogonocherus hispidus (L., 1758)	*		sh	*3
Coleoptera	Cerambycidae	Pogonocherus ovatus (Goeze, 1777)	V		s	*3
Coleoptera	Cerambycidae	Prionus coriarius (L., 1758)	*		mh	*3
Coleoptera	Cerambycidae	Pronocera angusta (Kriechb., 1844)	D		?	*3
Coleoptera	Cerambycidae	Pseudosphegestes cinereus (Cast. & Gory, 1825)	1		es	*3
Coleoptera	Cerambycidae	Pseudovadonia livida (F., 1776)	*		mh	*3
Coleoptera	Cerambycidae	Purpuricenus kaehleri (L., 1758)	1		es	*3
Coleoptera	Cerambycidae	Pyrrhidium sanguineum (L., 1758)	*		mh	*3
Coleoptera	Cerambycidae	Rhagium bifasciatum F., 1775	*		mh	*3
Coleoptera	Cerambycidae	Rhagium inquisitor (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Rhagium mordax (De Geer, 1775)	*		h	*3
Coleoptera	Cerambycidae	Rhagium sycophanta (Schrk., 1781)	3		s	*3
Coleoptera	Cerambycidae	Rhamnusium bicolor (Schrk., 1781)	2		s	*3
Coleoptera	Cerambycidae	Ropalopus clavipes (F., 1775)	1		es	*3
Coleoptera	Cerambycidae	Ropalopus femoratus (L., 1758)	*		s	*3
Coleoptera	Cerambycidae	Ropalopus spinicornis (Ab., 1869)	G		ss	*3
Coleoptera	Cerambycidae	Ropalopus ungaricus (Hbst., 1784)	3		ss	*3
Coleoptera	Cerambycidae	Rosalia alpina (L., 1758)	3		ss	*3
Coleoptera	Cerambycidae	Saperda carcharias (L., 1758)	*		mh	*3
Coleoptera	Cerambycidae	Saperda octopunctata (Scop., 1772)	2		ss	*3
Coleoptera	Cerambycidae	Saperda perforata (Pall., 1773)	3		ss	*3
Coleoptera	Cerambycidae	Saperda populnea (L., 1758)	*		sh	*3
Coleoptera	Cerambycidae	Saperda punctata (L., 1767)	1		es	*3
Coleoptera	Cerambycidae	Saperda scalaris (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Saperda similis Laich., 1784	R		es	*3
Coleoptera	Cerambycidae	Saphanus piceus (Laich., 1784)	V		ss	*3
Coleoptera	Cerambycidae	Semanotus undatus (L., 1758)	*		s	*3
Coleoptera	Cerambycidae	Spondylis buprestoides (L., 1758)	*		mh	*3
Coleoptera	Cerambycidae	Stenocorus meridianus (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Stenocorus quercus (Götz, 1783)	3		s	*3
Coleoptera	Cerambycidae	Stenopterus rufus (L., 1767)	*		mh	*3
Coleoptera	Cerambycidae	Stenostola dubia (Laich., 1784)	*		mh	*3
Coleoptera	Cerambycidae	Stenostola ferrea (Schrk., 1776)	*		s	*3
Coleoptera	Cerambycidae	Stenurella bifasciata (Müll., 1776)	*		mh	*3
Coleoptera	Cerambycidae	Stenurella melanura (L., 1758)	*		sh	*3
Coleoptera	Cerambycidae	Stenurella nigra (L., 1758)	*		h	*3

Order	Family	Species	K	L	P	S
Coleoptera	Cerambycidae	Stenurella septempunctata (F., 1792)	R		es	*3
Coleoptera	Cerambycidae	Strangalia attenuata (L., 1758)	*		mh	*3
Coleoptera	Cerambycidae	Tetropium castaneum (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Tetropium fuscum (F., 1758)	*		mh	*3
Coleoptera	Cerambycidae	Tetropium gabrieli Weise, 1905	*		h	*3
Coleoptera	Cerambycidae	Tetrops praeustus (L., 1758)	*		h	*3
Coleoptera	Cerambycidae	Tetrops starkii Chevr., 1859	*		s	*3
Coleoptera	Cerambycidae	Tragosoma depsarium (L., 1767)	3		ss	*3
Coleoptera	Cerambycidae	Trichoferus pallidus (Ol., 1790)	3		ss	*3
Coleoptera	Cerambycidae	Xylotrechus antilope (Schönh., 1817)	*		mh	*3
Coleoptera	Cerambycidae	Xylotrechus arvicola (Ol., 1795)	3		s	*3
Coleoptera	Cerambycidae	Xylotrechus pantherinus (Sav., 1825)	1		es	*3
Coleoptera	Cerambycidae	Xylotrechus rusticus (Hampe, 1870)	*		s	*3
Coleoptera	Cerophytidae	Cerophytum elateroides (Latr., 1804)	2		ss	*3
Coleoptera	Cerylonidae	Cerylon deplanatum Gyll., 1827	V		s	*3
Coleoptera	Cerylonidae	Cerylon fagi Bris., 1867	*		mh	*3
Coleoptera	Cerylonidae	Cerylon ferrugineum Steph., 1830	*		h	*3
Coleoptera	Cerylonidae	Cerylon histeroides (F., 1792)	*		h	*3
Coleoptera	Cerylonidae	Cerylon impressum Er., 1845	*		s	*3
Coleoptera	Cerylonidae	Philothermus evanescens Rtt., 1876	R		es	*3
Coleoptera	Cholevidae	Anemadus strigosus (Kr., 1852)	R		es	*3
Coleoptera	Cholevidae	Catops chrysomeloides (Panz., 1798)	*		mh	*3
Coleoptera	Cholevidae	Catops coracinus Kelln., 1846	*		h	*3
Coleoptera	Cholevidae	Catops fuliginosus Er., 1837	*		sh	*3
Coleoptera	Cholevidae	Catops fuscus (Panz., 1794)	*		h	*3
Coleoptera	Cholevidae	Catops grandicollis Er., 1837	*		s	*3
Coleoptera	Cholevidae	Catops joffrei Dev., 1927	0	1940	ex	*3
Coleoptera	Cholevidae	Catops kirbyi (Spence, 1815)	*		h	*3
Coleoptera	Cholevidae	Catops longulus Kelln.,1846	*		s	*3
Coleoptera	Cholevidae	Catops mariei Jeann., 1934	0	1949	ex	*3
Coleoptera	Cholevidae	Catops morio (F., 1792)	*		mh	*3
Coleoptera	Cholevidae	Catops neglectus Kr., 1852	*		h	*3
Coleoptera	Cholevidae	Catops nigricans (Spence, 1815)	*		h	*3
Coleoptera	Cholevidae	Catops nigricantoides Rtt., 1901	*		s	*3
Coleoptera	Cholevidae	Catops nigriclavis Gerh., 1900	*		mh	*3
Coleoptera	Cholevidae	Catops nitidicollis Kr., 1856	R		es	*3
Coleoptera	Cholevidae	Catops picipes (F., 1792)	*		sh	*3
Coleoptera	Cholevidae	Catops subfuscus Kelln., 1846	*		h	*3
Coleoptera	Cholevidae	Catops tristis (Panz., 1793)	*		sh	*3
Coleoptera	Cholevidae	Catops ventricosus (Weise, 1877)	R		es	*3
Coleoptera	Cholevidae	Choleva agilis (Ill., 1798)	*		mh	*3
Coleoptera	Cholevidae	Choleva angustata (F., 1781)	*		mh	*3
Coleoptera	Cholevidae	Choleva bicolor Jeann., 1923	*		s	*3
Coleoptera	Cholevidae	Choleva cisteloides (Frön., 1799)	*		mh	*3
Coleoptera	Cholevidae	Choleva elongata (Payk., 1798)	*		mh	*3
Coleoptera	Cholevidae	Choleva fagniezi Jeann., 1922	*		s	*3
Coleoptera	Cholevidae	Choleva glauca Britt., 1918	*		mh	*3
Coleoptera	Cholevidae	Choleva jeanneli Britt., 1922	*		s	*3
Coleoptera	Cholevidae	Choleva lederiana Rtt., 1902	R		es	*3
Coleoptera	Cholevidae	Choleva nivalis (Kr., 1856)	*		ss	*3
Coleoptera	Cholevidae	Choleva oblonga Latr., 1807	*		mh	*3
Coleoptera	Cholevidae	Choleva paskoviensis Rtt., 1913	*		s	*3
Coleoptera	Cholevidae	Choleva reitteri Petri, 1915	*		ss	*3
Coleoptera	Cholevidae	Choleva spadicea (Sturm, 1839)	*		s	*3
Coleoptera	Cholevidae	Choleva sturmii Bris., 1863	R		es	*3
Coleoptera	Cholevidae	Dreposcia umbrina (Er., 1837)	2		ss	*3
Coleoptera	Cholevidae	Fissocatops westi (Krog., 1931)	*		s	*3
Coleoptera	Cholevidae	Nargus anisotomoides (Spence, 1815)	*		sh	*3
Coleoptera	Cholevidae	Nargus brunneus (Sturm, 1839)	*		s	*3
Coleoptera	Cholevidae	Nargus velox (Spence, 1815)	*		h	*3
Coleoptera	Cholevidae	Nargus wilkini (Spence, 1815)	*		sh	*3
Coleoptera	Cholevidae	Nemadus colonoides (Kr., 1851)	*		mh	*3
Coleoptera	Cholevidae	Parabathyscia wollastoni (Jans., 1857)	nb		nb	*3
Coleoptera	Cholevidae	Ptomaphagus sericatus (Chaud., 1845)	*		sh	*3
Coleoptera	Cholevidae	Ptomaphagus subvillosus (Goeze, 1777)	*		h	*3
Coleoptera	Cholevidae	Ptomaphagus varicornis (Rosh., 1847)	*		h	*3
Coleoptera	Cholevidae	Sciodrepoides alpestris Jeann., 1934	R		es	*3
Coleoptera	Cholevidae	Sciodrepoides fumatus (Spence, 1915)	*		h	*3
Coleoptera	Cholevidae	Sciodrepoides watsoni (Spence, 1815)	*		sh	*3
Coleoptera	Chrysomelidae	Agelastica alni (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Altica aenescens Weise, 1888	*		mh	*3
Coleoptera	Chrysomelidae	Altica ampelophaga Guér., 1858	D		ss	*3
Coleoptera	Chrysomelidae	Altica brevicollis Foudr., 1860	*		s	*3
Coleoptera	Chrysomelidae	Altica carduorum (Guér., 1858)	D		ss	*3
Coleoptera	Chrysomelidae	Altica carinthiaca Weise, 1888	3		s	*3
Coleoptera	Chrysomelidae	Altica ericeti (All., 1859)	1		es	*3
Coleoptera	Chrysomelidae	Altica helianthemi Duft., 1825	V		s	*3
Coleoptera	Chrysomelidae	Altica impressicollis (Reiche, 1862)	*		s	*3
Coleoptera	Chrysomelidae	Altica longicollis (All., 1860)	2		ss	*3
Coleoptera	Chrysomelidae	Altica lythri Aubé, 1843	*		h	*3

Order	Family	Species	K	L	P	S
Coleoptera	Chrysomelidae	Altica oleracea (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Altica palustris Weise, 1888	*		mh	*3
Coleoptera	Chrysomelidae	Altica quercetorum Foudr., 1860	*		mh	*3
Coleoptera	Chrysomelidae	Altica tamaricis Schrk., 1785	3		s	*3
Coleoptera	Chrysomelidae	Aphthona abdominalis (Duft., 1825)	2		ss	*3
Coleoptera	Chrysomelidae	Aphthona aeneomicans All., 1875	0	1950	ex	*3
Coleoptera	Chrysomelidae	Aphthona atrocoerulea (Steph., 1831)	*		s	*3
Coleoptera	Chrysomelidae	Aphthona atrovirens (Foerst., 1849)	3		s	*3
Coleoptera	Chrysomelidae	Aphthona cyparissiae (Koch, 1803)	*		mh	*3
Coleoptera	Chrysomelidae	Aphthona czwalinai Weise, 1888	0	1950	ex	*3
Coleoptera	Chrysomelidae	Aphthona delicatula Foudr., 1860	2		ss	*3
Coleoptera	Chrysomelidae	Aphthona erichsoni (Zett., 1838)	0	1955	ex	*3
Coleoptera	Chrysomelidae	Aphthona euphorbiae (Schrk., 1781)	*		h	*3
Coleoptera	Chrysomelidae	Aphthona herbigrada (Curt., 1837)	*		s	*3
Coleoptera	Chrysomelidae	Aphthona illigeri Bedel, 1898	2		ss	*3
Coleoptera	Chrysomelidae	Aphthona lutescens (Gyll., 1808)	*		mh	*3
Coleoptera	Chrysomelidae	Aphthona nigriscutis Foudr., 1860	2		ss	*3
Coleoptera	Chrysomelidae	Aphthona nonstriata (Goeze, 1777)	*		mh	*3
Coleoptera	Chrysomelidae	Aphthona ovata Foudr., 1860	3		s	*3
Coleoptera	Chrysomelidae	Aphthona pallida (Bach, 1856)	3		s	*3
Coleoptera	Chrysomelidae	Aphthona pygmaea (Kutsch., 1861)	*		s	*3
Coleoptera	Chrysomelidae	Aphthona venustula (Kutsch., 1861)	*		h	*3
Coleoptera	Chrysomelidae	Aphthona violacea (Koch, 1803)	2		s	*3
Coleoptera	Chrysomelidae	Apteropeda globosa (Ill., 1794)	*		s	*3
Coleoptera	Chrysomelidae	Apteropeda orbiculata (Marsh., 1802)	*		mh	*3
Coleoptera	Chrysomelidae	Apteropeda splendida All., 1860	*		s	*3
Coleoptera	Chrysomelidae	Argopus ahrensi (Germ., 1817)	1		es	*3
Coleoptera	Chrysomelidae	Batophila aerata (Marsh., 1802)	3		s	*3
Coleoptera	Chrysomelidae	Batophila rubi (Payk., 1799)	*		h	*3
Coleoptera	Chrysomelidae	Bromius obscurus (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Calomicrus circumfusus (Marsh., 1802)	3		s	*3
Coleoptera	Chrysomelidae	Calomicrus pinicola (Duft., 1825)	*		mh	*3
Coleoptera	Chrysomelidae	Cassida atrata F., 1787	1		es	*3
Coleoptera	Chrysomelidae	Cassida azurea F., 1801	1		es	*3
Coleoptera	Chrysomelidae	Cassida bergeali Bordy, 1995	2		ss	*3
Coleoptera	Chrysomelidae	Cassida berolinensis Suffr., 1844	D		?	*3
Coleoptera	Chrysomelidae	Cassida canaliculata Laich., 1781	3		s	*3
Coleoptera	Chrysomelidae	Cassida denticollis Suffr., 1844	*		mh	*3
Coleoptera	Chrysomelidae	Cassida ferruginea Goeze, 1777	2		ss	*3
Coleoptera	Chrysomelidae	Cassida flaveola Thunb., 1794	*		mh	*3
Coleoptera	Chrysomelidae	Cassida hemisphaerica Hbst., 1799	*		s	*3
Coleoptera	Chrysomelidae	Cassida leucanthemi Bordy, 1995	D		s	*3
Coleoptera	Chrysomelidae	Cassida margaritacea Schall., 1783	3		s	*3
Coleoptera	Chrysomelidae	Cassida murraea L., 1767	*		s	*3
Coleoptera	Chrysomelidae	Cassida nebulosa L., 1758	*		mh	*3
Coleoptera	Chrysomelidae	Cassida nobilis L., 1758	*		mh	*3
Coleoptera	Chrysomelidae	Cassida pannonica Suffr., 1844	2		ss	*3
Coleoptera	Chrysomelidae	Cassida panzeri Weise, 1907	2		ss	*3
Coleoptera	Chrysomelidae	Cassida prasina Ill., 1798	V		s	*3
Coleoptera	Chrysomelidae	Cassida rubiginosa Müll., 1776	*		h	*3
Coleoptera	Chrysomelidae	Cassida rufovirens Suffr., 1844	3		s	*3
Coleoptera	Chrysomelidae	Cassida sanguinolenta Müll., 1776	*		s	*3
Coleoptera	Chrysomelidae	Cassida sanguinosa Suffr., 1844	3		s	*3
Coleoptera	Chrysomelidae	Cassida seladonia Gyll., 1827	1		ss	*3
Coleoptera	Chrysomelidae	Cassida stigmatica Suffr., 1844	*		mh	*3
Coleoptera	Chrysomelidae	Cassida subreticulata Suffr., 1844	D		ss	*3
Coleoptera	Chrysomelidae	Cassida vibex L., 1767	*		h	*3
Coleoptera	Chrysomelidae	Cassida viridis L., 1758	*		h	*3
Coleoptera	Chrysomelidae	Cassida vittata Vill., 1789	*		mh	*3
Coleoptera	Chrysomelidae	Chaetocnema aerosa (Letzn., 1846)	3		s	*3
Coleoptera	Chrysomelidae	Chaetocnema angustula (Rosh., 1847)	2		ss	*3
Coleoptera	Chrysomelidae	Chaetocnema arida Foudr., 1860	3		s	*3
Coleoptera	Chrysomelidae	Chaetocnema aridula (Gyll., 1827)	*		mh	*3
Coleoptera	Chrysomelidae	Chaetocnema chlorophana (Duft., 1825)	2		ss	*3
Coleoptera	Chrysomelidae	Chaetocnema compressa (Letzn., 1846)	3		s	*3
Coleoptera	Chrysomelidae	Chaetocnema concinna (Marsh., 1802)	*		sh	*3
Coleoptera	Chrysomelidae	Chaetocnema confusa (Boh., 1851)	3		s	*3
Coleoptera	Chrysomelidae	Chaetocnema hortensis (Fourcr., 1785)	*		sh	*3
Coleoptera	Chrysomelidae	Chaetocnema mannerheimii (Gyll., 1827)	3		mh	*3
Coleoptera	Chrysomelidae	Chaetocnema obesa (Boield., 1859)	2		ss	*3
Coleoptera	Chrysomelidae	Chaetocnema picipes Steph., 1831	*		mh	*3
Coleoptera	Chrysomelidae	Chaetocnema procerula (Rosh., 1856)	2		ss	*3
Coleoptera	Chrysomelidae	Chaetocnema sahlbergii (Gyll., 1827)	3		s	*3
Coleoptera	Chrysomelidae	Chaetocnema semicoerulea (Koch, 1803)	2		ss	*3
Coleoptera	Chrysomelidae	Chaetocnema subcoerulea (Kutsch., 1864)	3		s	*3
Coleoptera	Chrysomelidae	Chaetocnema tibialis (Ill., 1807)	D		?	*3
Coleoptera	Chrysomelidae	Cheilotoma musciformis (Goeze, 1777)	2		ss	*3
Coleoptera	Chrysomelidae	Chrysochus asclepiadeus (Pall., 1773)	2		s	*3
Coleoptera	Chrysomelidae	Chrysolina analis (L., 1767)	3		s	*3
Coleoptera	Chrysomelidae	Chrysolina aurichalcea (Mannh., 1825)	2		ss	*3

Order	Family	Species	K	L	P	S
Coleoptera	Chrysomelidae	Chrysolina brunsvicensis (Grav., 1807)	3		s	*3
Coleoptera	Chrysomelidae	Chrysolina carnifex (Suffr., 1851)	2		s	*3
Coleoptera	Chrysomelidae	Chrysolina cerealis (L., 1767)	3		s	*3
Coleoptera	Chrysomelidae	Chrysolina coerulans (Scriba, 1791)	*		h	*3
Coleoptera	Chrysomelidae	Chrysolina didymata (Scriba, 1791)	0	1950	ex	*3
Coleoptera	Chrysomelidae	Chrysolina fastuosa (Scop., 1763)	*		h	*3
Coleoptera	Chrysomelidae	Chrysolina fuliginosa (Ol., 1807)	3		s	*3
Coleoptera	Chrysomelidae	Chrysolina geminata (Payk., 1799)	*		mh	*3
Coleoptera	Chrysomelidae	Chrysolina globosa (Panz., 1805)	1		es	*3
Coleoptera	Chrysomelidae	Chrysolina graminis (L., 1758)	V		s	*3
Coleoptera	Chrysomelidae	Chrysolina gypsophilae (Küst., 1845)	3		s	*3
Coleoptera	Chrysomelidae	Chrysolina haemoptera (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Chrysolina herbacea (Duft., 1825)	*		h	*3
Coleoptera	Chrysomelidae	Chrysolina hyperici (Forst., 1771)	*		mh	*3
Coleoptera	Chrysomelidae	Chrysolina kuesteri (Hellies., 1911)	V		mh	*3
Coleoptera	Chrysomelidae	Chrysolina latecincta (Dem., 1896)	0	1955	ex	*3
Coleoptera	Chrysomelidae	Chrysolina limbata (Suffr., 1851)	2		ss	*3
Coleoptera	Chrysomelidae	Chrysolina marcasitica (Germ., 1824)	0	1950	ex	*3
Coleoptera	Chrysomelidae	Chrysolina marginata (L., 1758)	V		s	*3
Coleoptera	Chrysomelidae	Chrysolina oricalcia (Müll., 1776)	*		mh	*3
Coleoptera	Chrysomelidae	Chrysolina polita (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Chrysolina pseudolurida (Roub., 1917)	1		ss	*3
Coleoptera	Chrysomelidae	Chrysolina purpurascens (Germ., 1817)	3		ss	*3
Coleoptera	Chrysomelidae	Chrysolina quadrigemina (Suffr., 1851)	0	1950	ex	*3
Coleoptera	Chrysomelidae	Chrysolina rufa (Duft., 1825)	2		ss	*3
Coleoptera	Chrysomelidae	Chrysolina rufoaenea (Suffr., 1851)	2		ss	*3
Coleoptera	Chrysomelidae	Chrysolina sanguinolenta (L., 1758)	V		mh	*3
Coleoptera	Chrysomelidae	Chrysolina staphylaea (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Chrysolina sturmi (Bedel, 1892)	*		mh	*3
Coleoptera	Chrysomelidae	Chrysolina umbratilis (Weise, 1887)	1		es	*3
Coleoptera	Chrysomelidae	Chrysolina varians (Schall., 1783)	*		h	*3
Coleoptera	Chrysomelidae	Chrysomela collaris L., 1758	2		s	*3
Coleoptera	Chrysomelidae	Chrysomela cuprea F., 1775	*		mh	*3
Coleoptera	Chrysomelidae	Chrysomela lapponica L., 1758	3		s	*3
Coleoptera	Chrysomelidae	Chrysomela populi L., 1758	*		h	*3
Coleoptera	Chrysomelidae	Chrysomela saliceti (Weise, 1884)	V		mh	*3
Coleoptera	Chrysomelidae	Chrysomela tremula F., 1787	*		s	*3
Coleoptera	Chrysomelidae	Chrysomela vigintipunctata Scop., 1763	*		mh	*3
Coleoptera	Chrysomelidae	Clytra laeviuscula Ratz., 1837	*		mh	*3
Coleoptera	Chrysomelidae	Clytra quadripunctata (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Colaphellus sophiae (Schall., 1783)	*		mh	*3
Coleoptera	Chrysomelidae	Coptocephala linnaeana Petitpierre & A.-Zarazaga, 2000	0	1900	ex	*3
Coleoptera	Chrysomelidae	Coptocephala rubicunda (Laich., 1781)	V		mh	*3
Coleoptera	Chrysomelidae	Coptocephala scopolina (L., 1767)	1		es	*3
Coleoptera	Chrysomelidae	Coptocephala unifasciata (Scop., 1763)	3		s	*3
Coleoptera	Chrysomelidae	Crepidodera aurata (Marsh., 1802)	*		sh	*3
Coleoptera	Chrysomelidae	Crepidodera aurea (Fourcr., 1785)	*		sh	*3
Coleoptera	Chrysomelidae	Crepidodera fulvicornis (F., 1792)	*		h	*3
Coleoptera	Chrysomelidae	Crepidodera lamina Bedel, 1901	*		s	*3
Coleoptera	Chrysomelidae	Crepidodera nitidula (L., 1758)	*		s	*3
Coleoptera	Chrysomelidae	Crepidodera plutus (Latr., 1804)	*		mh	*3
Coleoptera	Chrysomelidae	Crioceris asparagi (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Crioceris duodecimpunctata (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Crioceris quatuordecimpunctata (Scop., 1763)	*		s	*3
Coleoptera	Chrysomelidae	Crioceris quinquepunctata (Scop., 1763)	R		es	*3
Coleoptera	Chrysomelidae	Cryptocephalus albolineatus Suffr., 1847	0	1950	ex	*3
Coleoptera	Chrysomelidae	Cryptocephalus androgyne Mars., 1875	2		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus anticus Suffr., 1848	1		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus aureolus Suffr., 1847	*		mh	*3
Coleoptera	Chrysomelidae	Cryptocephalus bameuli Duhaldeb., 1999	*		mh	*3
Coleoptera	Chrysomelidae	Cryptocephalus biguttatus (Scop., 1763)	*		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus bilineatus (L., 1767)	3		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus bipunctatus (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Cryptocephalus bohemius Drap., 1819	0	1950	ex	*3
Coleoptera	Chrysomelidae	Cryptocephalus carinthiacus Suffr., 1848	0	1900	ex	*3
Coleoptera	Chrysomelidae	Cryptocephalus chrysopus Gm., 1788	3		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus cordiger (L., 1758)	1		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus coryli (L., 1758)	3		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus decemmaculatus (L., 1758)	3		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus distinguendus Schneid., 1792	1		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus elegantulus Grav., 1807	2		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus exiguus Schneid., 1792	2		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus flavipes F., 1781	*		mh	*3
Coleoptera	Chrysomelidae	Cryptocephalus frenatus Laich., 1781	V		mh	*3
Coleoptera	Chrysomelidae	Cryptocephalus frontalis Marsh., 1802	3		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus fulvus Goeze, 1777	*		h	*3
Coleoptera	Chrysomelidae	Cryptocephalus hypochoeridis (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Cryptocephalus imperialis Laich., 1781	1		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus janthinus Germ., 1824	1		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus labiatus (L., 1761)	*		h	*3

Order	Family	Species	K	L	P	S
Coleoptera	Chrysomelidae	Cryptocephalus laetus F., 1792	0	1955	ex	*3
Coleoptera	Chrysomelidae	Cryptocephalus macellus Suffr., 1848	3		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus marginatus F., 1781	V		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus marginellus Ol., 1791	2		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus moraei (L., 1758)	*		sh	*3
Coleoptera	Chrysomelidae	Cryptocephalus nitidulus F., 1787	3		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus nitidus (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Cryptocephalus ocellatus Drap., 1819	*		h	*3
Coleoptera	Chrysomelidae	Cryptocephalus ochroleucus Steph., 1834	1		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus octomaculatus Rossi, 1790	1		es	*3
Coleoptera	Chrysomelidae	Cryptocephalus octopunctatus (Scop., 1763)	2		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus pallifrons Gyll., 1813	1		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus parvulus Müll., 1776	3		mh	*3
Coleoptera	Chrysomelidae	Cryptocephalus pini (L., 1758)	*		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus populi Suffr., 1848	V		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus primarius Har., 1872	2		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus punctiger Payk., 1799	2		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus pusillus F., 1777	*		mh	*3
Coleoptera	Chrysomelidae	Cryptocephalus pygmaeus F., 1792	*		mh	*3
Coleoptera	Chrysomelidae	Cryptocephalus quadriguttatus Richt., 1820	0	1950	ex	*3
Coleoptera	Chrysomelidae	Cryptocephalus quadripustulatus Gyll., 1813	D		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus querceti Suffr., 1848	2		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus quinquepunctatus (Scop., 1763)	V		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus rufipes Goeze, 1777	*		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus saliceti Zebe, 1855	3		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus schaefferi Schrk., 1789	2		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus sericeus (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Cryptocephalus sexpunctatus (L., 1758)	V		mh	*3
Coleoptera	Chrysomelidae	Cryptocephalus signatifrons Suffr., 1847	*		s	*3
Coleoptera	Chrysomelidae	Cryptocephalus strigosus Germ., 1823	0	1950	ex	*3
Coleoptera	Chrysomelidae	Cryptocephalus variegatus F., 1781	2		ss	*3
Coleoptera	Chrysomelidae	Cryptocephalus villosulus Suffr., 1847	0	1950	ex	*3
Coleoptera	Chrysomelidae	Cryptocephalus violaceus Laich., 1781	V		mh	*3
Coleoptera	Chrysomelidae	Cryptocephalus virens Suffr., 1847	0	1950	ex	*3
Coleoptera	Chrysomelidae	Cryptocephalus vittatus F., 1775	*		s	*3
Coleoptera	Chrysomelidae	Derocrepis rufipes (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Diabrotica virgifera LeConte, 1858	nb		nb	*3
Coleoptera	Chrysomelidae	Dibolia cryptocephala (Koch, 1803)	2		ss	*3
Coleoptera	Chrysomelidae	Dibolia cynoglossi (Koch, 1803)	3		s	*3
Coleoptera	Chrysomelidae	Dibolia depressiuscula Letzn., 1846	3		ss	*3
Coleoptera	Chrysomelidae	Dibolia femoralis Redt., 1849	2		ss	*3
Coleoptera	Chrysomelidae	Dibolia foersteri Bach, 1859	2		ss	*3
Coleoptera	Chrysomelidae	Dibolia occultans (Koch, 1803)	2		ss	*3
Coleoptera	Chrysomelidae	Dibolia rugulosa Redt., 1849	3		s	*3
Coleoptera	Chrysomelidae	Dibolia schillingi Letzn., 1846	3		s	*3
Coleoptera	Chrysomelidae	Dibolia timida (Ill., 1803)	3		s	*3
Coleoptera	Chrysomelidae	Donacia aquatica (L., 1758)	3		s	*3
Coleoptera	Chrysomelidae	Donacia bicolora Zschach, 1788	V		mh	*3
Coleoptera	Chrysomelidae	Donacia brevicornis Ahr., 1810	2		ss	*3
Coleoptera	Chrysomelidae	Donacia brevitarsis Thoms., 1884	2		ss	*3
Coleoptera	Chrysomelidae	Donacia cinerea Hbst., 1784	*		mh	*3
Coleoptera	Chrysomelidae	Donacia clavipes F., 1792	3		s	*3
Coleoptera	Chrysomelidae	Donacia crassipes F., 1775	V		s	*3
Coleoptera	Chrysomelidae	Donacia dentata Hoppe, 1795	2		ss	*3
Coleoptera	Chrysomelidae	Donacia impressa Payk., 1799	V		s	*3
Coleoptera	Chrysomelidae	Donacia malinovskyi Ahr., 1810	1		es	*3
Coleoptera	Chrysomelidae	Donacia marginata Hoppe, 1795	V		mh	*3
Coleoptera	Chrysomelidae	Donacia obscura Gyll., 1813	1		ss	*3
Coleoptera	Chrysomelidae	Donacia reticulata Gyll., 1817	0	1950	ex	*3
Coleoptera	Chrysomelidae	Donacia semicuprea Panz., 1796	*		mh	*3
Coleoptera	Chrysomelidae	Donacia simplex F., 1775	V		mh	*3
Coleoptera	Chrysomelidae	Donacia sparganii Ahr., 1810	2		s	*3
Coleoptera	Chrysomelidae	Donacia springeri Müll., 1916	1		es	*3
Coleoptera	Chrysomelidae	Donacia thalassina Germ., 1811	V		mh	*3
Coleoptera	Chrysomelidae	Donacia tomentosa Ahr., 1810	1		ss	*3
Coleoptera	Chrysomelidae	Donacia versicolorea (Brahm, 1790)	V		mh	*3
Coleoptera	Chrysomelidae	Donacia vulgaris Zschach, 1788	*		mh	*3
Coleoptera	Chrysomelidae	Entomoscelis adonidis (Pall., 1771)	1		ss	*3
Coleoptera	Chrysomelidae	Epitrix atropae Foudr., 1860	*		mh	*3
Coleoptera	Chrysomelidae	Epitrix pubescens (Koch, 1803)	*		h	*3
Coleoptera	Chrysomelidae	Galeruca dahli (Joann., 1866)	1		ss	*3
Coleoptera	Chrysomelidae	Galeruca interrupta Ill., 1802	2		ss	*3
Coleoptera	Chrysomelidae	Galeruca jucunda Fald., 1833	2		ss	*3
Coleoptera	Chrysomelidae	Galeruca laticollis Sahlb., 1837	3		s	*3
Coleoptera	Chrysomelidae	Galeruca melanocephala Ponza, 1805	1		ss	*3
Coleoptera	Chrysomelidae	Galeruca pomonae (Scop., 1763)	V		mh	*3
Coleoptera	Chrysomelidae	Galeruca tanaceti (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Galerucella grisescens (Joann., 1866)	*		mh	*3
Coleoptera	Chrysomelidae	Galerucella nymphaeae (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Gastrophysa polygoni (L., 1758)	*		h	*3

Order	Family	Species	K	L	P	S
Coleoptera	Chrysomelidae	Gastrophysa viridula (Deg., 1775)	*		sh	*3
Coleoptera	Chrysomelidae	Gonioctena decemnotata (Marsh., 1802)	*		mh	*3
Coleoptera	Chrysomelidae	Gonioctena flavicornis (Suffr., 1861)	1		es	*3
Coleoptera	Chrysomelidae	Gonioctena fornicata (Brüggemann, 1873)	D		?	*3
Coleoptera	Chrysomelidae	Gonioctena holdhausi (Leeder, 1950)	R		es	*3
Coleoptera	Chrysomelidae	Gonioctena intermedia (Hell., 1913)	3		s	*3
Coleoptera	Chrysomelidae	Gonioctena interposita (Franz & Palmén, 1950)	3		s	*3
Coleoptera	Chrysomelidae	Gonioctena linnaeana (Schrk., 1781)	*		s	*3
Coleoptera	Chrysomelidae	Gonioctena nivosa Suffr., 1851	R		es	*3
Coleoptera	Chrysomelidae	Gonioctena olivacea (Forst., 1771)	*		mh	*3
Coleoptera	Chrysomelidae	Gonioctena pallida (L., 1758)	*		s	*3
Coleoptera	Chrysomelidae	Gonioctena quinquepunctata (F., 1787)	*		h	*3
Coleoptera	Chrysomelidae	Gonioctena viminalis (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Hermaeophaga cicatrix (Ill., 1807)	0	1950	ex	*3
Coleoptera	Chrysomelidae	Hermaeophaga mercurialis (F., 1792)	*		h	*3
Coleoptera	Chrysomelidae	Hippuriphila modeeri (L., 1761)	*		mh	*3
Coleoptera	Chrysomelidae	Hispa atra L., 1767	*		mh	*3
Coleoptera	Chrysomelidae	Hypocassida subferruginea (Schr., 1776)	*		mh	*3
Coleoptera	Chrysomelidae	Labidostomis cyanicornis (Germ., 1817)	0	1950	ex	*3
Coleoptera	Chrysomelidae	Labidostomis humeralis (Schneid., 1792)	2		ss	*3
Coleoptera	Chrysomelidae	Labidostomis longimana (L., 1761)	*		mh	*3
Coleoptera	Chrysomelidae	Labidostomis lucida (Germ., 1823)	2		ss	*3
Coleoptera	Chrysomelidae	Labidostomis tridentata (L., 1758)	3		s	*3
Coleoptera	Chrysomelidae	Lachnaia sexpunctata (Scop., 1763)	3		s	*3
Coleoptera	Chrysomelidae	Lema cyanella (L., 1758)	3		s	*3
Coleoptera	Chrysomelidae	Leptinotarsa decemlineata (Say, 1824)	nb		nb	*3
Coleoptera	Chrysomelidae	Lilioceris lilii (Scop., 1763)	*		h	*3
Coleoptera	Chrysomelidae	Lilioceris merdigera (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Lilioceris schneideri Weise, 1900	D		?	*3
Coleoptera	Chrysomelidae	Lilioceris tibialis (Villa, 1838)	2		ss	*3
Coleoptera	Chrysomelidae	Lochmaea caprea (L., 1758)	*		sh	*3
Coleoptera	Chrysomelidae	Lochmaea crataegi (Forst., 1771)	*		s	*3
Coleoptera	Chrysomelidae	Lochmaea suturalis (Thoms., 1866)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus absynthii Kutsch., 1862	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus aeneicollis (Fald., 1837)	2		ss	*3
Coleoptera	Chrysomelidae	Longitarsus aeruginosus (Foudr., 1860)	*		s	*3
Coleoptera	Chrysomelidae	Longitarsus agilis (Rye, 1868)	2		ss	*3
Coleoptera	Chrysomelidae	Longitarsus anchusae (Payk., 1799)	*		h	*3
Coleoptera	Chrysomelidae	Longitarsus apicalis (Beck, 1817)	V		s	*3
Coleoptera	Chrysomelidae	Longitarsus atricillus (L., 1761)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus australis (Muls. & Rey, 1874)	2		ss	*3
Coleoptera	Chrysomelidae	Longitarsus ballotae (Marsh., 1802)	*		s	*3
Coleoptera	Chrysomelidae	Longitarsus brisouti Hktr., 1912	*		s	*3
Coleoptera	Chrysomelidae	Longitarsus brunneus (Duft., 1825)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus callidus Warch., 1967	1		es	*3
Coleoptera	Chrysomelidae	Longitarsus celticus Leonardi, 1975	1		es	*3
Coleoptera	Chrysomelidae	Longitarsus cerinthes (Schrank, 1798)	1		es	*3
Coleoptera	Chrysomelidae	Longitarsus curtus (All., 1860)	2		ss	*3
Coleoptera	Chrysomelidae	Longitarsus dorsalis (F., 1781)	*		s	*3
Coleoptera	Chrysomelidae	Longitarsus echii (Koch, 1803)	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus exsoletus (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus ferrugineus (Foudr., 1860)	*		s	*3
Coleoptera	Chrysomelidae	Longitarsus foudrasi Weise, 1893	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus fulgens (Foudr., 1860)	1		ss	*3
Coleoptera	Chrysomelidae	Longitarsus ganglbaueri Hktr., 1912	*		s	*3
Coleoptera	Chrysomelidae	Longitarsus gracilis Kutsch., 1864	*		s	*3
Coleoptera	Chrysomelidae	Longitarsus helvolus Kutsch., 1862	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus holsaticus (L., 1758)	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus jacobaeae (Wtrh., 1858)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus kutscherai (Rye, 1872)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus languidus Kutsch., 1863	1		ss	*3
Coleoptera	Chrysomelidae	Longitarsus lateripunctatus (Rosh., 1856)	R		es	*3
Coleoptera	Chrysomelidae	Longitarsus lewisii (Baly, 1874)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus linnaei (Duft., 1825)	2		es	*3
Coleoptera	Chrysomelidae	Longitarsus longipennis Kutsch., 1863	2		ss	*3
Coleoptera	Chrysomelidae	Longitarsus longiseta Weise, 1889	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus luridus (Scop., 1763)	*		sh	*3
Coleoptera	Chrysomelidae	Longitarsus lycopi (Foudr., 1860)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus melanocephalus (Deg., 1775)	*		h	*3
Coleoptera	Chrysomelidae	Longitarsus membranaceus (Foudr., 1860)	*		s	*3
Coleoptera	Chrysomelidae	Longitarsus minimus Kutsch., 1863	2		ss	*3
Coleoptera	Chrysomelidae	Longitarsus minusculus (Foudr., 1860)	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus monticola Kutsch., 1863	*		s	*3
Coleoptera	Chrysomelidae	Longitarsus nanus (Foudr., 1860)	3		ss	*3
Coleoptera	Chrysomelidae	Longitarsus nasturtii (F., 1792)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus niger (Koch, 1803)	2		ss	*3
Coleoptera	Chrysomelidae	Longitarsus nigerrimus (Gyll., 1827)	1		es	*3
Coleoptera	Chrysomelidae	Longitarsus nigrofasciatus (Goeze, 1777)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus noricus Leonardi, 1976	D		s	*3
Coleoptera	Chrysomelidae	Longitarsus obliteratoides Gruev, 1973	3		ss	*3

Order	Family	Species	K	L	P	S
Coleoptera	Chrysomelidae	Longitarsus obliteratus (Rosh., 1847)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus ochroleucus (Marsh., 1802)	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus parvulus (Payk., 1799)	*		sh	*3
Coleoptera	Chrysomelidae	Longitarsus pellucidus (Foudr., 1860)	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus pinguis Weise, 1888	2		ss	*3
Coleoptera	Chrysomelidae	Longitarsus plantagomaritimus Dollm., 1912	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus pratensis (Panz., 1794)	*		sh	*3
Coleoptera	Chrysomelidae	Longitarsus pulmonariae Weise, 1893	*		s	*3
Coleoptera	Chrysomelidae	Longitarsus quadriguttatus (Pont., 1765)	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus reichei (All., 1860)	3		s	*3
Coleoptera	Chrysomelidae	Longitarsus rubiginosus (Foudr., 1860)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus salviae Gruev, 1975	*		ss	*3
Coleoptera	Chrysomelidae	Longitarsus scutellaris (Rey, 1873)	*		s	*3
Coleoptera	Chrysomelidae	Longitarsus strigicollis Woll., 1864	D		s	*3
Coleoptera	Chrysomelidae	Longitarsus succineus (Foudr., 1860)	*		h	*3
Coleoptera	Chrysomelidae	Longitarsus suturellus (Duft., 1825)	*		h	*3
Coleoptera	Chrysomelidae	Longitarsus symphyti Hktr., 1912	V		mh	*3
Coleoptera	Chrysomelidae	Longitarsus tabidus (F., 1775)	*		mh	*3
Coleoptera	Chrysomelidae	Longitarsus tristis Weise, 1888	1		es	*3
Coleoptera	Chrysomelidae	Longitarsus weisei Guillb., 1895	1		es	*3
Coleoptera	Chrysomelidae	Luperomorpha xanthodera (Fairm., 1888)	nb		nb	*3
Coleoptera	Chrysomelidae	Luperus flavipes (L., 1767)	3		s	*3
Coleoptera	Chrysomelidae	Luperus longicornis (F., 1781)	*		mh	*3
Coleoptera	Chrysomelidae	Luperus luperus (Sulz., 1776)	*		h	*3
Coleoptera	Chrysomelidae	Luperus saxonicus (Gm., 1790)	3		s	*3
Coleoptera	Chrysomelidae	Luperus viridipennis Germ., 1824	*		s	*3
Coleoptera	Chrysomelidae	Luperus xanthopoda (Schrk., 1781)	3		s	*3
Coleoptera	Chrysomelidae	Lythraria salicariae (Payk., 1800)	*		h	*3
Coleoptera	Chrysomelidae	Macroplea appendiculata (Panz., 1794)	1		ss	*3
Coleoptera	Chrysomelidae	Macroplea mutica (F., 1792)	1		ss	*3
Coleoptera	Chrysomelidae	Mantura chrysanthemi (Koch, 1803)	*		mh	*3
Coleoptera	Chrysomelidae	Mantura horioni Hktr., 1951	2		ss	*3
Coleoptera	Chrysomelidae	Mantura mathewsii (Curt., 1833)	3		s	*3
Coleoptera	Chrysomelidae	Mantura obtusata (Gyll., 1813)	2		ss	*3
Coleoptera	Chrysomelidae	Mantura pallidicornis (Waltl, 1839)	2		s	*3
Coleoptera	Chrysomelidae	Mantura rustica (L., 1767)	V		mh	*3
Coleoptera	Chrysomelidae	Minota carpathica Hktr., 1911	R		es	*3
Coleoptera	Chrysomelidae	Minota obesa (Waltl, 1839)	*		s	*3
Coleoptera	Chrysomelidae	Mniophila muscorum (Koch, 1803)	3		s	*3
Coleoptera	Chrysomelidae	Neocrepidodera brevicollis (Dan., 1904)	3		ss	*3
Coleoptera	Chrysomelidae	Neocrepidodera femorata (Gyll., 1813)	*		s	*3
Coleoptera	Chrysomelidae	Neocrepidodera ferruginea (Scop., 1763)	*		sh	*3
Coleoptera	Chrysomelidae	Neocrepidodera impressa (F., 1801)	1		es	*3
Coleoptera	Chrysomelidae	Neocrepidodera interpunctata (Motsch., 1859)	3		s	*3
Coleoptera	Chrysomelidae	Neocrepidodera melanostoma (Redt., 1849)	D		?	*3
Coleoptera	Chrysomelidae	Neocrepidodera motschulskii (Konstantinov, 1991)	2		ss	*3
Coleoptera	Chrysomelidae	Neocrepidodera nigritula (Gyll., 1813)	3		s	*3
Coleoptera	Chrysomelidae	Neocrepidodera peirolerii (Kutsch., 1860)	*		s	*3
Coleoptera	Chrysomelidae	Neocrepidodera rhaetica (Kutsch., 1860)	R		es	*3
Coleoptera	Chrysomelidae	Neocrepidodera transversa (Marsh., 1802)	*		h	*3
Coleoptera	Chrysomelidae	Neogalerucella calmariensis (L., 1767)	*		mh	*3
Coleoptera	Chrysomelidae	Neogalerucella lineola (F., 1781)	*		h	*3
Coleoptera	Chrysomelidae	Neogalerucella pusilla (Duft., 1825)	*		mh	*3
Coleoptera	Chrysomelidae	Neogalerucella tenella (L., 1761)	*		h	*3
Coleoptera	Chrysomelidae	Neophaedon pyritosus (Rossi, 1792)	1		ss	*3
Coleoptera	Chrysomelidae	Ochrosis ventralis (Ill., 1807)	2		s	*3
Coleoptera	Chrysomelidae	Oomorphus concolor (Sturm, 1807)	*		s	*3
Coleoptera	Chrysomelidae	Oreina alpestris (Schumm., 1843)	*		mh	*3
Coleoptera	Chrysomelidae	Oreina bifrons (F., 1792)	*		s	*3
Coleoptera	Chrysomelidae	Oreina cacaliae (Schrk., 1785)	*		mh	*3
Coleoptera	Chrysomelidae	Oreina caerulea (Ol., 1807)	3		s	*3
Coleoptera	Chrysomelidae	Oreina frigida (Weise, 1883)	R		es	*3
Coleoptera	Chrysomelidae	Oreina gloriosa (F., 1781)	R		es	*3
Coleoptera	Chrysomelidae	Oreina intricata (Germ., 1824)	*		ss	*3
Coleoptera	Chrysomelidae	Oreina melancholica (Heer, 1845)	1		es	*3
Coleoptera	Chrysomelidae	Oreina plagiata (Suffr., 1861)	R		es	*3
Coleoptera	Chrysomelidae	Oreina speciosa (L., 1767)	*		s	*3
Coleoptera	Chrysomelidae	Oreina speciosissima (Scop., 1763)	*		mh	*3
Coleoptera	Chrysomelidae	Oreina virgulata (Germ., 1824)	R		es	*3
Coleoptera	Chrysomelidae	Oreina viridis (Duft., 1825)	R		es	*3
Coleoptera	Chrysomelidae	Orsodacne cerasi (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Orsodacne humeralis (Latr., 1804)	2		ss	*3
Coleoptera	Chrysomelidae	Oulema duftschmidi (Redt., 1874)	*		sh	*3
Coleoptera	Chrysomelidae	Oulema erichsonii (Suffr., 1841)	2		ss	*3
Coleoptera	Chrysomelidae	Oulema gallaeciana (Heyd., 1870)	*		sh	*3
Coleoptera	Chrysomelidae	Oulema melanopus (L., 1758)	*		sh	*3
Coleoptera	Chrysomelidae	Oulema rufocyanea (Suffr., 1847)	1		es	*3
Coleoptera	Chrysomelidae	Oulema septentrionis (Weise, 1880)	1		es	*3
Coleoptera	Chrysomelidae	Oulema tristis (Hbst., 1786)	1		es	*3
Coleoptera	Chrysomelidae	Pachnephorus pilosus (Rossi, 1790)	3		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Chrysomelidae	Pachnephorus tessellatus (Duft., 1825)	1		es	*3
Coleoptera	Chrysomelidae	Pachybrachis fimbriolatus Suffr., 1848	1		ss	*3
Coleoptera	Chrysomelidae	Pachybrachis hieroglyphicus (Laich., 1781)	3		mh	*3
Coleoptera	Chrysomelidae	Pachybrachis hippophaes Suffr., 1848	2		ss	*3
Coleoptera	Chrysomelidae	Pachybrachis pallidulus Weise, 1882	2		ss	*3
Coleoptera	Chrysomelidae	Pachybrachis picus Weise, 1882	3		s	*3
Coleoptera	Chrysomelidae	Pachybrachis sinuatus Muls. & Rey, 1859	3		s	*3
Coleoptera	Chrysomelidae	Pachybrachis tessellatus (Ol., 1791)	3		s	*3
Coleoptera	Chrysomelidae	Phaedon armoraciae (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Phaedon cochleariae (F., 1792)	*		h	*3
Coleoptera	Chrysomelidae	Phaedon concinnus Steph., 1831	3		s	*3
Coleoptera	Chrysomelidae	Phaedon laevigatus (Duft., 1825)	1		ss	*3
Coleoptera	Chrysomelidae	Phratora atrovirens (Corn., 1857)	*		ss	*3
Coleoptera	Chrysomelidae	Phratora laticollis (Suffr., 1851)	*		h	*3
Coleoptera	Chrysomelidae	Phratora polaris (Schneid., 1886)	R		es	*3
Coleoptera	Chrysomelidae	Phratora tibialis (Suffr., 1851)	*		mh	*3
Coleoptera	Chrysomelidae	Phratora vitellinae (L., 1758)	*		sh	*3
Coleoptera	Chrysomelidae	Phratora vulgatissima (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Phyllobrotica quadrimaculata (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Phyllotreta armoraciae (Koch, 1803)	*		mh	*3
Coleoptera	Chrysomelidae	Phyllotreta astrachanica Lopatin, 1977	*		mh	*3
Coleoptera	Chrysomelidae	Phyllotreta atra (F., 1775)	*		sh	*3
Coleoptera	Chrysomelidae	Phyllotreta austriaca Hktr., 1909	1		es	*3
Coleoptera	Chrysomelidae	Phyllotreta christinae (Hktr., 1941)	*		s	*3
Coleoptera	Chrysomelidae	Phyllotreta consobrina (Curt., 1837)	*		ss	*3
Coleoptera	Chrysomelidae	Phyllotreta cruciferae (Goeze, 1777)	*		mh	*3
Coleoptera	Chrysomelidae	Phyllotreta diademata Foudr., 1860	R		es	*3
Coleoptera	Chrysomelidae	Phyllotreta dilatata Thoms., 1866	V		s	*3
Coleoptera	Chrysomelidae	Phyllotreta exclamationis (Thunb., 1784)	*		mh	*3
Coleoptera	Chrysomelidae	Phyllotreta flexuosa (Ill., 1794)	2		s	*3
Coleoptera	Chrysomelidae	Phyllotreta nemorum (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Phyllotreta nigripes (F., 1775)	*		sh	*3
Coleoptera	Chrysomelidae	Phyllotreta nodicornis (Marsh., 1802)	*		mh	*3
Coleoptera	Chrysomelidae	Phyllotreta ochripes (Curt., 1837)	*		h	*3
Coleoptera	Chrysomelidae	Phyllotreta procera (Redt., 1849)	3		s	*3
Coleoptera	Chrysomelidae	Phyllotreta punctulata (Marsh., 1802)	*		s	*3
Coleoptera	Chrysomelidae	Phyllotreta scheuchi Hktr., 1941	2		ss	*3
Coleoptera	Chrysomelidae	Phyllotreta striolata (F., 1803)	*		mh	*3
Coleoptera	Chrysomelidae	Phyllotreta tetrastigma (Com., 1837)	*		mh	*3
Coleoptera	Chrysomelidae	Phyllotreta undulata (Kutsch., 1860)	*		h	*3
Coleoptera	Chrysomelidae	Phyllotreta vittula (Redt., 1849)	*		sh	*3
Coleoptera	Chrysomelidae	Pilemostoma fastuosum (Schall., 1783)	2		ss	*3
Coleoptera	Chrysomelidae	Plagiodera versicolora (Laich., 1781)	*		h	*3
Coleoptera	Chrysomelidae	Plagiosterna aenea (L., 1758)	*		h	*3
Coleoptera	Chrysomelidae	Plateumaris braccata (Scop., 1772)	3		s	*3
Coleoptera	Chrysomelidae	Plateumaris consimilis (Schrk., 1781)	*		mh	*3
Coleoptera	Chrysomelidae	Plateumaris discolor (Panz., 1795)	2		s	*3
Coleoptera	Chrysomelidae	Plateumaris rustica (Kunze, 1818)	3		s	*3
Coleoptera	Chrysomelidae	Plateumaris sericea (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Podagrica fuscicornis (L., 1767)	*		mh	*3
Coleoptera	Chrysomelidae	Podagrica fuscipes (F., 1775)	2		ss	*3
Coleoptera	Chrysomelidae	Podagrica malvae (Ill., 1807)	0	1955	ex	*3
Coleoptera	Chrysomelidae	Prasocuris glabra (Hbst., 1783)	*		s	*3
Coleoptera	Chrysomelidae	Prasocuris hannoveriana (F., 1775)	3		s	*3
Coleoptera	Chrysomelidae	Prasocuris junci (Brahm, 1790)	*		mh	*3
Coleoptera	Chrysomelidae	Prasocuris marginella (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Prasocuris phellandrii (L., 1758)	*		s	*3
Coleoptera	Chrysomelidae	Psylliodes aerea Foudr., 1860	1		es	*3
Coleoptera	Chrysomelidae	Psylliodes affinis (Payk., 1799)	*		h	*3
Coleoptera	Chrysomelidae	Psylliodes attenuata (Koch, 1803)	3		s	*3
Coleoptera	Chrysomelidae	Psylliodes brisouti Bedel, 1898	1		es	*3
Coleoptera	Chrysomelidae	Psylliodes chalcomera (Ill., 1807)	*		mh	*3
Coleoptera	Chrysomelidae	Psylliodes chrysocephala (L., 1758)	*		sh	*3
Coleoptera	Chrysomelidae	Psylliodes crambicola Lohse, 1954	1		es	*3
Coleoptera	Chrysomelidae	Psylliodes cucullata (Ill., 1807)	*		s	*3
Coleoptera	Chrysomelidae	Psylliodes cuprea (Koch, 1803)	*		mh	*3
Coleoptera	Chrysomelidae	Psylliodes cupreata (Duft., 1825)	1		es	*3
Coleoptera	Chrysomelidae	Psylliodes dulcamarae (Koch, 1803)	*		mh	*3
Coleoptera	Chrysomelidae	Psylliodes glabra (Duft., 1825)	R		es	*3
Coleoptera	Chrysomelidae	Psylliodes hyoscyami (L., 1758)	1		ss	*3
Coleoptera	Chrysomelidae	Psylliodes instabilis Foudr., 1860	3		s	*3
Coleoptera	Chrysomelidae	Psylliodes isatidis Hktr., 1912	*		s	*3
Coleoptera	Chrysomelidae	Psylliodes laticollis Kutsch., 1864	3		s	*3
Coleoptera	Chrysomelidae	Psylliodes luteola (Müll., 1776)	D		ss	*3
Coleoptera	Chrysomelidae	Psylliodes marcida (Ill., 1807)	V		s	*3
Coleoptera	Chrysomelidae	Psylliodes napi (F., 1792)	*		sh	*3
Coleoptera	Chrysomelidae	Psylliodes picina (Marsh., 1802)	*		h	*3
Coleoptera	Chrysomelidae	Psylliodes reitteri Weise, 1888	*		ss	*3
Coleoptera	Chrysomelidae	Psylliodes thlaspis Foudr., 1860	3		s	*3
Coleoptera	Chrysomelidae	Psylliodes toelgi Hktr., 1914	2		ss	*3

Order	Family	Species	K	L	P	S
Coleoptera	Chrysomelidae	Psylliodes tricolor Weise, 1888	3		s	*3
Coleoptera	Chrysomelidae	Psylliodes vindobonensis Hktr., 1914	1		es	*3
Coleoptera	Chrysomelidae	Pyrrhalta viburni (Payk., 1799)	*		h	*3
Coleoptera	Chrysomelidae	Sclerophaedon carniolicus (Germ., 1824)	2		ss	*3
Coleoptera	Chrysomelidae	Sclerophaedon orbicularis (Suffr., 1851)	*		s	*3
Coleoptera	Chrysomelidae	Sermylassa halensis (L., 1767)	*		h	*3
Coleoptera	Chrysomelidae	Smaragdina affinis (Ill., 1794)	*		mh	*3
Coleoptera	Chrysomelidae	Smaragdina aurita (L., 1767)	*		mh	*3
Coleoptera	Chrysomelidae	Smaragdina diversipes (Letzn., 1839)	1		ss	*3
Coleoptera	Chrysomelidae	Smaragdina flavicollis (Charp., 1825)	3		s	*3
Coleoptera	Chrysomelidae	Smaragdina salicina (Scop., 1763)	*		mh	*3
Coleoptera	Chrysomelidae	Smaragdina xanthaspis (Germ., 1824)	D		?	*3
Coleoptera	Chrysomelidae	Sphaeroderma rubidum (Graells, 1858)	*		mh	*3
Coleoptera	Chrysomelidae	Sphaeroderma testaceum (F., 1775)	*		h	*3
Coleoptera	Chrysomelidae	Timarcha goettingensis (L., 1758)	*		mh	*3
Coleoptera	Chrysomelidae	Timarcha metallica (Laich., 1781)	*		s	*3
Coleoptera	Chrysomelidae	Timarcha tenebricosa (F., 1775)	V		mh	*3
Coleoptera	Chrysomelidae	Xanthogaleruca luteola (Müll., 1766)	2		ss	*3
Coleoptera	Chrysomelidae	Zeugophora flavicollis (Marsh., 1802)	*		mh	*3
Coleoptera	Chrysomelidae	Zeugophora frontalis Suffr., 1840	2		ss	*3
Coleoptera	Chrysomelidae	Zeugophora scutellaris Suffr., 1840	3		s	*3
Coleoptera	Chrysomelidae	Zeugophora subspinosa (F., 1781)	*		mh	*3
Coleoptera	Chrysomelidae	Zeugophora turneri Power, 1863	2		ss	*3
Coleoptera	Cimberidae	Cimberis attelaboides (Fabricius, 1787)	*		mh	*3
Coleoptera	Cimberidae	Doydirhynchus austriacus (Olivier, 1807)	*		s	*3
Coleoptera	Cisidae	Cis bidentatus (Ol., 1790)	*		mh	*3
Coleoptera	Cisidae	Cis boleti (Scop., 1763)	*		sh	*3
Coleoptera	Cisidae	Cis castaneus Mell., 1848	*		h	*3
Coleoptera	Cisidae	Cis comptus Gyll., 1827	*		s	*3
Coleoptera	Cisidae	Cis dentatus Mell., 1848	*		s	*3
Coleoptera	Cisidae	Cis fagi Waltl, 1839	D		ss	*3
Coleoptera	Cisidae	Cis fissicornis Mell., 1848	R		es	*3
Coleoptera	Cisidae	Cis glabratus Mell., 1848	*		s	*3
Coleoptera	Cisidae	Cis hanseni Strand, 1965	3		ss	*3
Coleoptera	Cisidae	Cis hispidus (Payk., 1798)	*		sh	*3
Coleoptera	Cisidae	Cis jacquemartii Mell., 1848	D		ss	*3
Coleoptera	Cisidae	Cis laminatus Mell., 1848	0	1950	ex	*3
Coleoptera	Cisidae	Cis lineatocribratus Mell., 1848	*		s	*3
Coleoptera	Cisidae	Cis micans (F., 1792)	*		mh	*3
Coleoptera	Cisidae	Cis nitidus (F., 1792)	*		h	*3
Coleoptera	Cisidae	Cis punctulatus Gyll., 1827	*		h	*3
Coleoptera	Cisidae	Cis quadridens Mell., 1848	*		ss	*3
Coleoptera	Cisidae	Cis rugulosus Mell., 1848	*		mh	*3
Coleoptera	Cisidae	Cis setiger Mell., 1848	*		s	*3
Coleoptera	Cisidae	Cis striatulus Mell., 1848	*		ss	*3
Coleoptera	Cisidae	Ennearthron cornutum (Gyll., 1827)	*		sh	*3
Coleoptera	Cisidae	Ennearthron laricinum (Mell., 1848)	0	1900	ex	*3
Coleoptera	Cisidae	Ennearthron palmi Lohse, 1966	R		es	*3
Coleoptera	Cisidae	Ennearthron pruinosulum (Perris, 1864)	R		es	*3
Coleoptera	Cisidae	Hadreule elongatulum (Gyll., 1827)	R		es	*3
Coleoptera	Cisidae	Octotemnus glabriculus (Gyll., 1827)	*		sh	*3
Coleoptera	Cisidae	Octotemnus mandibularis (Gyll., 1813)	*		ss	*3
Coleoptera	Cisidae	Orthocis alni (Gyll., 1813)	*		h	*3
Coleoptera	Cisidae	Orthocis festivus (Panz., 1793)	*		mh	*3
Coleoptera	Cisidae	Orthocis juglandis (Rtt., 1885)	D		?	*3
Coleoptera	Cisidae	Orthocis linearis (Sahlb., 1901)	R		es	*3
Coleoptera	Cisidae	Orthocis lucasi (Ab., 1874)	V		s	*3
Coleoptera	Cisidae	Orthocis pygmaeus (Marsh., 1802)	*		s	*3
Coleoptera	Cisidae	Orthocis vestitus (Mell., 1848)	*		mh	*3
Coleoptera	Cisidae	Ropalodontus baudueri Ab., 1874	R		es	*3
Coleoptera	Cisidae	Ropalodontus novorossicus Rtt., 1902	R		es	*3
Coleoptera	Cisidae	Ropalodontus perforatus (Gyll., 1813)	*		mh	*3
Coleoptera	Cisidae	Sulcacis affinis (Gyll., 1827)	*		sh	*3
Coleoptera	Cisidae	Sulcacis bicornis (Mell., 1848)	*		ss	*3
Coleoptera	Cisidae	Sulcacis bidentulus (Rosh., 1847)	G		ss	*3
Coleoptera	Cisidae	Sulcacis fronticornis (Panz., 1809)	*		h	*3
Coleoptera	Cisidae	Wagaicis wagai (Wank., 1869)	R		es	*3
Coleoptera	Cisidae	Xylographus bostrychoides (Duf., 1843)	R		es	*3
Coleoptera	Clambidae	Calyptomerus alpestris Redt., 1849	R		es	*3
Coleoptera	Clambidae	Calyptomerus dubius (Marsh., 1802)	*		s	*3
Coleoptera	Clambidae	Clambus armadillo (De Geer, 1774)	*		sh	*3
Coleoptera	Clambidae	Clambus evae E.-Y., 1960	R		es	*3
Coleoptera	Clambidae	Clambus gibbulus (Lec., 1850)	D		s	*3
Coleoptera	Clambidae	Clambus lohsei Meybohm, 2004	D		?	*3
Coleoptera	Clambidae	Clambus minutus (Sturm, 1807)	D		s	*3
Coleoptera	Clambidae	Clambus nigrellus Rtt., 1914	D		s	*3
Coleoptera	Clambidae	Clambus nigriclavis Steph., 1835	D		s	*3
Coleoptera	Clambidae	Clambus pallidulus Rtt., 1911	D		s	*3
Coleoptera	Clambidae	Clambus pubescens Redt., 1849	*		mh	*3
Coleoptera	Clambidae	Clambus punctulum (Beck, 1817)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Clambidae	Clambus simsoni Blackburn, 1902	nb		nb	*3
Coleoptera	Clambidae	Loricaster testaceus Muls. & Rey, 1861	R		es	*3
Coleoptera	Cleridae	Allonyx quadrimaculatus (Schall., 1783)	*		ss	*3
Coleoptera	Cleridae	Clerus mutillarius F., 1775	2		es	*3
Coleoptera	Cleridae	Denops albofasciatus (Charp., 1825)	R		es	*3
Coleoptera	Cleridae	Dermestoides sanguinicollis (F., 1787)	1		es	*3
Coleoptera	Cleridae	Korynetes caeruleus (De Geer, 1775)	*		mh	*3
Coleoptera	Cleridae	Korynetes ruficornis Sturm, 1837	*		mh	*3
Coleoptera	Cleridae	Necrobia ruficollis (F., 1775)	*		ss	*3
Coleoptera	Cleridae	Necrobia rufipes (De Geer, 1775)	*		s	*3
Coleoptera	Cleridae	Necrobia violacea (L., 1758)	*		mh	*3
Coleoptera	Cleridae	Opilo domesticus (Sturm, 1837)	G		ss	*3
Coleoptera	Cleridae	Opilo mollis (L., 1758)	*		mh	*3
Coleoptera	Cleridae	Opilo pallidus (Ol., 1795)	3		ss	*3
Coleoptera	Cleridae	Tarsostenus univittatus (Rossi, 1792)	R		es	*3
Coleoptera	Cleridae	Thanasimus femoralis (Zett., 1828)	*		mh	*3
Coleoptera	Cleridae	Thanasimus formicarius (L., 1758)	*		h	*3
Coleoptera	Cleridae	Tilloidea unifasciata (F., 1787)	3		ss	*3
Coleoptera	Cleridae	Tillus elongatus (L., 1758)	*		mh	*3
Coleoptera	Cleridae	Trichodes alvearius (F., 1792)	3		s	*3
Coleoptera	Cleridae	Trichodes apiarius (L., 1758)	3		s	*3
Coleoptera	Coccinellidae	Adalia bipunctata (L., 1758)	*		sh	*3
Coleoptera	Coccinellidae	Adalia conglomerata (L., 1758)	*		s	*3
Coleoptera	Coccinellidae	Adalia decempunctata (L., 1758)	*		sh	*3
Coleoptera	Coccinellidae	Anatis ocellata (L., 1758)	*		h	*3
Coleoptera	Coccinellidae	Anisosticta novemdecimpunctata (L., 1758)	*		mh	*3
Coleoptera	Coccinellidae	Aphidecta obliterata (L., 1758)	*		h	*3
Coleoptera	Coccinellidae	Brumus oblongus (Weidenb., 1859)	3		ss	*3
Coleoptera	Coccinellidae	Calvia decemguttata (L., 1767)	*		h	*3
Coleoptera	Coccinellidae	Calvia quatuordecimguttata (L., 1758)	*		sh	*3
Coleoptera	Coccinellidae	Calvia quindecimguttata (F., 1777)	D		ss	*3
Coleoptera	Coccinellidae	Chilocorus bipustulatus (L., 1758)	*		mh	*3
Coleoptera	Coccinellidae	Chilocorus renipustulatus (Scriba, 1850)	*		h	*3
Coleoptera	Coccinellidae	Clitostethus arcuatus (Rossi, 1794)	*		s	*3
Coleoptera	Coccinellidae	Coccidula rufa (Hbst., 1783)	*		h	*3
Coleoptera	Coccinellidae	Coccidula scutellata (Hbst., 1783)	*		mh	*3
Coleoptera	Coccinellidae	Coccinella hieroglyphica L., 1758	G		s	*3
Coleoptera	Coccinellidae	Coccinella magnifica Redt., 1843	*		s	*3
Coleoptera	Coccinellidae	Coccinella quinquepunctata L., 1758	*		h	*3
Coleoptera	Coccinellidae	Coccinella septempunctata L., 1758	*		sh	*3
Coleoptera	Coccinellidae	Coccinella undecimpunctata L., 1758	*		mh	*3
Coleoptera	Coccinellidae	Coccinula quatuordecimpustulata (L., 1758)	*		mh	*3
Coleoptera	Coccinellidae	Cynegetis impunctata (L., 1767)	V		mh	*3
Coleoptera	Coccinellidae	Exochomus nigromaculatus (Goeze, 1777)	*		s	*3
Coleoptera	Coccinellidae	Exochomus quadripustulatus (L., 1758)	*		h	*3
Coleoptera	Coccinellidae	Halyzia sedecimguttata (L., 1758)	*		h	*3
Coleoptera	Coccinellidae	Harmonia axyridis (Pallas, 1773)	nb		nb	*3
Coleoptera	Coccinellidae	Harmonia quadripunctata (Pont., 1763)	*		h	*3
Coleoptera	Coccinellidae	Henosepilachna argus (Fourcr., 1762)	*		mh	*3
Coleoptera	Coccinellidae	Hippodamia alpina (Villa, 1835)	*		ss	*3
Coleoptera	Coccinellidae	Hippodamia notata (Laich., 1781)	V		s	*3
Coleoptera	Coccinellidae	Hippodamia septemmaculata (De Geer, 1775)	G		s	*3
Coleoptera	Coccinellidae	Hippodamia tredecimpunctata (L., 1758)	*		mh	*3
Coleoptera	Coccinellidae	Hippodamia undecimnotata (Schneid., 1792)	D		s	*3
Coleoptera	Coccinellidae	Hippodamia variegata (Goeze, 1777)	*		h	*3
Coleoptera	Coccinellidae	Hyperaspis campestris (Hbst., 1783)	D		s	*3
Coleoptera	Coccinellidae	Hyperaspis concolor Suffr., 1843	V		s	*3
Coleoptera	Coccinellidae	Hyperaspis inexpectata Günther, 1959	D		ss	*3
Coleoptera	Coccinellidae	Hyperaspis pseudopustulata Muls., 1853	D		s	*3
Coleoptera	Coccinellidae	Hyperaspis reppensis (Hbst., 1783)	D		s	*3
Coleoptera	Coccinellidae	Lithophilus connatus (Panz., 1796)	0	1900	ex	*3
Coleoptera	Coccinellidae	Myrrha octodecimguttata (L., 1758)	*		h	*3
Coleoptera	Coccinellidae	Myzia oblongoguttata (L., 1758)	*		mh	*3
Coleoptera	Coccinellidae	Nephus bipunctatus (Kug., 1794)	*		s	*3
Coleoptera	Coccinellidae	Nephus bisignatus (Boh., 1850)	D		ss	*3
Coleoptera	Coccinellidae	Nephus limonii (Donisth., 1903)	D		?	*3
Coleoptera	Coccinellidae	Nephus quadrimaculatus (Hbst., 1783)	*		s	*3
Coleoptera	Coccinellidae	Nephus redtenbacheri (Muls., 1846)	*		s	*3
Coleoptera	Coccinellidae	Novius cruentatus (Muls., 1846)	*		s	*3
Coleoptera	Coccinellidae	Oenopia conglobata (L., 1758)	*		mh	*3
Coleoptera	Coccinellidae	Oenopia impustulata (L., 1767)	G		s	*3
Coleoptera	Coccinellidae	Oenopia lyncea (Ol., 1808)	*		ss	*3
Coleoptera	Coccinellidae	Platynaspis luteorubra (Goeze, 1777)	V		s	*3
Coleoptera	Coccinellidae	Propylea quatuordecimpunctata (L., 1758)	*		sh	*3
Coleoptera	Coccinellidae	Psyllobora vigintiduopunctata (L., 1758)	*		h	*3
Coleoptera	Coccinellidae	Rhyzobius chrysomeloides (Hbst., 1792)	*		h	*3
Coleoptera	Coccinellidae	Rhyzobius litura (F., 1787)	*		mh	*3
Coleoptera	Coccinellidae	Scymnus abietis (Payk., 1798)	*		mh	*3
Coleoptera	Coccinellidae	Scymnus apetzi Muls., 1846	G		s	*3
Coleoptera	Coccinellidae	Scymnus ater Kug., 1794	*		ss	*3

Order	Family	Species	K	L	P	S
Coleoptera	Coccinellidae	Scymnus auritus Thunb., 1795	*		mh	*3
Coleoptera	Coccinellidae	Scymnus doriai Capra, 1924	D		ss	*3
Coleoptera	Coccinellidae	Scymnus femoralis Gyll., 1827	D		?	*3
Coleoptera	Coccinellidae	Scymnus ferrugatus (Moll., 1785)	*		h	*3
Coleoptera	Coccinellidae	Scymnus frontalis (F., 1787)	*		mh	*3
Coleoptera	Coccinellidae	Scymnus haemorrhoidalis Hbst., 1797	*		mh	*3
Coleoptera	Coccinellidae	Scymnus impexus Muls., 1850	*		s	*3
Coleoptera	Coccinellidae	Scymnus interruptus (Goeze, 1777)	*		mh	*3
Coleoptera	Coccinellidae	Scymnus limbatus Steph., 1831	V		s	*3
Coleoptera	Coccinellidae	Scymnus mimulus Capra & Fürsch, 1967	*		mh	*3
Coleoptera	Coccinellidae	Scymnus nigrinus Kug., 1794	*		mh	*3
Coleoptera	Coccinellidae	Scymnus pallipediformis Günther, 1958	G		s	*3
Coleoptera	Coccinellidae	Scymnus rubromaculatus (Goeze, 1777)	*		h	*3
Coleoptera	Coccinellidae	Scymnus silesiacus Weise, 1902	0	1900	ex	*3
Coleoptera	Coccinellidae	Scymnus subvillosus (Goeze, 1777)	*		ss	*3
Coleoptera	Coccinellidae	Scymnus suturalis Thunb., 1795	*		sh	*3
Coleoptera	Coccinellidae	Sospita vigintiguttata (L., 1758)	*		s	*3
Coleoptera	Coccinellidae	Stethorus punctillum Weise, 1891	*		sh	*3
Coleoptera	Coccinellidae	Subcoccinella vigintiquatuorpuncta (L., 1758)	*		h	*3
Coleoptera	Coccinellidae	Tytthaspis sedecimpunctata (L., 1761)	*		h	*3
Coleoptera	Coccinellidae	Vibidia duodecimguttata (Poda, 1761)	*		s	*3
Coleoptera	Colonidae	Colon affine Sturm, 1839	D		ss	*3
Coleoptera	Colonidae	Colon angulare Er., 1837	*		mh	*3
Coleoptera	Colonidae	Colon appendiculatum (Sahlb., 1822)	D		s	*3
Coleoptera	Colonidae	Colon armipes Kr., 1854	D		ss	*3
Coleoptera	Colonidae	Colon barnevillei Kr., 1858	*		s	*3
Coleoptera	Colonidae	Colon bidentatum (Sahlb., 1822)	D		ss	*3
Coleoptera	Colonidae	Colon brunneum (Latr., 1807)	*		h	*3
Coleoptera	Colonidae	Colon calcaratum Er., 1837	D		s	*3
Coleoptera	Colonidae	Colon clavigerum Hbst., 1797	D		ss	*3
Coleoptera	Colonidae	Colon delarouzei Tourbn., 1863	0	1949	ex	*3
Coleoptera	Colonidae	Colon dentipes (Sahlb., 1822)	*		s	*3
Coleoptera	Colonidae	Colon fuscicorne Kr., 1852	R		es	*3
Coleoptera	Colonidae	Colon latum Kr., 1850	*		mh	*3
Coleoptera	Colonidae	Colon murinum Kr., 1850	D		ss	*3
Coleoptera	Colonidae	Colon puncticolle Kr., 1850	R		es	*3
Coleoptera	Colonidae	Colon rufescens Kr., 1850	D		ss	*3
Coleoptera	Colonidae	Colon serripes (Sahlb., 1822)	*		mh	*3
Coleoptera	Colonidae	Colon viennense Hbst., 1797	*		s	*3
Coleoptera	Colonidae	Colon zebei Kr., 1854	D		s	*3
Coleoptera	Colydiidae	Aglenus brunneus (Gyll., 1813)	G		ss	*3
Coleoptera	Colydiidae	Aulonium trisulcum (Fourcr., 1785)	3		ss	*3
Coleoptera	Colydiidae	Bitoma crenata (F., 1775)	*		sh	*3
Coleoptera	Colydiidae	Cicones undatus (Guer., 1844)	*		s	*3
Coleoptera	Colydiidae	Cicones variegatus (Hellw., 1792)	*		mh	*3
Coleoptera	Colydiidae	Colobicus hirtus (Rossi, 1790)	2		es	*3
Coleoptera	Colydiidae	Colydium elongatum (F., 1787)	3		s	*3
Coleoptera	Colydiidae	Colydium filiforme F., 1792	2		ss	*3
Coleoptera	Colydiidae	Coxelus pictus (Sturm, 1807)	V		s	*3
Coleoptera	Colydiidae	Diodesma subterranea Guer., 1844	*		s	*3
Coleoptera	Colydiidae	Langelandia anophthalma Aubé, 1842	R		es	*3
Coleoptera	Colydiidae	Orthocerus clavicornis (L., 1758)	2		s	*3
Coleoptera	Colydiidae	Orthocerus crassicornis (Er., 1845)	1		es	*3
Coleoptera	Colydiidae	Pycnomerus terebrans (Ol., 1790)	3		ss	*3
Coleoptera	Colydiidae	Rhopalocerus rondanii (Villa, 1833)	R		es	*3
Coleoptera	Colydiidae	Synchita humeralis (F., 1792)	*		h	*3
Coleoptera	Colydiidae	Synchita mediolanensis Villa, 1833	1		es	*3
Coleoptera	Colydiidae	Synchita separanda (Rtt., 1882)	1		es	*3
Coleoptera	Corylophidae	Arthrolips obscurus (Sahlb., 1833)	D		ss	*3
Coleoptera	Corylophidae	Arthrolips piceus (Com., 1837)	D		?	*3
Coleoptera	Corylophidae	Corylophus cassidoides (Marsh., 1802)	*		mh	*3
Coleoptera	Corylophidae	Corylophus sublaevipennis Du Val, 1859	R		es	*3
Coleoptera	Corylophidae	Orthoperus atomus (Gyll., 1808)	*		h	*3
Coleoptera	Corylophidae	Orthoperus brunnipes (Gyll., 1808)	D		s	*3
Coleoptera	Corylophidae	Orthoperus intersitus Bruce, 1951	D		ss	*3
Coleoptera	Corylophidae	Orthoperus mundus Matth., 1885	*		h	*3
Coleoptera	Corylophidae	Orthoperus nigrescens Steph., 1829	D		s	*3
Coleoptera	Corylophidae	Orthoperus punctatus Wank., 1865	R		es	*3
Coleoptera	Corylophidae	Orthoperus punctulatus Rtt., 1876	D		ss	*3
Coleoptera	Corylophidae	Sacium brunneum Bris., 1863	D		ss	*3
Coleoptera	Corylophidae	Sacium nanum (Muls. & Rey, 1861)	D		ss	*3
Coleoptera	Corylophidae	Sacium pusillum (Gyll., 1810)	*		s	*3
Coleoptera	Corylophidae	Sericoderus lateralis (Gyll., 1827)	*		sh	*3
Coleoptera	Cryptophagidae	Antherophagus canescens Grouv., 1916	*		s	*3
Coleoptera	Cryptophagidae	Antherophagus nigricornis (F., 1787)	*		mh	*3
Coleoptera	Cryptophagidae	Antherophagus pallens (L., 1758)	*		mh	*3
Coleoptera	Cryptophagidae	Atomaria abietina Rtt., 1887	R		es	*3
Coleoptera	Cryptophagidae	Atomaria affinis Sahlb., 1834	D		ss	*3
Coleoptera	Cryptophagidae	Atomaria alpina Heer, 1841	*		ss	*3
Coleoptera	Cryptophagidae	Atomaria analis Er., 1846	*		sh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Cryptophagidae	Atomaria apicalis Er., 1846	*		h	*3
Coleoptera	Cryptophagidae	Atomaria atra (Hbst., 1793)	3		s	*3
Coleoptera	Cryptophagidae	Atomaria atrata Rtt., 1875	D		s	*3
Coleoptera	Cryptophagidae	Atomaria atricapilla Steph., 1830	*		sh	*3
Coleoptera	Cryptophagidae	Atomaria attila Rtt., 1878	R		es	*3
Coleoptera	Cryptophagidae	Atomaria badia Er., 1846	D		ss	*3
Coleoptera	Cryptophagidae	Atomaria barani Bris., 1863	D		s	*3
Coleoptera	Cryptophagidae	Atomaria basalis Er., 1846	*		h	*3
Coleoptera	Cryptophagidae	Atomaria basicornis Rtt., 1887	D		ss	*3
Coleoptera	Cryptophagidae	Atomaria bella Rtt., 1875	D		ss	*3
Coleoptera	Cryptophagidae	Atomaria bicolor Er., 1846	R		es	*3
Coleoptera	Cryptophagidae	Atomaria clavigera Ganglb., 1899	3		ss	*3
Coleoptera	Cryptophagidae	Atomaria diluta Er., 1846	*		s	*3
Coleoptera	Cryptophagidae	Atomaria elongatula Er., 1846	D		ss	*3
Coleoptera	Cryptophagidae	Atomaria fimetarii (Hbst., 1793)	*		s	*3
Coleoptera	Cryptophagidae	Atomaria fuscata (Schönh., 1808)	*		sh	*3
Coleoptera	Cryptophagidae	Atomaria fuscipes (Gyll., 1808)	G		ss	*3
Coleoptera	Cryptophagidae	Atomaria gibbula Er., 1846	*		s	*3
Coleoptera	Cryptophagidae	Atomaria gottwaldi Johns., 1971	R		es	*3
Coleoptera	Cryptophagidae	Atomaria gravidula Er., 1846	G		ss	*3
Coleoptera	Cryptophagidae	Atomaria gutta Newm., 1834	*		mh	*3
Coleoptera	Cryptophagidae	Atomaria hislopi Woll., 1857	R		es	*3
Coleoptera	Cryptophagidae	Atomaria ihsseni Johns.,1978	R		es	*3
Coleoptera	Cryptophagidae	Atomaria impressa Er., 1846	*		ss	*3
Coleoptera	Cryptophagidae	Atomaria jonica Rtt., 1887	R		es	*3
Coleoptera	Cryptophagidae	Atomaria lewisi Rtt., 1877	*		sh	*3
Coleoptera	Cryptophagidae	Atomaria linearis Steph., 1830	*		sh	*3
Coleoptera	Cryptophagidae	Atomaria lohsei Johns. & Strand, 1968	*		s	*3
Coleoptera	Cryptophagidae	Atomaria mesomela (Hbst., 1792)	*		mh	*3
Coleoptera	Cryptophagidae	Atomaria morio Kol., 1846	3		s	*3
Coleoptera	Cryptophagidae	Atomaria munda Er., 1846	3		s	*3
Coleoptera	Cryptophagidae	Atomaria nigripennis (Kug., 1794)	3		s	*3
Coleoptera	Cryptophagidae	Atomaria nigrirostris Steph., 1830	*		sh	*3
Coleoptera	Cryptophagidae	Atomaria nigriventris Steph., 1830	*		mh	*3
Coleoptera	Cryptophagidae	Atomaria nitidula (Marsh., 1802)	D		s	*3
Coleoptera	Cryptophagidae	Atomaria ornata Heer, 1841	*		s	*3
Coleoptera	Cryptophagidae	Atomaria peltata Kr., 1853	3		s	*3
Coleoptera	Cryptophagidae	Atomaria plicata Rtt., 1875	D		ss	*3
Coleoptera	Cryptophagidae	Atomaria procerula Er., 1846	*		mh	*3
Coleoptera	Cryptophagidae	Atomaria pseudatra Rtt., 1887	G		ss	*3
Coleoptera	Cryptophagidae	Atomaria pulchra Er., 1846	D		s	*3
Coleoptera	Cryptophagidae	Atomaria puncticollis Thoms., 1868	*		mh	*3
Coleoptera	Cryptophagidae	Atomaria punctithorax Rtt., 1887	*		mh	*3
Coleoptera	Cryptophagidae	Atomaria pusilla (Payk., 1798)	*		h	*3
Coleoptera	Cryptophagidae	Atomaria rhenana Kr., 1853	V		s	*3
Coleoptera	Cryptophagidae	Atomaria rubella Heer, 1841	*		mh	*3
Coleoptera	Cryptophagidae	Atomaria rubida Rtt., 1875	D		?	*3
Coleoptera	Cryptophagidae	Atomaria rubricollis Bris., 1863	V		s	*3
Coleoptera	Cryptophagidae	Atomaria scutellaris Motsch., 1849	R		es	*3
Coleoptera	Cryptophagidae	Atomaria soedermani Sjöb., 1947	D		?	*3
Coleoptera	Cryptophagidae	Atomaria subangulata Sahlb., 1926	D		ss	*3
Coleoptera	Cryptophagidae	Atomaria testacea Steph., 1830	*		sh	*3
Coleoptera	Cryptophagidae	Atomaria turgida Er., 1846	*		h	*3
Coleoptera	Cryptophagidae	Atomaria umbrina (Gyll., 1827)	*		s	*3
Coleoptera	Cryptophagidae	Atomaria wollastoni Shp., 1867	*		ss	*3
Coleoptera	Cryptophagidae	Atomaria zetterstedti (Zett., 1838)	3		ss	*3
Coleoptera	Cryptophagidae	Caenoscelis ferruginea (Sahlb., 1820)	*		mh	*3
Coleoptera	Cryptophagidae	Caenoscelis sibirica Rtt., 1889	*		s	*3
Coleoptera	Cryptophagidae	Caenoscelis subdeplanata Bris., 1882	*		mh	*3
Coleoptera	Cryptophagidae	Cryptophagus acuminatus Coombs & Woodr., 1955	D		?	*3
Coleoptera	Cryptophagidae	Cryptophagus acutangulus Gyll., 1827	*		h	*3
Coleoptera	Cryptophagidae	Cryptophagus angustus Ganglb., 1899	D		ss	*3
Coleoptera	Cryptophagidae	Cryptophagus badius Sturm, 1845	3		s	*3
Coleoptera	Cryptophagidae	Cryptophagus cellaris (Scop., 1763)	3		s	*3
Coleoptera	Cryptophagidae	Cryptophagus confusus Bruce, 1934	2		ss	*3
Coleoptera	Cryptophagidae	Cryptophagus corticinus Thoms., 1863	G		ss	*3
Coleoptera	Cryptophagidae	Cryptophagus croaticus Rtt., 1879	*		s	*3
Coleoptera	Cryptophagidae	Cryptophagus cylindrus Kiesw., 1858	*		s	*3
Coleoptera	Cryptophagidae	Cryptophagus dentatus (Hbst., 1793)	*		sh	*3
Coleoptera	Cryptophagidae	Cryptophagus deubeli Ganglb., 1897	*		mh	*3
Coleoptera	Cryptophagidae	Cryptophagus distinguendus Sturm, 1845	*		sh	*3
Coleoptera	Cryptophagidae	Cryptophagus dorsalis Sahlb., 1834	*		mh	*3
Coleoptera	Cryptophagidae	Cryptophagus fallax Balf.-Browne, 1953	*		s	*3
Coleoptera	Cryptophagidae	Cryptophagus fuscicornis Sturm, 1845	2		ss	*3
Coleoptera	Cryptophagidae	Cryptophagus intermedius Bruce, 1934	*		s	*3
Coleoptera	Cryptophagidae	Cryptophagus labilis Er., 1846	V		s	*3
Coleoptera	Cryptophagidae	Cryptophagus lapponicus Gyll., 1827	D		ss	*3
Coleoptera	Cryptophagidae	Cryptophagus laticollis Lucas, 1849	3		s	*3
Coleoptera	Cryptophagidae	Cryptophagus lycoperdi (Scop., 1763)	*		h	*3
Coleoptera	Cryptophagidae	Cryptophagus lysholmi Munst., 1932	R		es	*3

Order	Family	Species	K	L	P	S
Coleoptera	Cryptophagidae	Cryptophagus micaceus Rey, 1889	*		mh	*3
Coleoptera	Cryptophagidae	Cryptophagus nitidulus Mill., 1858	D		ss	*3
Coleoptera	Cryptophagidae	Cryptophagus obsoletus Rtt., 1879	nb		nb	*3
Coleoptera	Cryptophagidae	Cryptophagus pallidus Sturm, 1845	*		sh	*3
Coleoptera	Cryptophagidae	Cryptophagus pilosus Gyll., 1827	*		sh	*3
Coleoptera	Cryptophagidae	Cryptophagus populi Payk., 1800	*		s	*3
Coleoptera	Cryptophagidae	Cryptophagus postpositus Sahlb., 1903	D		s	*3
Coleoptera	Cryptophagidae	Cryptophagus pseudodentatus Bruce, 1934	*		sh	*3
Coleoptera	Cryptophagidae	Cryptophagus pubescens Sturm, 1845	*		h	*3
Coleoptera	Cryptophagidae	Cryptophagus quercinus Kr., 1852	3		s	*3
Coleoptera	Cryptophagidae	Cryptophagus rotundatus Coombs & Woodr., 1955	D		?	*3
Coleoptera	Cryptophagidae	Cryptophagus ruficornis Steph., 1830	D		?	*3
Coleoptera	Cryptophagidae	Cryptophagus saginatus Sturm, 1845	*		sh	*3
Coleoptera	Cryptophagidae	Cryptophagus scanicus (L., 1758)	*		h	*3
Coleoptera	Cryptophagidae	Cryptophagus schmidti Sturm, 1845	*		mh	*3
Coleoptera	Cryptophagidae	Cryptophagus scutellatus Newm., 1834	*		h	*3
Coleoptera	Cryptophagidae	Cryptophagus setulosus Sturm, 1845	*		s	*3
Coleoptera	Cryptophagidae	Cryptophagus sporadum Bruce, 1934	R		es	*3
Coleoptera	Cryptophagidae	Cryptophagus subdepressus Gyll., 1827	*		s	*3
Coleoptera	Cryptophagidae	Cryptophagus subfumatus Kr., 1856	3		s	*3
Coleoptera	Cryptophagidae	Cryptophagus thomsoni Rtt., 1875	*		sh	*3
Coleoptera	Cryptophagidae	Curelius exiguus Er., 1846	D		ss	*3
Coleoptera	Cryptophagidae	Curelius japonicus (Rtt., 1877)	nb		nb	*3
Coleoptera	Cryptophagidae	Emphylus glaber (Gyll., 1808)	*		mh	*3
Coleoptera	Cryptophagidae	Ephistemus globulus (Payk., 1798)	*		sh	*3
Coleoptera	Cryptophagidae	Ephistemus reitteri Casey, 1900	nb		nb	*3
Coleoptera	Cryptophagidae	Henoticus californicus (Mannh., 1843)	D		ss	*3
Coleoptera	Cryptophagidae	Henoticus serratus (Gyll., 1808)	D		ss	*3
Coleoptera	Cryptophagidae	Hypocoprus lathridioides Motsch., 1839	G		ss	*3
Coleoptera	Cryptophagidae	Micrambe abietis (Payk., 1798)	*		h	*3
Coleoptera	Cryptophagidae	Micrambe bimaculata (Panz., 1798)	D		ss	*3
Coleoptera	Cryptophagidae	Micrambe lindbergorum (Bruce, 1934)	*		mh	*3
Coleoptera	Cryptophagidae	Micrambe longitarsis (Sahlb., 1900)	R		es	*3
Coleoptera	Cryptophagidae	Micrambe villosa (Heer, 1841)	*		mh	*3
Coleoptera	Cryptophagidae	Micrambe vini (Panz., 1797)	D		?	*3
Coleoptera	Cryptophagidae	Ootypus globosus (Waltl, 1838)	*		mh	*3
Coleoptera	Cryptophagidae	Paramecosoma melanocephalum (Hbst., 1793)	*		mh	*3
Coleoptera	Cryptophagidae	Pteryngium crenatum (F., 1798)	*		s	*3
Coleoptera	Cryptophagidae	Telmatophilus brevicollis Aubé, 1862	*		mh	*3
Coleoptera	Cryptophagidae	Telmatophilus caricis (Ol., 1790)	*		mh	*3
Coleoptera	Cryptophagidae	Telmatophilus schoenherri (Gyll., 1808)	*		mh	*3
Coleoptera	Cryptophagidae	Telmatophilus sparganii (Ahr., 1812)	G		s	*3
Coleoptera	Cryptophagidae	Telmatophilus typhae (Fall., 1802)	*		h	*3
Coleoptera	Cucujidae	Cucujus cinnaberinus (Scop., 1763)	*		s	*3
Coleoptera	Cucujidae	Pediacus depressus (Hbst., 1797)	*		mh	*3
Coleoptera	Cucujidae	Pediacus dermestoides (F., 1792)	G		ss	*3
Coleoptera	Cucujidae	Pediacus fuscus Er., 1845	R		es	*3
Coleoptera	Curculionidae	Acalles camelus (Fabricius, 1792)	*		mh	*3
Coleoptera	Curculionidae	Acalles dubius A. & F. Solari, 1907	*		s	*3
Coleoptera	Curculionidae	Acalles echinatus (Germar, 1824)	*		s	*3
Coleoptera	Curculionidae	Acalles fallax Boheman, 1844	*		s	*3
Coleoptera	Curculionidae	Acalles lemur (Germar, 1824)	*		s	*3
Coleoptera	Curculionidae	Acalles micros Dieckmann, 1982	*		ss	*3
Coleoptera	Curculionidae	Acalles misellus Boheman, 1844	3		ss	*3
Coleoptera	Curculionidae	Acalles parvulus Boheman, 1837	R		es	*3
Coleoptera	Curculionidae	Acalles ptinoides (Marsham, 1802)	*		s	*3
Coleoptera	Curculionidae	Acallocrates colonnellii Bahr, 2003	0	1900	ex	*3
Coleoptera	Curculionidae	Acalyptus carpini (Fabricius, 1792)	*		mh	*3
Coleoptera	Curculionidae	Acalyptus sericeus Gyllenhal, 1836	3		ss	*3
Coleoptera	Curculionidae	Adexius scrobipennis Gyllenhal, 1834	*		s	*3
Coleoptera	Curculionidae	Amalorrhynchus melanarius (Stephens, 1831)	V		s	*3
Coleoptera	Curculionidae	Amalus scortillum (Herbst, 1795)	*		mh	*3
Coleoptera	Curculionidae	Andrion regensteinense (Herbst, 1797)	*		h	*3
Coleoptera	Curculionidae	Anoplus plantaris (Naezen, 1794)	*		mh	*3
Coleoptera	Curculionidae	Anoplus roboris Suffrian, 1840	*		mh	*3
Coleoptera	Curculionidae	Anoplus setulosus Kirsch, 1870	3		s	*3
Coleoptera	Curculionidae	Anthonomus bituberculatus Thomson, 1868	V		s	*3
Coleoptera	Curculionidae	Anthonomus brunnipennis Curtis, 1840	1		es	*3
Coleoptera	Curculionidae	Anthonomus chevrolati Desbrochers, 1868	D		ss	*3
Coleoptera	Curculionidae	Anthonomus conspersus Desbrochers, 1868	G		s	*3
Coleoptera	Curculionidae	Anthonomus germanicus Dieckmann, 1968	2		es	*3
Coleoptera	Curculionidae	Anthonomus humeralis (Panzer, 1795)	*		mh	*3
Coleoptera	Curculionidae	Anthonomus kirschi Desbrochers, 1868	G		ss	*3
Coleoptera	Curculionidae	Anthonomus pedicularius (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Anthonomus phyllocola (Herbst, 1795)	*		h	*3
Coleoptera	Curculionidae	Anthonomus pinivorax Silfverberg, 1977	D		s	*3
Coleoptera	Curculionidae	Anthonomus piri Kollar, 1837	G		s	*3
Coleoptera	Curculionidae	Anthonomus pomorum (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Anthonomus rectirostris (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Anthonomus rubi (Herbst, 1795)	*		sh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Curculionidae	Anthonomus rufus Gyllenhal, 1836	*		mh	*3
Coleoptera	Curculionidae	Anthonomus sorbi Germar, 1821	*		s	*3
Coleoptera	Curculionidae	Anthonomus spilotus Redtenbacher, 1849	G		ss	*3
Coleoptera	Curculionidae	Anthonomus ulmi (DeGeer, 1775)	*		s	*3
Coleoptera	Curculionidae	Anthonomus undulatus Gyllenhal, 1836	*		ss	*3
Coleoptera	Curculionidae	Aphytobius sphaerion (Boheman, 1845)	0	1891	ex	*3
Coleoptera	Curculionidae	Archarius crux (Fabricius, 1776)	*		h	*3
Coleoptera	Curculionidae	Archarius pyrrhoceras (Marsham, 1802)	*		h	*3
Coleoptera	Curculionidae	Archarius salicivorus (Paykull, 1792)	*		h	*3
Coleoptera	Curculionidae	Archeophloeus inermis (Boheman, 1842)	R		es	*3
Coleoptera	Curculionidae	Argoptochus quadrisignatus (Bach, 1856)	2		ss	*3
Coleoptera	Curculionidae	Asproparthenis punctiventris (Germar, 1824)	3		ss	*3
Coleoptera	Curculionidae	Attactagenus plumbeus (Marsham, 1802)	1		es	*3
Coleoptera	Curculionidae	Aulacobaris chlorizans (Germar, 1824)	2		ss	*3
Coleoptera	Curculionidae	Aulacobaris coerulescens (Scopoli, 1763)	*		mh	*3
Coleoptera	Curculionidae	Aulacobaris cuprirostris (Fabricius, 1787)	2		ss	*3
Coleoptera	Curculionidae	Aulacobaris fallax (H. Brisout, 1870)	3		s	*3
Coleoptera	Curculionidae	Aulacobaris lepidii (Germar, 1824)	*		mh	*3
Coleoptera	Curculionidae	Aulacobaris picicornis (Marsham, 1802)	*		s	*3
Coleoptera	Curculionidae	Auleutes epilobii (Paykull, 1800)	*		mh	*3
Coleoptera	Curculionidae	Bagous alismatis (Marsham, 1802)	V		mh	*3
Coleoptera	Curculionidae	Bagous argillaceus Gyllenhal, 1836	0	1918	ex	*3
Coleoptera	Curculionidae	Bagous binodulus (Herbst, 1795)	2		s	*3
Coleoptera	Curculionidae	Bagous brevis Gyllenhal, 1836	0	1912	ex	*3
Coleoptera	Curculionidae	Bagous claudicans Boheman, 1845	1		es	*3
Coleoptera	Curculionidae	Bagous collignensis (Herbst, 1797)	2		s	*3
Coleoptera	Curculionidae	Bagous czwalinai Seidlitz, 1891	0	1951	ex	*3
Coleoptera	Curculionidae	Bagous diglyptus Boheman, 1845	2		ss	*3
Coleoptera	Curculionidae	Bagous elegans (Fabricius, 1801)	1		es	*3
Coleoptera	Curculionidae	Bagous frit (Herbst, 1795)	2		ss	*3
Coleoptera	Curculionidae	Bagous frivaldszkyi Tournier, 1874	2		ss	*3
Coleoptera	Curculionidae	Bagous glabrirostris (Herbst, 1795)	3		s	*3
Coleoptera	Curculionidae	Bagous limosus (Gyllenhal, 1827)	2		s	*3
Coleoptera	Curculionidae	Bagous longitarsis Thomson, 1868	2		s	*3
Coleoptera	Curculionidae	Bagous lutosus (Gyllenhal, 1813)	1		ss	*3
Coleoptera	Curculionidae	Bagous lutulentus (Gyllenhal, 1813)	3		mh	*3
Coleoptera	Curculionidae	Bagous lutulosus (Gyllenhal, 1827)	1		ss	*3
Coleoptera	Curculionidae	Bagous majzlani (Kodada et al., 1992)	1		es	*3
Coleoptera	Curculionidae	Bagous nodulosus Gyllenhal, 1836	2		s	*3
Coleoptera	Curculionidae	Bagous petro (Herbst, 1795)	1		es	*3
Coleoptera	Curculionidae	Bagous puncticollis Boheman, 1845	2		s	*3
Coleoptera	Curculionidae	Bagous robustus H. Brisout, 1863	2		ss	*3
Coleoptera	Curculionidae	Bagous rotundicollis Boheman, 1845	1		es	*3
Coleoptera	Curculionidae	Bagous subcarinatus Gyllenhal, 1836	V		mh	*3
Coleoptera	Curculionidae	Bagous tempestivus (Herbst, 1795)	V		mh	*3
Coleoptera	Curculionidae	Bagous tubulus Caldara & O'Brien, 1998	3		s	*3
Coleoptera	Curculionidae	Baris analis (Olivier, 1790)	1		es	*3
Coleoptera	Curculionidae	Baris artemisiae (Herbst, 1795)	*		mh	*3
Coleoptera	Curculionidae	Baris nesapia Faust, 1887	1		es	*3
Coleoptera	Curculionidae	Barynotus alternans Boheman, 1834	D		ss	*3
Coleoptera	Curculionidae	Barynotus margaritaceus Germar, 1824	R		es	*3
Coleoptera	Curculionidae	Barynotus moerens (Fabricius, 1792)	*		s	*3
Coleoptera	Curculionidae	Barynotus obscurus (Fabricius, 1775)	*		mh	*3
Coleoptera	Curculionidae	Bothynoderes affinis (Schrank, 1781)	V		s	*3
Coleoptera	Curculionidae	Brachiodontus alpinus (Hampe, 1867)	R		es	*3
Coleoptera	Curculionidae	Brachonyx pineti (Paykull, 1792)	*		h	*3
Coleoptera	Curculionidae	Brachyderes incanus (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Brachyderes lusitanicus (Fabricius, 1781)	D		?	*3
Coleoptera	Curculionidae	Brachypera dauci (Olivier, 1807)	3		s	*3
Coleoptera	Curculionidae	Brachypera vidua (Gené, 1837)	1		es	*3
Coleoptera	Curculionidae	Brachypera zoilus (Scopoli, 1763)	*		mh	*3
Coleoptera	Curculionidae	Brachysomus echinatus (Bonsdorff, 1785)	*		mh	*3
Coleoptera	Curculionidae	Brachysomus hirtus (Boheman, 1845)	3		s	*3
Coleoptera	Curculionidae	Brachysomus setiger (Gyllenhal, 1840)	2		s	*3
Coleoptera	Curculionidae	Brachysomus subnudus (Seidlitz, 1868)	R		es	*3
Coleoptera	Curculionidae	Brachytemnus porcatus (Germar, 1824)	3		ss	*3
Coleoptera	Curculionidae	Bradybatus creutzeri Germar, 1824	G		ss	*3
Coleoptera	Curculionidae	Bradybatus fallax Gerstaecker, 1860	*		s	*3
Coleoptera	Curculionidae	Bradybatus kellneri Bach, 1854	*		s	*3
Coleoptera	Curculionidae	Caenopsis fissirostris (Waltl, 1847)	D		ss	*3
Coleoptera	Curculionidae	Caenopsis waltoni (Boheman, 1842)	*		ss	*3
Coleoptera	Curculionidae	Calosirus apicalis (Gyllenhal, 1827)	2		ss	*3
Coleoptera	Curculionidae	Calosirus terminatus (Herbst, 1795)	V		s	*3
Coleoptera	Curculionidae	Camptorhinus statua (Rossi, 1790)	1		es	*3
Coleoptera	Curculionidae	Cathormiocerus aristatus (Gyllenhal, 1827)	*		mh	*3
Coleoptera	Curculionidae	Cathormiocerus spinosus (Goeze, 1777)	V		s	*3
Coleoptera	Curculionidae	Centricnemus leucogrammus (Germar, 1824)	2		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus aeneicollis Germar, 1824	V		s	*3
Coleoptera	Curculionidae	Ceutorhynchus alliariae H. Brisout, 1860	*		h	*3
Coleoptera	Curculionidae	Ceutorhynchus assimilis (Paykull, 1792)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Curculionidae	Ceutorhynchus atomus Boheman, 1845	*		s	*3
Coleoptera	Curculionidae	Ceutorhynchus barbareae Suffrian, 1847	2		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus cakilis (Hansen, 1917)	3		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus canaliculatus Ch. Brisout, 1869	*		s	*3
Coleoptera	Curculionidae	Ceutorhynchus carinatus Gyllenhal, 1837	2		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus chalybaeus Germar, 1824	V		mh	*3
Coleoptera	Curculionidae	Ceutorhynchus chlorophanus Rouget, 1857	1		es	*3
Coleoptera	Curculionidae	Ceutorhynchus cochleariae (Gyllenhal, 1813)	*		mh	*3
Coleoptera	Curculionidae	Ceutorhynchus coerulescens Gyllenhal, 1837	2		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus constrictus (Marsham, 1802)	*		mh	*3
Coleoptera	Curculionidae	Ceutorhynchus contractus (Marsham, 1802)	*		h	*3
Coleoptera	Curculionidae	Ceutorhynchus dubius Ch. Brisout, 1883	2		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus erysimi (Fabricius, 1787)	*		sh	*3
Coleoptera	Curculionidae	Ceutorhynchus gallorhenanus F. Solari, 1949	2		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus granulicollis Thomson, 1865	3		s	*3
Coleoptera	Curculionidae	Ceutorhynchus griseus Ch. Brisout, 1869	3		s	*3
Coleoptera	Curculionidae	Ceutorhynchus hampei Ch. Brisout, 1869	V		s	*3
Coleoptera	Curculionidae	Ceutorhynchus hirtulus Germar, 1824	V		s	*3
Coleoptera	Curculionidae	Ceutorhynchus hutchinsiae Tempère, 1975	D		?	*3
Coleoptera	Curculionidae	Ceutorhynchus ignitus Germar, 1824	*		mh	*3
Coleoptera	Curculionidae	Ceutorhynchus inaffectatus Gyllenhal, 1837	*		s	*3
Coleoptera	Curculionidae	Ceutorhynchus interjectus Schultze, 1903	R		es	*3
Coleoptera	Curculionidae	Ceutorhynchus leprieuri Ch. Brisout, 1881	1		es	*3
Coleoptera	Curculionidae	Ceutorhynchus nanus Gyllenhal, 1837	2		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus napi Gyllenhal, 1837	*		h	*3
Coleoptera	Curculionidae	Ceutorhynchus nigritulus Schultze, 1897	1		es	*3
Coleoptera	Curculionidae	Ceutorhynchus niyazii Hoffmann, 1957	*		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus obstrictus (Marsham, 1802)	*		sh	*3
Coleoptera	Curculionidae	Ceutorhynchus pallidactylus (Marsham, 1802)	*		sh	*3
Coleoptera	Curculionidae	Ceutorhynchus pandellei Ch. Brisout, 1869	R		es	*3
Coleoptera	Curculionidae	Ceutorhynchus parvulus Ch. Brisout, 1869	V		s	*3
Coleoptera	Curculionidae	Ceutorhynchus pectoralis Weise, 1895	3		s	*3
Coleoptera	Curculionidae	Ceutorhynchus pervicax Weise, 1883	*		s	*3
Coleoptera	Curculionidae	Ceutorhynchus picitarsis (Gyllenhal, 1837)	*		mh	*3
Coleoptera	Curculionidae	Ceutorhynchus plumbeus Ch. Brisout, 1869	2		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus posthumus Germar, 1824	1		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus pulvinatus Gyllenhal, 1837	*		s	*3
Coleoptera	Curculionidae	Ceutorhynchus pumilio (Gyllenhal, 1827)	V		mh	*3
Coleoptera	Curculionidae	Ceutorhynchus puncticollis Boheman, 1845	*		s	*3
Coleoptera	Curculionidae	Ceutorhynchus pyrrhorhynchus (Marsham, 1802)	*		h	*3
Coleoptera	Curculionidae	Ceutorhynchus querceti (Gyllenhal, 1813)	3		s	*3
Coleoptera	Curculionidae	Ceutorhynchus rapae Gyllenhal, 1837	*		mh	*3
Coleoptera	Curculionidae	Ceutorhynchus resedae (Marsham, 1802)	*		mh	*3
Coleoptera	Curculionidae	Ceutorhynchus rhenanus (Schultze, 1895)	3		s	*3
Coleoptera	Curculionidae	Ceutorhynchus roberti Gyllenhal, 1837	*		s	*3
Coleoptera	Curculionidae	Ceutorhynchus rusticus Gyllenhal, 1837	3		s	*3
Coleoptera	Curculionidae	Ceutorhynchus scapularis Gyllenhal, 1837	V		s	*3
Coleoptera	Curculionidae	Ceutorhynchus scrobicollis Neresheimer & Wagner, 1924	V		s	*3
Coleoptera	Curculionidae	Ceutorhynchus similis Ch. Brisout, 1869	1		es	*3
Coleoptera	Curculionidae	Ceutorhynchus sisymbrii (Dieckmann, 1966)	*		s	*3
Coleoptera	Curculionidae	Ceutorhynchus sophiae Gyllenhal, 1837	3		s	*3
Coleoptera	Curculionidae	Ceutorhynchus striatellus Schultze, 1900	2		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus sulcicollis (Paykull, 1800)	V		mh	*3
Coleoptera	Curculionidae	Ceutorhynchus syrites Germar, 1824	2		ss	*3
Coleoptera	Curculionidae	Ceutorhynchus thomsoni Kolbe, 1900	R		es	*3
Coleoptera	Curculionidae	Ceutorhynchus turbatus Schultze, 1903	*		mh	*3
Coleoptera	Curculionidae	Ceutorhynchus typhae (Herbst, 1795)	*		sh	*3
Coleoptera	Curculionidae	Ceutorhynchus unguicularis Thomson, 1871	2		s	*3
Coleoptera	Curculionidae	Charagmus gressorius (Fabricius, 1792)	*		h	*3
Coleoptera	Curculionidae	Charagmus griseus (Fabricius, 1775)	*		mh	*3
Coleoptera	Curculionidae	Charagmus intermedius (Küster, 1847)	2		ss	*3
Coleoptera	Curculionidae	Chlorophanus flavescens (Fabricius, 1787)	1		es	*3
Coleoptera	Curculionidae	Chlorophanus pollinosus (Fabricius, 1792)	1		es	*3
Coleoptera	Curculionidae	Chlorophanus viridis (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Cionus alauda (Herbst, 1784)	*		mh	*3
Coleoptera	Curculionidae	Cionus clairvillei Boheman, 1838	1		ss	*3
Coleoptera	Curculionidae	Cionus ganglbaueri Wingelmüller, 1914	3		s	*3
Coleoptera	Curculionidae	Cionus hortulanus (Geoffroy, 1785)	*		h	*3
Coleoptera	Curculionidae	Cionus leonhardi Wingelmüller, 1914	1		es	*3
Coleoptera	Curculionidae	Cionus longicollis montanus Wingelmüller, 1914	3		s	*3
Coleoptera	Curculionidae	Cionus nigritarsis Reitter, 1904	*		mh	*3
Coleoptera	Curculionidae	Cionus olens (Fabricius, 1792)	V		s	*3
Coleoptera	Curculionidae	Cionus olivieri Rosenschöld, 1838	0	1951	ex	*3
Coleoptera	Curculionidae	Cionus scrophulariae (Linnaeus, 1758)	V		s	*3
Coleoptera	Curculionidae	Cionus thapsus (Fabricius, 1792)	G		s	*3
Coleoptera	Curculionidae	Cionus tuberculosus (Scopoli, 1763)	*		h	*3
Coleoptera	Curculionidae	Cleonis pigra (Scopoli, 1763)	*		mh	*3
Coleoptera	Curculionidae	Cleopomiarus distinctus (Boheman, 1845)	2		ss	*3
Coleoptera	Curculionidae	Cleopomiarus graminis (Gyllenhal, 1813)	*		mh	*3
Coleoptera	Curculionidae	Cleopomiarus micros (Germar, 1821)	3		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Curculionidae	Cleopus pulchellus (Herbst, 1795)	V		s	*3
Coleoptera	Curculionidae	Cleopus solani (Fabricius, 1792)	*		s	*3
Coleoptera	Curculionidae	Coeliastes lamii (Fabricius, 1792)	*		mh	*3
Coleoptera	Curculionidae	Coeliodes ilicis (Bedel, 1885)	2		es	*3
Coleoptera	Curculionidae	Coeliodes rana (Fabricius, 1787)	*		h	*3
Coleoptera	Curculionidae	Coeliodes ruber (Marsham, 1802)	*		mh	*3
Coleoptera	Curculionidae	Coeliodes transversealbofasciatus (Goeze, 1777)	*		h	*3
Coleoptera	Curculionidae	Coeliodes trifasciatus Bach, 1854	V		s	*3
Coleoptera	Curculionidae	Coeliodinus nigritarsis (Hartmann, 1895)	2		ss	*3
Coleoptera	Curculionidae	Coeliodinus rubicundus (Herbst, 1795)	*		h	*3
Coleoptera	Curculionidae	Coelositona cambricus (Stephens, 1831)	V		s	*3
Coleoptera	Curculionidae	Coelositona cinerascens (Fahraeus, 1840)	1		es	*3
Coleoptera	Curculionidae	Coniatus wenckeri Capiomont, 1868	0	1914	ex	*3
Coleoptera	Curculionidae	Coniocleonus cicatricosus (Hoppe, 1795)	1		es	*3
Coleoptera	Curculionidae	Coniocleonus nebulosus (Linnaeus, 1758)	1		ss	*3
Coleoptera	Curculionidae	Coniocleonus nigrosuturatus (Goeze, 1777)	1		es	*3
Coleoptera	Curculionidae	Coniocleonus turbatus (Fahraeus, 1842)	3		s	*3
Coleoptera	Curculionidae	Coryssomerus capucinus (Beck, 1817)	V		s	*3
Coleoptera	Curculionidae	Cosmobaris scolopacea (Germar, 1824)	1		es	*3
Coleoptera	Curculionidae	Cossonus cylindricus Sahlberg, 1835	3		s	*3
Coleoptera	Curculionidae	Cossonus linearis (Fabricius, 1775)	*		mh	*3
Coleoptera	Curculionidae	Cossonus parallelepipedus (Herbst, 1795)	V		s	*3
Coleoptera	Curculionidae	Cotaster cuneipennis Aubé, 1850	1		es	*3
Coleoptera	Curculionidae	Cotaster uncipes (Boheman, 1838)	G		ss	*3
Coleoptera	Curculionidae	Cryptorhynchus lapathi (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Curculio betulae (Stephens, 1831)	V		s	*3
Coleoptera	Curculionidae	Curculio elephas (Gyllenhal, 1836)	D		ss	*3
Coleoptera	Curculionidae	Curculio glandium Marsham, 1802	*		sh	*3
Coleoptera	Curculionidae	Curculio nucum Linnaeus, 1758	*		h	*3
Coleoptera	Curculionidae	Curculio pellitus (Boheman, 1843)	*		s	*3
Coleoptera	Curculionidae	Curculio rubidus (Gyllenhal, 1836)	V		mh	*3
Coleoptera	Curculionidae	Curculio venosus (Gravenhorst, 1807)	*		h	*3
Coleoptera	Curculionidae	Curculio villosus Fabricius, 1781	*		mh	*3
Coleoptera	Curculionidae	Cycloderes pilosulus (Herbst, 1796)	2		ss	*3
Coleoptera	Curculionidae	Cyphocleonus dealbatus (Gmelin, 1790)	3		s	*3
Coleoptera	Curculionidae	Cyphocleonus trisulcatus (Herbst, 1795)	2		ss	*3
Coleoptera	Curculionidae	Datonychus angulosus (Boheman, 1845)	*		mh	*3
Coleoptera	Curculionidae	Datonychus arquatus (Herbst, 1795)	3		s	*3
Coleoptera	Curculionidae	Datonychus derennei (Guillebeau, 1936)	2		ss	*3
Coleoptera	Curculionidae	Datonychus melanostictus (Marsham, 1802)	*		mh	*3
Coleoptera	Curculionidae	Datonychus paszlavszkyi (Kuthy, 1890)	1		es	*3
Coleoptera	Curculionidae	Datonychus urticae (Boheman, 1845)	3		s	*3
Coleoptera	Curculionidae	Dieckmanniellus chevrieri (Boheman, 1845)	0	1950	ex	*3
Coleoptera	Curculionidae	Dodecastichus geniculatus (Germar, 1817)	*		mh	*3
Coleoptera	Curculionidae	Dodecastichus inflatus (Gyllenhal, 1834)	D		ss	*3
Coleoptera	Curculionidae	Donus comatus (Boheman, 1842)	*		s	*3
Coleoptera	Curculionidae	Donus intermedius (Boheman, 1842)	2		ss	*3
Coleoptera	Curculionidae	Donus ovalis (Boheman, 1842)	*		s	*3
Coleoptera	Curculionidae	Donus palumbarius (Germar, 1821)	R		es	*3
Coleoptera	Curculionidae	Donus segnis (Capiomont, 1867)	0	1937	ex	*3
Coleoptera	Curculionidae	Donus tesselatus (Herbst, 1795)	2		ss	*3
Coleoptera	Curculionidae	Donus viennensis (Herbst, 1795)	2		ss	*3
Coleoptera	Curculionidae	Dorytomus dejeani Faust, 1882	*		h	*3
Coleoptera	Curculionidae	Dorytomus dorsalis (Linnaeus, 1758)	2		ss	*3
Coleoptera	Curculionidae	Dorytomus filirostris (Gyllenhal, 1836)	*		mh	*3
Coleoptera	Curculionidae	Dorytomus hirtipennis (Bedel, 1884)	*		mh	*3
Coleoptera	Curculionidae	Dorytomus ictor (Herbst, 1795)	*		h	*3
Coleoptera	Curculionidae	Dorytomus longimanus (Forster, 1771)	*		h	*3
Coleoptera	Curculionidae	Dorytomus majalis (Paykull, 1792)	3		s	*3
Coleoptera	Curculionidae	Dorytomus melanophthalmus (Paykull, 1792)	*		h	*3
Coleoptera	Curculionidae	Dorytomus minutus (Gyllenhal, 1836)	3		s	*3
Coleoptera	Curculionidae	Dorytomus nebulosus (Gyllenhal, 1836)	V		mh	*3
Coleoptera	Curculionidae	Dorytomus nordenskioldi Faust, 1882	R		es	*3
Coleoptera	Curculionidae	Dorytomus occallescens (Gyllenhal, 1836)	2		ss	*3
Coleoptera	Curculionidae	Dorytomus puberulus (Boheman, 1843)	G		ss	*3
Coleoptera	Curculionidae	Dorytomus rubrirostris (Gravenhorst, 1807)	*		mh	*3
Coleoptera	Curculionidae	Dorytomus rufatus (Bedel, 1888)	*		mh	*3
Coleoptera	Curculionidae	Dorytomus salicinus (Gyllenhal, 1827)	2		ss	*3
Coleoptera	Curculionidae	Dorytomus salicis Waltl, 1851	3		s	*3
Coleoptera	Curculionidae	Dorytomus schoenherri Faust, 1882	G		s	*3
Coleoptera	Curculionidae	Dorytomus suratus (Gyllenhal, 1836)	G		ss	*3
Coleoptera	Curculionidae	Dorytomus taeniatus (Fabricius, 1781)	*		h	*3
Coleoptera	Curculionidae	Dorytomus tortrix (Linnaeus, 1761)	*		h	*3
Coleoptera	Curculionidae	Dorytomus tremulae (Fabricius, 1787)	*		s	*3
Coleoptera	Curculionidae	Dorytomus villosulus (Gyllenhal, 1836)	3		s	*3
Coleoptera	Curculionidae	Drupenatus nasturtii (Germar, 1824)	V		s	*3
Coleoptera	Curculionidae	Dryophthorus corticalis (Paykull, 1792)	3		s	*3
Coleoptera	Curculionidae	Echinodera hypocrita (Boheman, 1837)	*		mh	*3
Coleoptera	Curculionidae	Ellescus bipunctatus (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Ellescus infirmus (Herbst, 1795)	3		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Curculionidae	Ellescus scanicus (Paykull, 1792)	*		mh	*3
Coleoptera	Curculionidae	Ethelcus denticulatus (Schrank, 1781)	1		ss	*3
Coleoptera	Curculionidae	Eubrychius velutus (Beck, 1817)	3		s	*3
Coleoptera	Curculionidae	Eucoeliodes mirabilis (Villa, 1835)	0	1897	ex	*3
Coleoptera	Curculionidae	Euophryum confine (Broun, 1881)	D		?	*3
Coleoptera	Curculionidae	Eusomus ovulum Germar, 1824	*		h	*3
Coleoptera	Curculionidae	Exomias araneiformis (Schrank, 1781)	*		mh	*3
Coleoptera	Curculionidae	Exomias chevrolati (Boheman, 1842)	R		es	*3
Coleoptera	Curculionidae	Exomias maritimus (Formanek, 1904)	V		s	*3
Coleoptera	Curculionidae	Exomias mollicomus (Ahrens, 1812)	*		mh	*3
Coleoptera	Curculionidae	Exomias montanus (Chevrolat, 1863)	*		s	*3
Coleoptera	Curculionidae	Exomias pellucidus (Boheman, 1834)	*		sh	*3
Coleoptera	Curculionidae	Exomias tenex (Boheman, 1842)	*		s	*3
Coleoptera	Curculionidae	Exomias trichopterus (Gautier, 1863)	*		mh	*3
Coleoptera	Curculionidae	Ferreria marqueti (Aubé, 1863)	D		?	*3
Coleoptera	Curculionidae	Foucartia ptochioides (Bach, 1856)	2		ss	*3
Coleoptera	Curculionidae	Foucartia squamulata (Herbst, 1795)	V		s	*3
Coleoptera	Curculionidae	Gasterocercus depressirostris (Fabricius, 1792)	2		ss	*3
Coleoptera	Curculionidae	Glocianus distinctus (Ch. Brisout, 1870)	*		mh	*3
Coleoptera	Curculionidae	Glocianus fennicus (Faust, 1895)	0	1952	ex	*3
Coleoptera	Curculionidae	Glocianus moelleri (Thomson, 1868)	2		ss	*3
Coleoptera	Curculionidae	Glocianus pilosellus (Gyllenhal, 1837)	1		es	*3
Coleoptera	Curculionidae	Glocianus punctiger (C.R. Sahlberg, 1835)	*		h	*3
Coleoptera	Curculionidae	Graptus triguttatus (Fabricius, 1775)	*		mh	*3
Coleoptera	Curculionidae	Gronops inaequalis Boheman, 1842	*		s	*3
Coleoptera	Curculionidae	Gronops lunatus (Fabricius, 1775)	3		s	*3
Coleoptera	Curculionidae	Grypus brunnirostris (Fabricius, 1792)	3		s	*3
Coleoptera	Curculionidae	Grypus equiseti (Fabricius, 1775)	*		mh	*3
Coleoptera	Curculionidae	Gymnetron beccabungae (Linnaeus, 1761)	3		s	*3
Coleoptera	Curculionidae	Gymnetron melanarium (Germar, 1821)	3		s	*3
Coleoptera	Curculionidae	Gymnetron rostellum (Herbst, 1795)	3		s	*3
Coleoptera	Curculionidae	Gymnetron stimulosum (Germar, 1821)	2		ss	*3
Coleoptera	Curculionidae	Gymnetron veronicae (Germar, 1821)	V		mh	*3
Coleoptera	Curculionidae	Gymnetron villosulum Gyllenhal, 1838	V		mh	*3
Coleoptera	Curculionidae	Hadroplontus litura (Fabricius, 1775)	*		mh	*3
Coleoptera	Curculionidae	Hadroplontus trimaculatus (Fabricius, 1775)	3		s	*3
Coleoptera	Curculionidae	Hexarthrum capitulum (Wollaston, 1858)	D		?	*3
Coleoptera	Curculionidae	Hexarthrum duplicatum Folwaczny, 1966	R		es	*3
Coleoptera	Curculionidae	Hexarthrum exiguum (Boheman, 1838)	G		ss	*3
Coleoptera	Curculionidae	Holotrichapion pullum (Gyllenhal, 1833)	1		es	*3
Coleoptera	Curculionidae	Hylobius abietis (Linnaeus, 1758)	*		sh	*3
Coleoptera	Curculionidae	Hylobius excavatus (Laicharting, 1781)	*		s	*3
Coleoptera	Curculionidae	Hylobius pinastri (Gyllenhal, 1813)	D		s	*3
Coleoptera	Curculionidae	Hylobius transversovittatus (Goeze, 1777)	3		s	*3
Coleoptera	Curculionidae	Hypera arator (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Hypera arundinis (Paykull, 1792)	1		es	*3
Coleoptera	Curculionidae	Hypera conmaculata (Herbst, 1795)	V		s	*3
Coleoptera	Curculionidae	Hypera contaminata (Herbst, 1795)	3		s	*3
Coleoptera	Curculionidae	Hypera denominanda (Capiomont, 1868)	1		es	*3
Coleoptera	Curculionidae	Hypera diversipunctata (Schrank, 1798)	V		s	*3
Coleoptera	Curculionidae	Hypera kunzii Germar, 1822	0	1823	ex	*3
Coleoptera	Curculionidae	Hypera melancholica (Fabricius, 1793)	2		ss	*3
Coleoptera	Curculionidae	Hypera meles (Fabricius, 1792)	*		mh	*3
Coleoptera	Curculionidae	Hypera miles (Paykull, 1792)	*		mh	*3
Coleoptera	Curculionidae	Hypera nigrirostris (Fabricius, 1775)	*		h	*3
Coleoptera	Curculionidae	Hypera ononidis (Chevrolat, 1863)	2		s	*3
Coleoptera	Curculionidae	Hypera pandellei folwacznyi Dieckmann, 1975	2		es	*3
Coleoptera	Curculionidae	Hypera pastinacae (Rossi, 1790)	1		es	*3
Coleoptera	Curculionidae	Hypera plantaginis (DeGeer, 1775)	*		mh	*3
Coleoptera	Curculionidae	Hypera postica (Gyllenhal, 1813)	*		h	*3
Coleoptera	Curculionidae	Hypera rumicis (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Hypera striata (Boheman, 1834)	R		es	*3
Coleoptera	Curculionidae	Hypera venusta (Fabricius, 1781)	*		s	*3
Coleoptera	Curculionidae	Hypera viciae (Gyllenhal, 1813)	V		s	*3
Coleoptera	Curculionidae	Isochnus angustifrons (West, 1917)	G		s	*3
Coleoptera	Curculionidae	Isochnus foliorum (Müller, 1764)	3		s	*3
Coleoptera	Curculionidae	Isochnus sequensi (Stierlin, 1894)	*		h	*3
Coleoptera	Curculionidae	Kyklioacalles aubei (Boheman, 1837)	R		es	*3
Coleoptera	Curculionidae	Kyklioacalles navieresi (Boheman, 1837)	*		mh	*3
Coleoptera	Curculionidae	Kyklioacalles pyrenaeus (Boheman, 1844)	*		s	*3
Coleoptera	Curculionidae	Kyklioacalles roboris (Curtis, 1834)	*		mh	*3
Coleoptera	Curculionidae	Larinus carlinae (Olivier, 1807)	*		s	*3
Coleoptera	Curculionidae	Larinus centaurii (Olivier, 1807)	2		ss	*3
Coleoptera	Curculionidae	Larinus iaceae (Fabricius, 1775)	G		s	*3
Coleoptera	Curculionidae	Larinus obtusus Gyllenhal, 1836	2		ss	*3
Coleoptera	Curculionidae	Larinus pollinis (Laicharting, 1781)	2		ss	*3
Coleoptera	Curculionidae	Larinus sturnus (Schaller, 1783)	*		mh	*3
Coleoptera	Curculionidae	Larinus turbinatus Gyllenhal, 1836	*		mh	*3
Coleoptera	Curculionidae	Leiosoma cribrum (Gyllenhal, 1834)	3		s	*3
Coleoptera	Curculionidae	Leiosoma deflexum (Panzer, 1795)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Curculionidae	Leiosoma kirschi Gredler, 1866	0	1951	ex	*3
Coleoptera	Curculionidae	Leiosoma oblongulum Boheman, 1842	*		s	*3
Coleoptera	Curculionidae	Lepyrus armatus Weise, 1893	G		ss	*3
Coleoptera	Curculionidae	Lepyrus capucinus (Schaller, 1783)	V		s	*3
Coleoptera	Curculionidae	Lepyrus palustris (Scopoli, 1763)	3		s	*3
Coleoptera	Curculionidae	Leucophyes occidentalis (Dieckmann, 1982)	1		es	*3
Coleoptera	Curculionidae	Leucophyes pedestris (Poda, 1761)	1		es	*3
Coleoptera	Curculionidae	Lignyodes enucleator (Panzer, 1798)	*		s	*3
Coleoptera	Curculionidae	Limnobaris dolorosa (Goeze, 1777)	*		mh	*3
Coleoptera	Curculionidae	Limnobaris t-album (Linnaeus, 1758)	*		s	*3
Coleoptera	Curculionidae	Limobius borealis (Paykull, 1792)	*		mh	*3
Coleoptera	Curculionidae	Liophloeus tessulatus (Müller, 1776)	*		h	*3
Coleoptera	Curculionidae	Liparus coronatus (Goeze, 1777)	*		mh	*3
Coleoptera	Curculionidae	Liparus dirus (Herbst, 1795)	2		ss	*3
Coleoptera	Curculionidae	Liparus germanus (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Liparus glabrirostris Küster, 1849	V		s	*3
Coleoptera	Curculionidae	Lixus albomarginatus Boheman, 1842	3		ss	*3
Coleoptera	Curculionidae	Lixus angustus (Herbst, 1795)	1		ss	*3
Coleoptera	Curculionidae	Lixus bardanae (Fabricius, 1787)	3		s	*3
Coleoptera	Curculionidae	Lixus cardui Olivier, 1807	0	1900	ex	*3
Coleoptera	Curculionidae	Lixus cylindrus (Fabricius, 1781)	0	1924	ex	*3
Coleoptera	Curculionidae	Lixus fasciculatus Boheman, 1836	V		ss	*3
Coleoptera	Curculionidae	Lixus filiformis (Fabricius, 1781)	*		mh	*3
Coleoptera	Curculionidae	Lixus iridis Olivier, 1807	*		s	*3
Coleoptera	Curculionidae	Lixus linearis Olivier, 1807	2		ss	*3
Coleoptera	Curculionidae	Lixus myagri Olivier, 1807	2		ss	*3
Coleoptera	Curculionidae	Lixus ochraceus Boheman, 1842	2		ss	*3
Coleoptera	Curculionidae	Lixus paraplecticus (Linnaeus, 1758)	2		s	*3
Coleoptera	Curculionidae	Lixus pulverulentus (Scopoli, 1763)	*		s	*3
Coleoptera	Curculionidae	Lixus punctiventris Boheman, 1836	3		s	*3
Coleoptera	Curculionidae	Lixus rubicundus Zoubkoff, 1833	*		mh	*3
Coleoptera	Curculionidae	Lixus subtilis Boheman, 1836	*		s	*3
Coleoptera	Curculionidae	Lixus vilis (Rossi, 1790)	0	1923	ex	*3
Coleoptera	Curculionidae	Magdalis armigera (Geoffroy, 1785)	*		h	*3
Coleoptera	Curculionidae	Magdalis barbicornis (Latreille, 1804)	*		s	*3
Coleoptera	Curculionidae	Magdalis carbonaria (Linnaeus, 1758)	*		s	*3
Coleoptera	Curculionidae	Magdalis caucasica (Tournier, 1872)	2		ss	*3
Coleoptera	Curculionidae	Magdalis cerasi (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Magdalis duplicata Germar, 1819	*		h	*3
Coleoptera	Curculionidae	Magdalis exarata (H. Brisout, 1862)	3		s	*3
Coleoptera	Curculionidae	Magdalis flavicornis (Gyllenhal, 1836)	*		mh	*3
Coleoptera	Curculionidae	Magdalis frontalis (Gyllenhal, 1827)	*		s	*3
Coleoptera	Curculionidae	Magdalis fuscicornis Desbrochers, 1870	3		s	*3
Coleoptera	Curculionidae	Magdalis linearis (Gyllenhal, 1827)	*		mh	*3
Coleoptera	Curculionidae	Magdalis memnonia (Gyllenhal, 1837)	*		mh	*3
Coleoptera	Curculionidae	Magdalis nitida (Gyllenhal, 1827)	*		mh	*3
Coleoptera	Curculionidae	Magdalis nitidipennis (Boheman, 1843)	G		ss	*3
Coleoptera	Curculionidae	Magdalis phlegmatica (Herbst, 1797)	*		s	*3
Coleoptera	Curculionidae	Magdalis punctulata (Mulsant & Rey, 1859)	G		ss	*3
Coleoptera	Curculionidae	Magdalis rufa Germar, 1824	*		mh	*3
Coleoptera	Curculionidae	Magdalis ruficornis (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Magdalis violacea (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Marmaropus besseri Gyllenhal, 1837	*		mh	*3
Coleoptera	Curculionidae	Mecaspis alternans (Herbst, 1795)	2		s	*3
Coleoptera	Curculionidae	Mecaspis caesus Gyllenhal, 1834	2		ss	*3
Coleoptera	Curculionidae	Mecinus circulatus (Marsham, 1802)	1		es	*3
Coleoptera	Curculionidae	Mecinus collaris Germar, 1821	2		ss	*3
Coleoptera	Curculionidae	Mecinus heydenii Wencker, 1866	2		ss	*3
Coleoptera	Curculionidae	Mecinus ictericus (Gyllenhal, 1838)	3		s	*3
Coleoptera	Curculionidae	Mecinus janthinus (Germar, 1817)	*		mh	*3
Coleoptera	Curculionidae	Mecinus labilis (Herbst, 1795)	*		mh	*3
Coleoptera	Curculionidae	Mecinus pascuorum (Gyllenhal, 1813)	*		mh	*3
Coleoptera	Curculionidae	Mecinus pirazzolii (Stierlin, 1867)	3		ss	*3
Coleoptera	Curculionidae	Mecinus plantaginis (Eppelsheim, 1875)	2		ss	*3
Coleoptera	Curculionidae	Mecinus pyraster (Herbst, 1795)	*		mh	*3
Coleoptera	Curculionidae	Melanobaris laticollis (Marsham, 1802)	V		s	*3
Coleoptera	Curculionidae	Melanobaris morio (Boheman, 1844)	2		ss	*3
Coleoptera	Curculionidae	Miarus ajugae (Herbst, 1795)	*		mh	*3
Coleoptera	Curculionidae	Miarus campanulae (Linnaeus, 1767)	*		mh	*3
Coleoptera	Curculionidae	Miarus monticola Petri, 1912	V		mh	*3
Coleoptera	Curculionidae	Micrelus ericae (Gyllenhal, 1813)	*		mh	*3
Coleoptera	Curculionidae	Microplontus campestris (Gyllenhal, 1837)	*		mh	*3
Coleoptera	Curculionidae	Microplontus figuratus (Gyllenhal, 1837)	*		mh	*3
Coleoptera	Curculionidae	Microplontus millefolii (Schultze, 1897)	*		mh	*3
Coleoptera	Curculionidae	Microplontus rugulosus (Herbst, 1795)	*		h	*3
Coleoptera	Curculionidae	Microplontus triangulum (Boheman, 1845)	3		s	*3
Coleoptera	Curculionidae	Minyops carinatus (Linnaeus, 1767)	0	1923	ex	*3
Coleoptera	Curculionidae	Minyops costalis Gyllenhal, 1834	D		?	*3
Coleoptera	Curculionidae	Minyops variolosus (Fabricius, 1801)	D		?	*3
Coleoptera	Curculionidae	Mitoplinthus caliginosus (Fabricius, 1775)	*		h	*3

Order	Family	Species	K	L	P	S
Coleoptera	Curculionidae	Mogulones abbreviatulus (Fabricius, 1792)	3		s	*3
Coleoptera	Curculionidae	Mogulones albosignatus (Gyllenhal, 1837)	1		ss	*3
Coleoptera	Curculionidae	Mogulones andreae (Germar, 1824)	1		es	*3
Coleoptera	Curculionidae	Mogulones angulicollis (Schultze, 1897)	G		ss	*3
Coleoptera	Curculionidae	Mogulones asperifoliarum (Gyllenhal, 1813)	*		h	*3
Coleoptera	Curculionidae	Mogulones borraginis (Fabricius, 1792)	2		ss	*3
Coleoptera	Curculionidae	Mogulones crucifer (Pallas, 1771)	3		s	*3
Coleoptera	Curculionidae	Mogulones cynoglossi (Frauenfeld, 1866)	V		s	*3
Coleoptera	Curculionidae	Mogulones diecki (H. Brisout, 1870)	2		ss	*3
Coleoptera	Curculionidae	Mogulones euphorbiae (Ch. Brisout, 1866)	3		s	*3
Coleoptera	Curculionidae	Mogulones geographicus (Goeze, 1777)	*		mh	*3
Coleoptera	Curculionidae	Mogulones javetii (Gerhardt, 1867)	2		ss	*3
Coleoptera	Curculionidae	Mogulones larvatus (Schultze, 1897)	2		s	*3
Coleoptera	Curculionidae	Mogulones pallidicornis (Gougelet & H. Brisout, 1860)	3		s	*3
Coleoptera	Curculionidae	Mogulones raphani (Fabricius, 1792)	*		mh	*3
Coleoptera	Curculionidae	Mogulones venedicus (Weise, 1879)	1		es	*3
Coleoptera	Curculionidae	Mononychus punctumalbum (Herbst, 1784)	*		h	*3
Coleoptera	Curculionidae	Nedyus quadrimaculatus (Linnaeus, 1758)	*		sh	*3
Coleoptera	Curculionidae	Neoglocianus maculaalba (Herbst, 1795)	V		s	*3
Coleoptera	Curculionidae	Neophytobius granatus (Gyllenhal, 1835)	3		ss	*3
Coleoptera	Curculionidae	Neophytobius muricatus (Ch. Brisout, 1867)	1		ss	*3
Coleoptera	Curculionidae	Neophytobius quadrinodosus (Gyllenhal, 1813)	3		s	*3
Coleoptera	Curculionidae	Neoplinthus tigratus porculus (Fabricius, 1801)	R		es	*3
Coleoptera	Curculionidae	Notaris acridulus (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Notaris aethiops (Fabricius, 1792)	2		ss	*3
Coleoptera	Curculionidae	Notaris aterrima (Hampe, 1850)	G		s	*3
Coleoptera	Curculionidae	Notaris maerkeli (Boheman, 1843)	R		es	*3
Coleoptera	Curculionidae	Notaris scirpi (Fabricius, 1792)	V		mh	*3
Coleoptera	Curculionidae	Omiamima mollina (Boheman, 1834)	3		s	*3
Coleoptera	Curculionidae	Omias puberulus Boheman, 1834	3		ss	*3
Coleoptera	Curculionidae	Omias seminulum (Fabricius, 1792)	0	1922	ex	*3
Coleoptera	Curculionidae	Onyxacalles croaticus (H. Brisout, 1867)	R		es	*3
Coleoptera	Curculionidae	Oprohinus consputus (Germar, 1824)	2		s	*3
Coleoptera	Curculionidae	Oprohinus suturalis (Fabricius, 1775)	3		mh	*3
Coleoptera	Curculionidae	Orchestes alni (Linnaeus, 1758)	G		ss	*3
Coleoptera	Curculionidae	Orchestes betuleti (Panzer, 1795)	3		s	*3
Coleoptera	Curculionidae	Orchestes calceatus (Germar, 1821)	2		ss	*3
Coleoptera	Curculionidae	Orchestes erythropus (Germar, 1821)	1		es	*3
Coleoptera	Curculionidae	Orchestes fagi (Linnaeus, 1758)	*		sh	*3
Coleoptera	Curculionidae	Orchestes hortorum (Fabricius, 1792)	*		mh	*3
Coleoptera	Curculionidae	Orchestes jota (Fabricius, 1787)	3		s	*3
Coleoptera	Curculionidae	Orchestes pilosus (Fabricius, 1781)	*		mh	*3
Coleoptera	Curculionidae	Orchestes quercus (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Orchestes rusci (Herbst, 1795)	*		h	*3
Coleoptera	Curculionidae	Orchestes subfasciatus Gyllenhal, 1835	R		es	*3
Coleoptera	Curculionidae	Orchestes testaceus (Müller, 1776)	*		s	*3
Coleoptera	Curculionidae	Orobitis cyanea (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Orthochaetes setiger (Beck, 1817)	3		s	*3
Coleoptera	Curculionidae	Otiorhynchus alpestris (Comolli, 1837)	1		es	*3
Coleoptera	Curculionidae	Otiorhynchus alpicola Boheman, 1842	*		s	*3
Coleoptera	Curculionidae	Otiorhynchus arcticus (O. Fabricius, 1780)	D		?	*3
Coleoptera	Curculionidae	Otiorhynchus armadillo (Rossi, 1792)	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus atroapterus (DeGeer, 1775)	3		ss	*3
Coleoptera	Curculionidae	Otiorhynchus auricomus Germar, 1824	*		ss	*3
Coleoptera	Curculionidae	Otiorhynchus aurifer (Boheman, 1842)	D		?	*3
Coleoptera	Curculionidae	Otiorhynchus carinatopunctatus (Retzius, 1783)	*		h	*3
Coleoptera	Curculionidae	Otiorhynchus chalceus Stierlin, 1861	D		ss	*3
Coleoptera	Curculionidae	Otiorhynchus chrysostictus Gyllenhal, 1834	1		es	*3
Coleoptera	Curculionidae	Otiorhynchus clavipes (Bonsdorff, 1785)	*		s	*3
Coleoptera	Curculionidae	Otiorhynchus coecus Germar, 1824	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus corruptor (Host, 1789)	D		?	*3
Coleoptera	Curculionidae	Otiorhynchus crataegi Germar, 1824	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus desertus Rosenhauer, 1847	R		es	*3
Coleoptera	Curculionidae	Otiorhynchus equestris (Richter, 1821)	*		ss	*3
Coleoptera	Curculionidae	Otiorhynchus fraxini Germar, 1824	R		es	*3
Coleoptera	Curculionidae	Otiorhynchus fullo (Schrank, 1781)	3		ss	*3
Coleoptera	Curculionidae	Otiorhynchus fuscipes (Olivier, 1807)	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus gemmatus (Scopoli, 1763)	*		s	*3
Coleoptera	Curculionidae	Otiorhynchus indefinitus Reitter, 1912	*		s	*3
Coleoptera	Curculionidae	Otiorhynchus labilis Stierlin, 1883	R		es	*3
Coleoptera	Curculionidae	Otiorhynchus lepidopterus (Fabricius, 1794)	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus ligneus (Olivier, 1807)	3		ss	*3
Coleoptera	Curculionidae	Otiorhynchus ligustici (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus lirus Schoenherr, 1834	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus lugdunensis Boheman, 1842	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus meridionalis Gyllenhal, 1834	*		ss	*3
Coleoptera	Curculionidae	Otiorhynchus morio (Fabricius, 1781)	*		h	*3
Coleoptera	Curculionidae	Otiorhynchus nocturnus Reitter, 1913	0	1950	ex	*3
Coleoptera	Curculionidae	Otiorhynchus nodosus (Müller, 1764)	*		s	*3
Coleoptera	Curculionidae	Otiorhynchus norici Alonso-Zarazaga, 2013	D		ss	*3

Order	Family	Species	K	L	P	S
Coleoptera	Curculionidae	Otiorhynchus ovatus (Linnaeus, 1758)	*		sh	*3
Coleoptera	Curculionidae	Otiorhynchus pauxillus Rosenhauer, 1847	D		?	*3
Coleoptera	Curculionidae	Otiorhynchus pigrans Stierlin, 1861	R		es	*3
Coleoptera	Curculionidae	Otiorhynchus pinastri (Herbst, 1795)	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus porcatus (Herbst, 1795)	*		h	*3
Coleoptera	Curculionidae	Otiorhynchus procerus Stierlin, 1875	0	1931	ex	*3
Coleoptera	Curculionidae	Otiorhynchus pseudonothus Apfelbeck, 1897	*		ss	*3
Coleoptera	Curculionidae	Otiorhynchus punctifrons Stierlin, 1888	R		es	*3
Coleoptera	Curculionidae	Otiorhynchus pupillatus Gyllenhal, 1834	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus raucus (Fabricius, 1777)	*		h	*3
Coleoptera	Curculionidae	Otiorhynchus rugifrons (Gyllenhal, 1813)	3		s	*3
Coleoptera	Curculionidae	Otiorhynchus rugosostriatus (Goeze, 1777)	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus sensitivus (Scopoli, 1763)	*		s	*3
Coleoptera	Curculionidae	Otiorhynchus singularis (Linnaeus, 1767)	*		h	*3
Coleoptera	Curculionidae	Otiorhynchus smreczynskii Cmoluch, 1968	*		mh	*3
Coleoptera	Curculionidae	Otiorhynchus squamosus Miller, 1859	*		ss	*3
Coleoptera	Curculionidae	Otiorhynchus subcostatus Stierlin, 1866	R		es	*3
Coleoptera	Curculionidae	Otiorhynchus subquadratus Rosenhauer, 1847	0	1951	ex	*3
Coleoptera	Curculionidae	Otiorhynchus sulcatus (Fabricius, 1775)	*		h	*3
Coleoptera	Curculionidae	Otiorhynchus tristis (Scopoli, 1763)	3		s	*3
Coleoptera	Curculionidae	Otiorhynchus troyeri Stierlin, 1883	R		es	*3
Coleoptera	Curculionidae	Otiorhynchus uncinatus Germar, 1824	3		s	*3
Coleoptera	Curculionidae	Otiorhynchus velutinus Germar, 1824	1		es	*3
Coleoptera	Curculionidae	Otiorhynchus veterator Uyttenboogaart, 1932	*		s	*3
Coleoptera	Curculionidae	Pachycerus segnis (Germar, 1824)	2		ss	*3
Coleoptera	Curculionidae	Pachyrhinus lethierryi (Desbrochers, 1875)	*		s	*3
Coleoptera	Curculionidae	Pachyrhinus squamulosus (Herbst, 1795)	3		s	*3
Coleoptera	Curculionidae	Pachytychius haematocephalus (Gyllenhal, 1836)	3		ss	*3
Coleoptera	Curculionidae	Pachytychius sparsutus (Olivier, 1807)	2		ss	*3
Coleoptera	Curculionidae	Parethelcus pollinarius (Forster, 1771)	*		h	*3
Coleoptera	Curculionidae	Pelenomus canaliculatus (Fahraeus, 1843)	2		ss	*3
Coleoptera	Curculionidae	Pelenomus commari (Panzer, 1794)	*		mh	*3
Coleoptera	Curculionidae	Pelenomus olssoni (Israelson, 1972)	2		ss	*3
Coleoptera	Curculionidae	Pelenomus quadricorniger (Colonnelli, 1986)	3		s	*3
Coleoptera	Curculionidae	Pelenomus quadrituberculatus (Fabricius, 1787)	*		mh	*3
Coleoptera	Curculionidae	Pelenomus velaris (Gyllenhal, 1827)	2		ss	*3
Coleoptera	Curculionidae	Pelenomus waltoni (Boheman, 1843)	*		mh	*3
Coleoptera	Curculionidae	Pelenomus zumpti (Wagner, 1939)	2		ss	*3
Coleoptera	Curculionidae	Pentarthrum huttoni Wollaston, 1854	D		?	*3
Coleoptera	Curculionidae	Peritelus sphaeroides Germar, 1824	*		s	*3
Coleoptera	Curculionidae	Philopedon plagiatum (Schaller, 1783)	*		mh	*3
Coleoptera	Curculionidae	Phloeophagus lignarius (Marsham, 1802)	V		mh	*3
Coleoptera	Curculionidae	Phloeophagus thomsoni (Grill, 1896)	2		ss	*3
Coleoptera	Curculionidae	Phrydiuchus topiarius (Germar, 1824)	2		ss	*3
Coleoptera	Curculionidae	Phyllobius arborator (Herbst, 1797)	*		mh	*3
Coleoptera	Curculionidae	Phyllobius argentatus (Linnaeus, 1758)	*		sh	*3
Coleoptera	Curculionidae	Phyllobius betulinus (Bechstein & Scharfenberg, 1805)	*		mh	*3
Coleoptera	Curculionidae	Phyllobius brevis Gyllenhal, 1834	2		ss	*3
Coleoptera	Curculionidae	Phyllobius dispar Redtenbacher, 1849	0	1900	ex	*3
Coleoptera	Curculionidae	Phyllobius glaucus (Scopoli, 1763)	*		h	*3
Coleoptera	Curculionidae	Phyllobius intrusus Kôno, 1948	*		ss	*3
Coleoptera	Curculionidae	Phyllobius maculicornis Germar, 1824	*		mh	*3
Coleoptera	Curculionidae	Phyllobius oblongus (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Phyllobius pomaceus Gyllenhal, 1834	*		h	*3
Coleoptera	Curculionidae	Phyllobius pyri (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Phyllobius roboretanus Gredler, 1882	*		h	*3
Coleoptera	Curculionidae	Phyllobius virideaeris (Laicharting, 1781)	*		h	*3
Coleoptera	Curculionidae	Phyllobius viridicollis (Fabricius, 1792)	*		h	*3
Coleoptera	Curculionidae	Phytobius leucogaster (Marsham, 1802)	V		s	*3
Coleoptera	Curculionidae	Pissodes castaneus (DeGeer, 1775)	*		mh	*3
Coleoptera	Curculionidae	Pissodes harcyniae (Herbst, 1795)	V		s	*3
Coleoptera	Curculionidae	Pissodes piceae (Illiger, 1807)	*		s	*3
Coleoptera	Curculionidae	Pissodes pini (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Pissodes piniphilus (Herbst, 1795)	*		mh	*3
Coleoptera	Curculionidae	Pissodes scabricollis Miller, 1859	*		s	*3
Coleoptera	Curculionidae	Pissodes validirostris (Sahlberg, 1834)	G		s	*3
Coleoptera	Curculionidae	Plinthus findelii Boheman, 1842	V		s	*3
Coleoptera	Curculionidae	Plinthus sturmii Germar, 1824	2		ss	*3
Coleoptera	Curculionidae	Plinthus tischeri Germar, 1824	2		ss	*3
Coleoptera	Curculionidae	Polydrusus aeratus Gravenhorst, 1807	*		h	*3
Coleoptera	Curculionidae	Polydrusus amoenus (Germar, 1824)	*		s	*3
Coleoptera	Curculionidae	Polydrusus cervinus (Linnaeus, 1758)	*		sh	*3
Coleoptera	Curculionidae	Polydrusus chaerodrysius Gredler, 1866	R		es	*3
Coleoptera	Curculionidae	Polydrusus confluens Stephens, 1831	3		s	*3
Coleoptera	Curculionidae	Polydrusus corruscus Germar, 1824	3		s	*3
Coleoptera	Curculionidae	Polydrusus flavipes (DeGeer, 1775)	2		ss	*3
Coleoptera	Curculionidae	Polydrusus formosus (Mayer, 1779)	*		h	*3
Coleoptera	Curculionidae	Polydrusus fulvicornis (Fabricius, 1792)	2		ss	*3
Coleoptera	Curculionidae	Polydrusus impar Gozis, 1882	*		h	*3
Coleoptera	Curculionidae	Polydrusus impressifrons Gyllenhal, 1834	*		h	*3

Order	Family	Species	K	L	P	S
Coleoptera	Curculionidae	Polydrusus inustus Germar, 1824	*		ss	*3
Coleoptera	Curculionidae	Polydrusus marginatus Stephens, 1831	*		mh	*3
Coleoptera	Curculionidae	Polydrusus mollis (Ström, 1768)	*		h	*3
Coleoptera	Curculionidae	Polydrusus picus (Fabricius, 1792)	3		s	*3
Coleoptera	Curculionidae	Polydrusus pilosus Gredler, 1866	*		mh	*3
Coleoptera	Curculionidae	Polydrusus planifrons Gyllenhal, 1834	G		s	*3
Coleoptera	Curculionidae	Polydrusus pterygomalis Boheman, 1840	*		mh	*3
Coleoptera	Curculionidae	Polydrusus pulchellus Stephens, 1831	3		s	*3
Coleoptera	Curculionidae	Polydrusus sparsus Gyllenhal, 1834	D		?	*3
Coleoptera	Curculionidae	Polydrusus tereticollis (DeGeer, 1775)	*		h	*3
Coleoptera	Curculionidae	Poophagus hopffgarteni Tournier, 1873	3		ss	*3
Coleoptera	Curculionidae	Poophagus sisymbrii (Fabricius, 1776)	V		mh	*3
Coleoptera	Curculionidae	Prisistus obsoletus (Germar, 1824)	0	1927	ex	*3
Coleoptera	Curculionidae	Procas picipes (Marsham, 1802)	1		es	*3
Coleoptera	Curculionidae	Pselactus spadix (Herbst, 1795)	2		ss	*3
Coleoptera	Curculionidae	Pseudocleonus cinereus (Schrank, 1781)	2		ss	*3
Coleoptera	Curculionidae	Pseudocleonus grammicus (Panzer, 1789)	1		ss	*3
Coleoptera	Curculionidae	Pseudomyllocerus canescens (Germar, 1824)	1		es	*3
Coleoptera	Curculionidae	Pseudomyllocerus sinuatus (Fabricius, 1801)	3		s	*3
Coleoptera	Curculionidae	Pseudorchestes ermischi (Dieckmann, 1958)	V		s	*3
Coleoptera	Curculionidae	Pseudorchestes pratensis (Germar, 1821)	2		ss	*3
Coleoptera	Curculionidae	Pseudorchestes purkynei (Dieckmann, 1958)	1		es	*3
Coleoptera	Curculionidae	Pseudostyphlus pillumus (Gyllenhal, 1836)	3		s	*3
Coleoptera	Curculionidae	Ranunculiphilus faeculentus (Gyllenhal, 1837)	1		ss	*3
Coleoptera	Curculionidae	Ranunculiphilus lycoctoni (Hustache, 1917)	1		es	*3
Coleoptera	Curculionidae	Rhabdorrhynchus echii (Brahm, 1790)	1		es	*3
Coleoptera	Curculionidae	Rhamphus oxyacanthae (Marsham, 1802)	*		mh	*3
Coleoptera	Curculionidae	Rhamphus pulicarius (Herbst, 1795)	*		h	*3
Coleoptera	Curculionidae	Rhamphus subaeneus Illiger, 1807	V		s	*3
Coleoptera	Curculionidae	Rhinocyllus conicus (Frölich, 1792)	*		mh	*3
Coleoptera	Curculionidae	Rhinomias forticornis (Boheman, 1842)	*		mh	*3
Coleoptera	Curculionidae	Rhinoncus albicinctus Gyllenhal, 1837	2		s	*3
Coleoptera	Curculionidae	Rhinoncus bosnicus Schultze, 1900	3		s	*3
Coleoptera	Curculionidae	Rhinoncus bruchoides (Herbst, 1784)	*		mh	*3
Coleoptera	Curculionidae	Rhinoncus castor (Fabricius, 1792)	*		h	*3
Coleoptera	Curculionidae	Rhinoncus henningsi Wagner, 1936	3		s	*3
Coleoptera	Curculionidae	Rhinoncus inconspectus (Herbst, 1795)	*		h	*3
Coleoptera	Curculionidae	Rhinoncus pericarpius (Linnaeus, 1758)	*		sh	*3
Coleoptera	Curculionidae	Rhinoncus perpendicularis (Reich, 1797)	*		h	*3
Coleoptera	Curculionidae	Rhinoncus smreczynskii Wagner, 1937	1		es	*3
Coleoptera	Curculionidae	Rhinusa antirrhini (Paykull, 1800)	*		h	*3
Coleoptera	Curculionidae	Rhinusa asellus (Gravenhorst, 1807)	*		s	*3
Coleoptera	Curculionidae	Rhinusa bipustulata (Rossi, 1792)	V		s	*3
Coleoptera	Curculionidae	Rhinusa collina (Gyllenhal, 1813)	3		s	*3
Coleoptera	Curculionidae	Rhinusa eversmanni (Rosenschöld, 1838)	1		ss	*3
Coleoptera	Curculionidae	Rhinusa herbarum (H. Brisout, 1862)	R		es	*3
Coleoptera	Curculionidae	Rhinusa linariae (Panzer, 1792)	V		mh	*3
Coleoptera	Curculionidae	Rhinusa melas (Boheman, 1838)	V		s	*3
Coleoptera	Curculionidae	Rhinusa neta (Germar, 1821)	3		s	*3
Coleoptera	Curculionidae	Rhinusa pilosa (Gyllenhal, 1838)	1		es	*3
Coleoptera	Curculionidae	Rhinusa tetra (Fabricius, 1792)	*		h	*3
Coleoptera	Curculionidae	Rhyncolus ater (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Rhyncolus elongatus (Gyllenhal, 1827)	3		ss	*3
Coleoptera	Curculionidae	Rhyncolus punctatulus Boheman, 1838	*		s	*3
Coleoptera	Curculionidae	Rhyncolus reflexus Boheman, 1838	2		ss	*3
Coleoptera	Curculionidae	Rhyncolus sculpturatus Waltl, 1839	2		ss	*3
Coleoptera	Curculionidae	Romualdius angustisetulus (Hansen, 1915)	V		s	*3
Coleoptera	Curculionidae	Romualdius scaber (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Rutidosoma globulus (Herbst, 1795)	3		s	*3
Coleoptera	Curculionidae	Sciaphilus asperatus (Bonsdorff, 1785)	*		h	*3
Coleoptera	Curculionidae	Sciaphobus rubi (Gyllenhal, 1813)	0	1887	ex	*3
Coleoptera	Curculionidae	Sciaphobus scitulus (Germar, 1824)	2		ss	*3
Coleoptera	Curculionidae	Scleropteridius fallax (Otto, 1897)	*		mh	*3
Coleoptera	Curculionidae	Scleropterus serratus (Germar, 1824)	2		ss	*3
Coleoptera	Curculionidae	Sibinia femoralis Germar, 1824	1		es	*3
Coleoptera	Curculionidae	Sibinia pellucens (Scopoli, 1772)	*		mh	*3
Coleoptera	Curculionidae	Sibinia phalerata (Gyllenhal, 1836)	V		s	*3
Coleoptera	Curculionidae	Sibinia primita (Herbst, 1795)	3		s	*3
Coleoptera	Curculionidae	Sibinia pyrrhodactyla Germar, 1824	V		mh	*3
Coleoptera	Curculionidae	Sibinia sodalis Germar, 1824	3		s	*3
Coleoptera	Curculionidae	Sibinia subelliptica (Desbrochers, 1873)	3		s	*3
Coleoptera	Curculionidae	Sibinia tibialis Gyllenhal, 1836	2		ss	*3
Coleoptera	Curculionidae	Sibinia unicolor (Fahraeus, 1843)	2		ss	*3
Coleoptera	Curculionidae	Sibinia variata (Gyllenhal, 1836)	3		ss	*3
Coleoptera	Curculionidae	Sibinia viscariae (Linnaeus, 1761)	*		mh	*3
Coleoptera	Curculionidae	Sibinia vittata Germar, 1824	1		es	*3
Coleoptera	Curculionidae	Simo hirticornis (Herbst, 1795)	*		mh	*3
Coleoptera	Curculionidae	Simo variegatus (Boheman, 1842)	*		mh	*3
Coleoptera	Curculionidae	Sirocalodes depressicollis (Gyllenhal, 1813)	*		mh	*3
Coleoptera	Curculionidae	Sirocalodes mixtus (Mulsant & Rey, 1858)	*		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Curculionidae	Sirocalodes quercicola (Paykull, 1792)	3		s	*3
Coleoptera	Curculionidae	Sitona ambiguus Gyllenhal, 1834	*		mh	*3
Coleoptera	Curculionidae	Sitona cylindricollis (Fahraeus, 1840)	*		h	*3
Coleoptera	Curculionidae	Sitona hispidulus (Fabricius, 1777)	*		h	*3
Coleoptera	Curculionidae	Sitona humeralis Stephens, 1831	*		h	*3
Coleoptera	Curculionidae	Sitona inops Gyllenhal, 1832	D		s	*3
Coleoptera	Curculionidae	Sitona languidus Gyllenhal, 1834	*		mh	*3
Coleoptera	Curculionidae	Sitona lateralis Gyllenhal, 1834	*		s	*3
Coleoptera	Curculionidae	Sitona lineatus (Linnaeus, 1758)	*		sh	*3
Coleoptera	Curculionidae	Sitona lineellus (Bonsdorff, 1785)	1		es	*3
Coleoptera	Curculionidae	Sitona longulus Gyllenhal, 1834	2		ss	*3
Coleoptera	Curculionidae	Sitona macularius (Marsham, 1802)	*		h	*3
Coleoptera	Curculionidae	Sitona obsoletus (Gmelin, 1790)	*		h	*3
Coleoptera	Curculionidae	Sitona puncticollis Stephens, 1831	*		mh	*3
Coleoptera	Curculionidae	Sitona striatellus Gyllenhal, 1834	*		mh	*3
Coleoptera	Curculionidae	Sitona sulcifrons argutulus Gyllenhal, 1834	*		mh	*3
Coleoptera	Curculionidae	Sitona sulcifrons sulcifrons (Thunberg, 1798)	*		h	*3
Coleoptera	Curculionidae	Sitona suturalis Stephens, 1831	*		mh	*3
Coleoptera	Curculionidae	Sitona waterhousei Waltl, 1846	3		s	*3
Coleoptera	Curculionidae	Sitophilus granarius (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Sitophilus oryzae (Linnaeus, 1763)	*		h	*3
Coleoptera	Curculionidae	Sitophilus zeamais Motschulsky, 1855	*		s	*3
Coleoptera	Curculionidae	Smicronyx coecus (Reich, 1797)	*		mh	*3
Coleoptera	Curculionidae	Smicronyx jungermanniae (Reich, 1797)	V		s	*3
Coleoptera	Curculionidae	Smicronyx nebulosus Tournier, 1874	1		es	*3
Coleoptera	Curculionidae	Smicronyx reichii (Gyllenhal, 1836)	2		ss	*3
Coleoptera	Curculionidae	Smicronyx smreczynskii F. Solari, 1952	3		s	*3
Coleoptera	Curculionidae	Smicronyx swertiae Voss, 1953	2		ss	*3
Coleoptera	Curculionidae	Sphenophorus striatopunctatus (Goeze, 1777)	V		s	*3
Coleoptera	Curculionidae	Stasiodis parvulus (Fabricius, 1792)	2		es	*3
Coleoptera	Curculionidae	Stenocarus cardui (Herbst, 1784)	1		es	*3
Coleoptera	Curculionidae	Stenocarus ruficornis (Stephens, 1831)	*		mh	*3
Coleoptera	Curculionidae	Stenopelmus rufinasus Gyllenhal, 1836	*		ss	*3
Coleoptera	Curculionidae	Stereocorynes truncorum (Germar, 1824)	*		s	*3
Coleoptera	Curculionidae	Stereonychus fraxini (DeGeer, 1775)	*		h	*3
Coleoptera	Curculionidae	Stomodes gyrosicollis (Boheman, 1842)	R		es	*3
Coleoptera	Curculionidae	Strophosoma capitatum (DeGeer, 1775)	*		h	*3
Coleoptera	Curculionidae	Strophosoma faber (Herbst, 1785)	3		s	*3
Coleoptera	Curculionidae	Strophosoma fulvicorne Waltl, 1846	3		ss	*3
Coleoptera	Curculionidae	Strophosoma melanogrammum (Forster, 1771)	*		h	*3
Coleoptera	Curculionidae	Strophosoma nebulosum Stephens, 1831	0	1942	ex	*3
Coleoptera	Curculionidae	Strophosoma sus Stephens, 1831	3		s	*3
Coleoptera	Curculionidae	Tachyerges decoratus (Germar, 1821)	*		mh	*3
Coleoptera	Curculionidae	Tachyerges pseudostigma (Tempère, 1982)	*		mh	*3
Coleoptera	Curculionidae	Tachyerges rufitarsis (Germar, 1821)	3		ss	*3
Coleoptera	Curculionidae	Tachyerges salicis (Linnaeus, 1759)	*		h	*3
Coleoptera	Curculionidae	Tachyerges stigma (Germar, 1821)	*		h	*3
Coleoptera	Curculionidae	Tanymecus palliatus (Fabricius, 1787)	*		h	*3
Coleoptera	Curculionidae	Tanysphyrus ater Blatchley, 1928	2		ss	*3
Coleoptera	Curculionidae	Tanysphyrus lemnae (Paykull, 1792)	*		h	*3
Coleoptera	Curculionidae	Tapinotus sellatus (Fabricius, 1794)	*		mh	*3
Coleoptera	Curculionidae	Thamiocolus pubicollis (Gyllenhal, 1837)	1		es	*3
Coleoptera	Curculionidae	Thamiocolus sahlbergi (C.R. Sahlberg, 1845)	R		es	*3
Coleoptera	Curculionidae	Thamiocolus signatus (Gyllenhal, 1837)	3		ss	*3
Coleoptera	Curculionidae	Thamiocolus viduatus (Gyllenhal, 1813)	V		mh	*3
Coleoptera	Curculionidae	Thryogenes festucae (Herbst, 1795)	2		ss	*3
Coleoptera	Curculionidae	Thryogenes fiorii Zumpt, 1928	2		s	*3
Coleoptera	Curculionidae	Thryogenes nereis (Paykull, 1800)	V		mh	*3
Coleoptera	Curculionidae	Thryogenes scirrhosus (Gyllenhal, 1836)	V		s	*3
Coleoptera	Curculionidae	Tournotaris bimaculata (Fabricius, 1787)	3		s	*3
Coleoptera	Curculionidae	Trachodes hispidus (Linnaeus, 1758)	*		h	*3
Coleoptera	Curculionidae	Trachyphloeus alternans Gyllenhal, 1834	*		mh	*3
Coleoptera	Curculionidae	Trachyphloeus heymesi Hubenthal, 1934	2		ss	*3
Coleoptera	Curculionidae	Trachyphloeus parallelus Seidlitz, 1868	2		es	*3
Coleoptera	Curculionidae	Trachyphloeus rectus Thomson, 1865	1		es	*3
Coleoptera	Curculionidae	Trachyphloeus scabriculus (Linnaeus, 1771)	*		mh	*3
Coleoptera	Curculionidae	Trachyphloeus spinimanus Germar, 1824	V		s	*3
Coleoptera	Curculionidae	Trichosirocalus barnevillei (Grenier, 1866)	V		s	*3
Coleoptera	Curculionidae	Trichosirocalus horridus (Panzer, 1801)	3		s	*3
Coleoptera	Curculionidae	Trichosirocalus rufulus (Dufour, 1851)	3		s	*3
Coleoptera	Curculionidae	Trichosirocalus spurnyi (Schultze, 1901)	2		es	*3
Coleoptera	Curculionidae	Trichosirocalus thalhammeri (Schultze, 1906)	3		s	*3
Coleoptera	Curculionidae	Trichosirocalus troglodytes (Fabricius, 1787)	*		h	*3
Coleoptera	Curculionidae	Tropiphorus cucullatus Fauvel, 1888	G		ss	*3
Coleoptera	Curculionidae	Tropiphorus elevatus (Herbst, 1795)	*		mh	*3
Coleoptera	Curculionidae	Tropiphorus obtusus (Bonsdorff, 1785)	0	1931	ex	*3
Coleoptera	Curculionidae	Tropiphorus styriacus (Bedel, 1883)	R		es	*3
Coleoptera	Curculionidae	Tropiphorus terricola (Newman, 1838)	3		s	*3
Coleoptera	Curculionidae	Tychius aureolus Kiesenwetter, 1851	*		s	*3
Coleoptera	Curculionidae	Tychius breviusculus Desbrochers, 1873	*		h	*3

Order	Family	Species	K	L	P	S
Coleoptera	Curculionidae	Tychius crassirostris Kirsch, 1871	3		s	*3
Coleoptera	Curculionidae	Tychius cuprifer (Panzer, 1799)	3		ss	*3
Coleoptera	Curculionidae	Tychius junceus (Reich, 1797)	*		mh	*3
Coleoptera	Curculionidae	Tychius lineatulus Stephens, 1831	3		s	*3
Coleoptera	Curculionidae	Tychius medicaginis Ch. Brisout, 1862	*		s	*3
Coleoptera	Curculionidae	Tychius meliloti Stephens, 1831	*		h	*3
Coleoptera	Curculionidae	Tychius parallelus (Panzer, 1794)	*		s	*3
Coleoptera	Curculionidae	Tychius picirostris (Fabricius, 1787)	*		sh	*3
Coleoptera	Curculionidae	Tychius polylineatus (Germar, 1824)	1		es	*3
Coleoptera	Curculionidae	Tychius pumilus Ch. Brisout, 1862	3		s	*3
Coleoptera	Curculionidae	Tychius pusillus Germar, 1842	V		s	*3
Coleoptera	Curculionidae	Tychius quinquepunctatus (Linnaeus, 1758)	*		mh	*3
Coleoptera	Curculionidae	Tychius schneideri (Herbst, 1795)	V		s	*3
Coleoptera	Curculionidae	Tychius sharpi Tournier, 1873	1		es	*3
Coleoptera	Curculionidae	Tychius squamulatus Gyllenhal, 1836	3		s	*3
Coleoptera	Curculionidae	Tychius stephensi Schoenherr, 1836	*		mh	*3
Coleoptera	Curculionidae	Tychius tibialis Boheman, 1843	1		es	*3
Coleoptera	Curculionidae	Tychius trivialis Boheman, 1843	1		es	*3
Coleoptera	Curculionidae	Zacladus exiguus (Olivier, 1807)	*		mh	*3
Coleoptera	Curculionidae	Zacladus geranii (Paykull, 1800)	*		mh	*3
Coleoptera	Cybocephalidae	Cybocephalus fodori E.-Y., 1965	D		ss	*3
Coleoptera	Cybocephalidae	Cybocephalus politus (Gyll., 1813)	*		s	*3
Coleoptera	Cybocephalidae	Cybocephalus pulchellus Er., 1845	D		?	*3
Coleoptera	Dascillidae	Dascillus cervinus (L., 1758)	*		mh	*3
Coleoptera	Dermestidae	Anthrenocerus australis (Hope, 1843)	nb		nb	*3
Coleoptera	Dermestidae	Anthrenus fuscus Ol., 1789	*		h	*3
Coleoptera	Dermestidae	Anthrenus museorum (L., 1761)	*		h	*3
Coleoptera	Dermestidae	Anthrenus olgae Kalik, 1946	D		?	*3
Coleoptera	Dermestidae	Anthrenus pimpinellae F., 1775	*		sh	*3
Coleoptera	Dermestidae	Anthrenus polonicus Mrocz., 1951	D		?	*3
Coleoptera	Dermestidae	Anthrenus scrophulariae (L., 1758)	*		h	*3
Coleoptera	Dermestidae	Anthrenus verbasci (L., 1767)	*		sh	*3
Coleoptera	Dermestidae	Attagenus fasciatus (Thunb., 1795)	nb		nb	*3
Coleoptera	Dermestidae	Attagenus pantherinus (Ahr., 1814)	0	1950	ex	*3
Coleoptera	Dermestidae	Attagenus pellio (L., 1758)	*		h	*3
Coleoptera	Dermestidae	Attagenus punctatus (Scop., 1772)	3		s	*3
Coleoptera	Dermestidae	Attagenus schaefferi (Hbst., 1792)	*		s	*3
Coleoptera	Dermestidae	Attagenus smirnovi Zhantiev, 1973	nb		nb	*3
Coleoptera	Dermestidae	Attagenus unicolor (Brahm, 1791)	*		h	*3
Coleoptera	Dermestidae	Ctesias serra (F., 1792)	*		mh	*3
Coleoptera	Dermestidae	Dermestes ater De Geer, 1774	D		?	*3
Coleoptera	Dermestidae	Dermestes aurichalceus Küst., 1846	R		es	*3
Coleoptera	Dermestidae	Dermestes bicolor F., 1781	3		s	*3
Coleoptera	Dermestidae	Dermestes erichsoni Ganglb., 1904	0	1954	ex	*3
Coleoptera	Dermestidae	Dermestes frischii Kug., 1792	*		mh	*3
Coleoptera	Dermestidae	Dermestes gyllenhalii Cast., 1840	1		es	*3
Coleoptera	Dermestidae	Dermestes haemorrhoidalis Küst., 1852	*		mh	*3
Coleoptera	Dermestidae	Dermestes laniarius Ill., 1802	3		s	*3
Coleoptera	Dermestidae	Dermestes lardarius L., 1758	*		h	*3
Coleoptera	Dermestidae	Dermestes maculatus De Geer, 1774	D		?	*3
Coleoptera	Dermestidae	Dermestes murinus L., 1758	*		h	*3
Coleoptera	Dermestidae	Dermestes olivieri Lepesme, 1939	0	1900	ex	*3
Coleoptera	Dermestidae	Dermestes peruvianus Cast., 1840	D		?	*3
Coleoptera	Dermestidae	Dermestes szekessyi Kalik, 1950	2		es	*3
Coleoptera	Dermestidae	Dermestes undulatus Brahm., 1790	*		h	*3
Coleoptera	Dermestidae	Globicornis corticalis (Eichh., 1863)	3		s	*3
Coleoptera	Dermestidae	Globicornis fasciata (Fairm., 1859)	R		es	*3
Coleoptera	Dermestidae	Globicornis marginata (Payk., 1798)	3		s	*3
Coleoptera	Dermestidae	Globicornis nigripes (F., 1792)	3		s	*3
Coleoptera	Dermestidae	Megatoma undata (L., 1758)	*		mh	*3
Coleoptera	Dermestidae	Reesa vespulae (Mill., 1939)	nb		nb	*3
Coleoptera	Dermestidae	Thylodrias contractus Motsch., 1839	nb		nb	*3
Coleoptera	Dermestidae	Trinodes hirtus (F., 1781)	*		mh	*3
Coleoptera	Dermestidae	Trogoderma angustum (Sol., 1849)	nb		nb	*3
Coleoptera	Dermestidae	Trogoderma glabrum (Hbst., 1797)	*		s	*3
Coleoptera	Dermestidae	Trogoderma versicolor (Creutz., 1799)	R		es	*3
Coleoptera	Derodontidae	Derodontus maculatus (Fuss, 1850)	2		es	*3
Coleoptera	Derodontidae	Laricobius erichsonii Rosh., 1846	*		h	*3
Coleoptera	Drilidae	Drilus concolor Ahr., 1812	*		mh	*3
Coleoptera	Drilidae	Drilus flavescens Ol., 1790	V		s	*3
Coleoptera	Dryopidae	Dryops anglicanus Edwards, 1909	2		ss	*1
Coleoptera	Dryopidae	Dryops auriculatus (Geoffroy, 1785)	*		s	*1
Coleoptera	Dryopidae	Dryops ernesti Des Gozis, 1886	*		s	*1
Coleoptera	Dryopidae	Dryops griseus (Erichson, 1847)	2		es	*1
Coleoptera	Dryopidae	Dryops luridus (Erichson, 1847)	*		mh	*1
Coleoptera	Dryopidae	Dryops lutulentus (Erichson, 1847)	D		?	*1
Coleoptera	Dryopidae	Dryops nitidulus (Heer, 1841)	2		ss	*1
Coleoptera	Dryopidae	Dryops rufipes (Krynicki, 1832)	D		?	*1
Coleoptera	Dryopidae	Dryops similaris Bollow, 1936	*		ss	*1
Coleoptera	Dryopidae	Dryops striatellus (Fairmaire & Brisout, 1859)	1		es	*1

Order	Family	Species	K	L	P	S
Coleoptera	Dryopidae	Dryops striatopunctatus (Heer, 1841)	1		es	*1
Coleoptera	Dryopidae	Dryops viennensis (Castelnau, 1840)	1		es	*1
Coleoptera	Dryopidae	Pomatinus substriatus (P.W.J. Müller, 1806)	3		es	*1
Coleoptera	Dytiscidae	Acilius (Acilius) canaliculatus (Nicolai, 1822)	*		h	*1
Coleoptera	Dytiscidae	Acilius (Acilius) sulcatus (Linnaeus, 1758)	*		h	*1
Coleoptera	Dytiscidae	Agabus (Acatodes) clypealis (Thomson, 1867)	R		es	*1
Coleoptera	Dytiscidae	Agabus (Acatodes) congener (Thunberg, 1794)	*		mh	*1
Coleoptera	Dytiscidae	Agabus (Acatodes) fuscipennis (Paykull, 1798)	2		ss	*1
Coleoptera	Dytiscidae	Agabus (Acatodes) sturmii (Gyllenhal, 1808)	*		sh	*1
Coleoptera	Dytiscidae	Agabus (Agabus) labiatus (Brahm, 1791)	3		s	*1
Coleoptera	Dytiscidae	Agabus (Agabus) uliginosus (Linnaeus, 1761)	*		h	*1
Coleoptera	Dytiscidae	Agabus (Agabus) undulatus (Schrank, 1776)	*		h	*1
Coleoptera	Dytiscidae	Agabus (Gaurodytes) affinis (Paykull, 1798)	V		mh	*1
Coleoptera	Dytiscidae	Agabus (Gaurodytes) biguttatus (Olivier, 1795)	*		mh	*1
Coleoptera	Dytiscidae	Agabus (Gaurodytes) bipustulatus (Linnaeus, 1767)	*		sh	*1
Coleoptera	Dytiscidae	Agabus (Gaurodytes) conspersus (Marsham, 1802)	3		ss	*1
Coleoptera	Dytiscidae	Agabus (Gaurodytes) didymus (Olivier, 1795)	*		mh	*1
Coleoptera	Dytiscidae	Agabus (Gaurodytes) guttatus (Paykull, 1798)	*		h	*1
Coleoptera	Dytiscidae	Agabus (Gaurodytes) melanarius Aubé, 1837	V		mh	*1
Coleoptera	Dytiscidae	Agabus (Gaurodytes) nebulosus (Forster, 1771)	*		h	*1
Coleoptera	Dytiscidae	Agabus (Gaurodytes) paludosus (Fabricius, 1801)	*		h	*1
Coleoptera	Dytiscidae	Agabus (Gaurodytes) striolatus (Gyllenhal, 1808)	3		ss	*1
Coleoptera	Dytiscidae	Agabus (Gaurodytes) unguicularis (Thomson, 1867)	3		mh	*1
Coleoptera	Dytiscidae	Bidessus delicatulus (Schaum, 1844)	1		es	*1
Coleoptera	Dytiscidae	Bidessus grossepunctatus Vorbringer, 1907	3		ss	*1
Coleoptera	Dytiscidae	Bidessus minutissimus (Germar, 1824)	3		ss	*1
Coleoptera	Dytiscidae	Bidessus unistriatus (Goeze, 1777)	V		s	*1
Coleoptera	Dytiscidae	Colymbetes fuscus (Linnaeus, 1758)	*		sh	*1
Coleoptera	Dytiscidae	Colymbetes paykulli Erichson, 1837	V		mh	*1
Coleoptera	Dytiscidae	Colymbetes striatus (Linnaeus, 1758)	V		s	*1
Coleoptera	Dytiscidae	Cybister (Scaphinectes) lateralimarginalis (De Geer, 1774)	*		h	*1
Coleoptera	Dytiscidae	Deronectes aubei (Mulsant, 1843)	R		es	*1
Coleoptera	Dytiscidae	Deronectes latus (Stephens, 1829)	V		s	*1
Coleoptera	Dytiscidae	Deronectes platynotus (Germar, 1834)	2		ss	*1
Coleoptera	Dytiscidae	Dytiscus circumcinctus Ahrens, 1811	V		s	*1
Coleoptera	Dytiscidae	Dytiscus circumflexus Fabricius, 1801	*		mh	*1
Coleoptera	Dytiscidae	Dytiscus dimidiatus Bergsträsser, 1778	*		h	*1
Coleoptera	Dytiscidae	Dytiscus lapponicus Gyllenhal, 1808	2		ss	*1
Coleoptera	Dytiscidae	Dytiscus latissimus Linnaeus, 1758	1		ss	*1
Coleoptera	Dytiscidae	Dytiscus marginalis Linnaeus, 1758	*		sh	*1
Coleoptera	Dytiscidae	Dytiscus semisulcatus O.F. Müller, 1776	2		ss	*1
Coleoptera	Dytiscidae	Graphoderus austriacus (Sturm, 1834)	*		s	*1
Coleoptera	Dytiscidae	Graphoderus bilineatus (De Geer, 1774)	3		s	*1
Coleoptera	Dytiscidae	Graphoderus cinereus (Linnaeus, 1758)	*		mh	*1
Coleoptera	Dytiscidae	Graphoderus zonatus (Hoppe, 1795)	3		s	*1
Coleoptera	Dytiscidae	Graptodytes bilineatus (Sturm, 1835)	3		s	*1
Coleoptera	Dytiscidae	Graptodytes granularis (Linnaeus, 1767)	*		mh	*1
Coleoptera	Dytiscidae	Graptodytes pictus (Fabricius, 1787)	*		h	*1
Coleoptera	Dytiscidae	Hydaticus (Hydaticus) aruspex Clark, 1864	1		es	*1
Coleoptera	Dytiscidae	Hydaticus (Hydaticus) continentalis J. Balfour-Browne, 1944	*		ss	*1
Coleoptera	Dytiscidae	Hydaticus (Hydaticus) seminiger (De Geer, 1774)	*		h	*1
Coleoptera	Dytiscidae	Hydaticus (Hydaticus) transversalis (Pontoppidan, 1763)	*		mh	*1
Coleoptera	Dytiscidae	Hydroglyphus geminus (Fabricius, 1792)	*		sh	*1
Coleoptera	Dytiscidae	Hydroglyphus hamulatus (Gyllenhal, 1813)	*		s	*1
Coleoptera	Dytiscidae	Hydroporus angustatus Sturm, 1835	*		sh	*1
Coleoptera	Dytiscidae	Hydroporus discretus Fairmaire & Brisout, 1859	*		mh	*1
Coleoptera	Dytiscidae	Hydroporus elongatulus Sturm, 1835	2		s	*1
Coleoptera	Dytiscidae	Hydroporus erythrocephalus (Linnaeus, 1758)	*		sh	*1
Coleoptera	Dytiscidae	Hydroporus ferrugineus Stephens, 1828	V		s	*1
Coleoptera	Dytiscidae	Hydroporus foveolatus Heer, 1839	R		es	*1
Coleoptera	Dytiscidae	Hydroporus fuscipennis Schaum, 1868	2		s	*1
Coleoptera	Dytiscidae	Hydroporus glabriusculus Aubé, 1838	1		ss	*1
Coleoptera	Dytiscidae	Hydroporus gyllenhalii Schiødte, 1841	*		mh	*1
Coleoptera	Dytiscidae	Hydroporus incognitus Sharp, 1869	*		h	*1
Coleoptera	Dytiscidae	Hydroporus kraatzii Schaum, 1868	2		es	*1
Coleoptera	Dytiscidae	Hydroporus longicornis Sharp, 1871	3		s	*1
Coleoptera	Dytiscidae	Hydroporus longulus Mulsant & Rey, 1860	3		s	*1
Coleoptera	Dytiscidae	Hydroporus marginatus (Duftschmid, 1805)	V		mh	*1
Coleoptera	Dytiscidae	Hydroporus melanarius Sturm, 1835	*		mh	*1
Coleoptera	Dytiscidae	Hydroporus memnonius Nicolai, 1822	*		h	*1
Coleoptera	Dytiscidae	Hydroporus morio Aubé, 1838	2		s	*1
Coleoptera	Dytiscidae	Hydroporus neglectus Schaum, 1845	*		mh	*1
Coleoptera	Dytiscidae	Hydroporus nigrita (Fabricius, 1792)	*		h	*1
Coleoptera	Dytiscidae	Hydroporus notatus Sturm, 1835	1		es	*1
Coleoptera	Dytiscidae	Hydroporus obscurus Sturm, 1835	V		mh	*1
Coleoptera	Dytiscidae	Hydroporus obsoletus Aubé, 1838	3		ss	*1
Coleoptera	Dytiscidae	Hydroporus palustris (Linnaeus, 1761)	*		sh	*1
Coleoptera	Dytiscidae	Hydroporus planus (Fabricius, 1781)	*		sh	*1
Coleoptera	Dytiscidae	Hydroporus pubescens (Gyllenhal, 1808)	*		mh	*1
Coleoptera	Dytiscidae	Hydroporus rufifrons (O.F. Müller, 1776)	2		s	*1

Order	Family	Species	K	L	P	S
Coleoptera	Dytiscidae	Hydroporus sabaudus Fauvel, 1865	R		es	*1
Coleoptera	Dytiscidae	Hydroporus scalesianus Stephens, 1828	2		s	*1
Coleoptera	Dytiscidae	Hydroporus striola (Gyllenhal, 1826)	*		h	*1
Coleoptera	Dytiscidae	Hydroporus tristis (Paykull, 1798)	*		h	*1
Coleoptera	Dytiscidae	Hydroporus umbrosus (Gyllenhal, 1808)	*		h	*1
Coleoptera	Dytiscidae	Hydrovatus cuspidatus (Kunze, 1818)	*		s	*1
Coleoptera	Dytiscidae	Hygrotus (Coelambus) confluens (Fabricius, 1787)	*		mh	*1
Coleoptera	Dytiscidae	Hygrotus (Coelambus) enneagrammus (Ahrens, 1833)	D		?	*1
Coleoptera	Dytiscidae	Hygrotus (Coelambus) flaviventris (Motschulsky, 1859)	D		?	*1
Coleoptera	Dytiscidae	Hygrotus (Coelambus) impressopunctatus (Schaller, 1783)	*		sh	*1
Coleoptera	Dytiscidae	Hygrotus (Coelambus) nigrolineatus (Steven, 1808)	3		s	*1
Coleoptera	Dytiscidae	Hygrotus (Coelambus) novemlineatus (Stephens, 1829)	1		es	*1
Coleoptera	Dytiscidae	Hygrotus (Coelambus) parallelogrammus (Ahrens, 1812)	*		s	*1
Coleoptera	Dytiscidae	Hygrotus (Hygrotus) decoratus (Gyllenhal, 1810)	*		h	*1
Coleoptera	Dytiscidae	Hygrotus (Hygrotus) inaequalis (Fabricius, 1777)	*		sh	*1
Coleoptera	Dytiscidae	Hygrotus (Hygrotus) quinquelineatus (Zetterstedt, 1828)	1		es	*1
Coleoptera	Dytiscidae	Hygrotus (Hygrotus) versicolor (Schaller, 1783)	*		h	*1
Coleoptera	Dytiscidae	Hyphydrus ovatus (Linnaeus, 1761)	*		sh	*1
Coleoptera	Dytiscidae	Ilybius aenescens Thomson, 1870	V		mh	*1
Coleoptera	Dytiscidae	Ilybius angustior (Gyllenhal, 1808)	R		es	*1
Coleoptera	Dytiscidae	Ilybius ater (De Geer, 1774)	*		h	*1
Coleoptera	Dytiscidae	Ilybius chalconatus (Panzer, 1796)	*		h	*1
Coleoptera	Dytiscidae	Ilybius crassus Thomson, 1856	2		ss	*1
Coleoptera	Dytiscidae	Ilybius erichsoni Gemminger & Harold, 1868	1		es	*1
Coleoptera	Dytiscidae	Ilybius fenestratus (Fabricius, 1781)	*		mh	*1
Coleoptera	Dytiscidae	Ilybius fuliginosus (Fabricius, 1792)	*		sh	*1
Coleoptera	Dytiscidae	Ilybius guttiger (Gyllenhal, 1808)	V		mh	*1
Coleoptera	Dytiscidae	Ilybius montanus (Stephens, 1828)	*		ss	*1
Coleoptera	Dytiscidae	Ilybius neglectus (Erichson, 1837)	*		mh	*1
Coleoptera	Dytiscidae	Ilybius quadriguttatus (Lacordaire, 1835)	*		h	*1
Coleoptera	Dytiscidae	Ilybius similis Thomson, 1856	1		es	*1
Coleoptera	Dytiscidae	Ilybius subaeneus Erichson, 1837	*		mh	*1
Coleoptera	Dytiscidae	Ilybius subtilis (Erichson, 1837)	*		mh	*1
Coleoptera	Dytiscidae	Ilybius wasastjernae (C.R. Sahlberg, 1824)	2		ss	*1
Coleoptera	Dytiscidae	Laccophilus hyalinus (De Geer, 1774)	*		h	*1
Coleoptera	Dytiscidae	Laccophilus minutus (Linnaeus, 1758)	*		sh	*1
Coleoptera	Dytiscidae	Laccophilus poecilus Klug, 1834	*		mh	*1
Coleoptera	Dytiscidae	Laccornis oblongus (Stephens, 1835)	3		s	*1
Coleoptera	Dytiscidae	Liopterus haemorrhoidalis (Fabricius, 1787)	*		h	*1
Coleoptera	Dytiscidae	Nebrioporus (Nebrioporus) assimilis (Paykull, 1798)	2		s	*1
Coleoptera	Dytiscidae	Nebrioporus (Nebrioporus) depressus (Fabricius, 1775)	*		s	*1
Coleoptera	Dytiscidae	Nebrioporus (Nebrioporus) elegans (Panzer, 1794)	*		mh	*1
Coleoptera	Dytiscidae	Nebrioporus (Zimmermannius) canaliculatus (Lacordaire, 1835)	*		mh	*1
Coleoptera	Dytiscidae	Oreodytes davisii (Curtis, 1831)	R		es	*1
Coleoptera	Dytiscidae	Oreodytes sanmarkii (C.R. Sahlberg, 1826)	*		h	*1
Coleoptera	Dytiscidae	Oreodytes septentrionalis (Gyllenhal, 1826)	2		es	*1
Coleoptera	Dytiscidae	Platambus maculatus (Linnaeus, 1758)	*		sh	*1
Coleoptera	Dytiscidae	Porhydrus lineatus (Fabricius, 1775)	*		h	*1
Coleoptera	Dytiscidae	Rhantus (Nartus) grapii (Gyllenhal, 1808)	*		mh	*1
Coleoptera	Dytiscidae	Rhantus (Rhantus) bistriatus (Bergsträsser, 1778)	3		ss	*1
Coleoptera	Dytiscidae	Rhantus (Rhantus) consputus (Sturm, 1834)	3		ss	*1
Coleoptera	Dytiscidae	Rhantus (Rhantus) exsoletus (Forster, 1771)	*		h	*1
Coleoptera	Dytiscidae	Rhantus (Rhantus) frontalis (Marsham, 1802)	*		h	*1
Coleoptera	Dytiscidae	Rhantus (Rhantus) incognitus Scholz, 1927	*		ss	*1
Coleoptera	Dytiscidae	Rhantus (Rhantus) latitans Sharp, 1882	*		s	*1
Coleoptera	Dytiscidae	Rhantus (Rhantus) notaticollis (Aubé, 1837)	1		es	*1
Coleoptera	Dytiscidae	Rhantus (Rhantus) suturalis (Macleay, 1825)	*		sh	*1
Coleoptera	Dytiscidae	Rhantus (Rhantus) suturellus (Harris, 1828)	V		mh	*1
Coleoptera	Dytiscidae	Scarodytes halensis (Fabricius, 1787)	*		mh	*1
Coleoptera	Dytiscidae	Stictotarsus duodecimpustulatus (Fabricius, 1792)	*		mh	*1
Coleoptera	Dytiscidae	Stictotarsus griseostriatus (De Geer, 1774)	2		es	*1
Coleoptera	Dytiscidae	Suphrodytes dorsalis (Fabricius, 1787)	D		?	*1
Coleoptera	Dytiscidae	Suphrodytes figuratus (Gyllenhal, 1826)	D		?	*1
Coleoptera	Elateridae	Actenicerus sjaelandicus (Müll., 1764)	V		mh	*3
Coleoptera	Elateridae	Adrastus axillaris Er., 1842	*		mh	*3
Coleoptera	Elateridae	Adrastus lacertosus Er., 1842	*		ss	*3
Coleoptera	Elateridae	Adrastus limbatus (F., 1776)	*		mh	*3
Coleoptera	Elateridae	Adrastus montanus (Scop., 1763)	*		s	*3
Coleoptera	Elateridae	Adrastus pallens (F., 1792)	*		h	*3
Coleoptera	Elateridae	Adrastus rachifer (Geoffr., 1785)	*		h	*3
Coleoptera	Elateridae	Agriotes acuminatus (Steph., 1830)	*		mh	*3
Coleoptera	Elateridae	Agriotes brevis Cand., 1863	D		?	*3
Coleoptera	Elateridae	Agriotes gallicus (Boisd. & Lacord., 1835)	*		mh	*3
Coleoptera	Elateridae	Agriotes lineatus (L., 1767)	*		sh	*3
Coleoptera	Elateridae	Agriotes obscurus (L., 1758)	*		sh	*3
Coleoptera	Elateridae	Agriotes pallidulus (Ill., 1807)	*		h	*3
Coleoptera	Elateridae	Agriotes pilosellus (Schönh., 1817)	*		mh	*3
Coleoptera	Elateridae	Agriotes sordidus (Ill., 1807)	*		ss	*3
Coleoptera	Elateridae	Agriotes sputator (L., 1758)	*		sh	*3
Coleoptera	Elateridae	Agriotes ustulatus (Schall., 1783)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Elateridae	Agrypnus murina (L., 1758)	*		sh	*3
Coleoptera	Elateridae	Ampedus aethiops (Lacord., 1835)	*		s	*3
Coleoptera	Elateridae	Ampedus auripes (Rtt., 1895)	R		es	*3
Coleoptera	Elateridae	Ampedus balteatus (L., 1758)	*		sh	*3
Coleoptera	Elateridae	Ampedus brunnicornis Germ., 1844	1		es	*3
Coleoptera	Elateridae	Ampedus cardinalis (Schdte., 1865)	1		ss	*3
Coleoptera	Elateridae	Ampedus cinnabarinus (Eschz., 1829)	2		s	*3
Coleoptera	Elateridae	Ampedus elegantulus (Schönh., 1817)	1		es	*3
Coleoptera	Elateridae	Ampedus elongatulus (F., 1787)	*		mh	*3
Coleoptera	Elateridae	Ampedus erythrogonus (Müll., 1821)	3		s	*3
Coleoptera	Elateridae	Ampedus forticornis Schwarz, 1900	D		?	*3
Coleoptera	Elateridae	Ampedus hjorti (Rye, 1905)	3		s	*3
Coleoptera	Elateridae	Ampedus impressicollis Bouwer, 1984	D		?	*3
Coleoptera	Elateridae	Ampedus melanurus Muls. & Guillb., 1855	1		es	*3
Coleoptera	Elateridae	Ampedus nemoralis Bouwer, 1980	D		?	*3
Coleoptera	Elateridae	Ampedus nigerrimus (Lacord., 1835)	3		s	*3
Coleoptera	Elateridae	Ampedus nigrinus (Hbst., 1784)	*		mh	*3
Coleoptera	Elateridae	Ampedus nigroflavus (Goeze, 1777)	3		s	*3
Coleoptera	Elateridae	Ampedus pomonae (Steph., 1830)	3		s	*3
Coleoptera	Elateridae	Ampedus pomorum (Hbst., 1784)	*		sh	*3
Coleoptera	Elateridae	Ampedus praeustus (F., 1792)	2		ss	*3
Coleoptera	Elateridae	Ampedus quercicola (Buyss., 1887)	*		mh	*3
Coleoptera	Elateridae	Ampedus rufipennis (Steph., 1830)	2		ss	*3
Coleoptera	Elateridae	Ampedus sanguineus (L., 1758)	*		sh	*3
Coleoptera	Elateridae	Ampedus sanguinolentus (Schrk., 1776)	*		mh	*3
Coleoptera	Elateridae	Ampedus sinuatus Germ., 1844	*		ss	*3
Coleoptera	Elateridae	Ampedus triangulum (Dorn, 1925)	3		s	*3
Coleoptera	Elateridae	Ampedus tristis (L., 1758)	R		es	*3
Coleoptera	Elateridae	Ampedus vandalitiae Lohse, 1976	D		?	*3
Coleoptera	Elateridae	Anostirus castaneus (L., 1758)	*		mh	*3
Coleoptera	Elateridae	Anostirus gracilicollis (Stierl., 1896)	2		es	*3
Coleoptera	Elateridae	Anostirus purpureus (Poda, 1761)	*		mh	*3
Coleoptera	Elateridae	Anostirus sulphuripennis (Germ., 1843)	2		ss	*3
Coleoptera	Elateridae	Athous bicolor (Goeze, 1777)	*		mh	*3
Coleoptera	Elateridae	Athous campyloides Newm., 1833	D		?	*3
Coleoptera	Elateridae	Athous haemorrhoidalis (F., 1801)	*		sh	*3
Coleoptera	Elateridae	Athous subfuscus (Müll., 1767)	*		sh	*3
Coleoptera	Elateridae	Athous vittatus (F., 1792)	*		h	*3
Coleoptera	Elateridae	Athous zebei Bach, 1854	*		ss	*3
Coleoptera	Elateridae	Betarmon bisbimaculatus (F., 1803)	G		ss	*3
Coleoptera	Elateridae	Brachygonus dubius (Platia & Cate, 1990)	1		es	*3
Coleoptera	Elateridae	Brachygonus megerlei (Lacord., 1835)	3		s	*3
Coleoptera	Elateridae	Brachygonus ruficeps (Muls. & Guillb., 1855)	1		es	*3
Coleoptera	Elateridae	Calambus bipustulatus (L., 1767)	V		s	*3
Coleoptera	Elateridae	Cardiophorus asellus Er., 1840	3		s	*3
Coleoptera	Elateridae	Cardiophorus atramentarius Er., 1840	*		ss	*3
Coleoptera	Elateridae	Cardiophorus discicollis (Hbst., 1806)	0	1900	ex	*3
Coleoptera	Elateridae	Cardiophorus ebeninus (Germ., 1824)	3		s	*3
Coleoptera	Elateridae	Cardiophorus gramineus (Scop., 1763)	2		ss	*3
Coleoptera	Elateridae	Cardiophorus nigerrimus Er., 1840	V		s	*3
Coleoptera	Elateridae	Cardiophorus ruficollis (L., 1758)	*		mh	*3
Coleoptera	Elateridae	Cardiophorus vestigialis Er., 1840	V		s	*3
Coleoptera	Elateridae	Cidnopus aeruginosus (Ol., 1790)	*		h	*3
Coleoptera	Elateridae	Cidnopus pilosus (Leske, 1785)	*		h	*3
Coleoptera	Elateridae	Cidnopus quercus (Ol., 1790)	*		mh	*3
Coleoptera	Elateridae	Crepidophorus mutilatus (Rosh., 1847)	2		ss	*3
Coleoptera	Elateridae	Ctenicera cuprea (F., 1775)	*		mh	*3
Coleoptera	Elateridae	Ctenicera heyeri (Sax., 1838)	3		ss	*3
Coleoptera	Elateridae	Ctenicera pectinicornis (L., 1758)	V		mh	*3
Coleoptera	Elateridae	Ctenicera virens (Schrk., 1781)	V		s	*3
Coleoptera	Elateridae	Dalopius marginatus (L., 1758)	*		sh	*3
Coleoptera	Elateridae	Danosoma fasciatum (L., 1758)	R		es	*3
Coleoptera	Elateridae	Denticollis borealis (Payk., 1800)	0	1900	ex	*3
Coleoptera	Elateridae	Denticollis linearis (L., 1758)	*		h	*3
Coleoptera	Elateridae	Denticollis rubens Pill. & Mitt., 1783	3		s	*3
Coleoptera	Elateridae	Diacanthous undulatus (De Geer, 1774)	3		ss	*3
Coleoptera	Elateridae	Dicronychus cinereus (Hbst., 1784)	*		sh	*3
Coleoptera	Elateridae	Dicronychus equiseti (Hbst., 1784)	3		s	*3
Coleoptera	Elateridae	Dicronychus equisetioides Lohse, 1976	3		s	*3
Coleoptera	Elateridae	Drasterius bimaculatus (Rossi, 1790)	R		es	*3
Coleoptera	Elateridae	Ectinus aterrimus (L., 1761)	*		h	*3
Coleoptera	Elateridae	Elater ferrugineus L., 1758	2		ss	*3
Coleoptera	Elateridae	Fleutiauxillus maritimus (Curt., 1840)	R		es	*3
Coleoptera	Elateridae	Haplotarsus angustulus (Kiesw., 1858)	V		s	*3
Coleoptera	Elateridae	Haplotarsus incanus (Gyll., 1827)	*		mh	*3
Coleoptera	Elateridae	Hemicrepidius hirtus (Hbst., 1784)	*		mh	*3
Coleoptera	Elateridae	Hemicrepidius niger (L., 1758)	*		sh	*3
Coleoptera	Elateridae	Hypnoidus riparius (F., 1792)	*		mh	*3
Coleoptera	Elateridae	Hypnoidus rivularius (Gyll., 1808)	R		es	*3
Coleoptera	Elateridae	Hypoganus inunctus (Lacord., 1835)	V		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Elateridae	Idolus picipennis (Bach, 1852)	*		s	*3
Coleoptera	Elateridae	Ischnodes sanguinicollis (Panz., 1793)	1		es	*3
Coleoptera	Elateridae	Lacon lepidopterus (Panz., 1801)	1		es	*3
Coleoptera	Elateridae	Lacon querceus (Hbst., 1784)	1		es	*3
Coleoptera	Elateridae	Limoniscus violaceus (Müll., 1821)	1		es	*3
Coleoptera	Elateridae	Limonius aeneoniger (De Geer, 1774)	*		mh	*3
Coleoptera	Elateridae	Limonius minutus (L., 1758)	*		sh	*3
Coleoptera	Elateridae	Limonius poneli Leseigneur & Mertlik, 2007	*		sh	*3
Coleoptera	Elateridae	Liotrichus affinis (Payk., 1800)	G		s	*3
Coleoptera	Elateridae	Megapenthes lugens (Redt., 1842)	1		es	*3
Coleoptera	Elateridae	Melanotus brunnipes (Germ., 1824)	*		mh	*3
Coleoptera	Elateridae	Melanotus castanipes (Payk., 1800)	*		mh	*3
Coleoptera	Elateridae	Melanotus crassicollis (Er., 1841)	3		ss	*3
Coleoptera	Elateridae	Melanotus punctolineatus (Pelerin, 1829)	V		mh	*3
Coleoptera	Elateridae	Melanotus rufipes (Hbst., 1784)	*		h	*3
Coleoptera	Elateridae	Metanomus infuscatus (Eschz., 1829)	R		es	*3
Coleoptera	Elateridae	Mosotalesus impressus (F., 1792)	V		s	*3
Coleoptera	Elateridae	Mosotalesus nigricornis (Panz., 1799)	3		s	*3
Coleoptera	Elateridae	Negastrius arenicola (Boh., 1852)	3		ss	*3
Coleoptera	Elateridae	Negastrius pulchellus (L., 1761)	V		s	*3
Coleoptera	Elateridae	Negastrius sabulicola (Boh., 1853)	V		s	*3
Coleoptera	Elateridae	Neopristilophus depressus (Germ., 1822)	D		ss	*3
Coleoptera	Elateridae	Nothodes parvulus (Panz., 1799)	*		mh	*3
Coleoptera	Elateridae	Oedostethus quadripustulatus (F., 1792)	3		s	*3
Coleoptera	Elateridae	Oedostethus tenuicornis (Germ., 1824)	D		?	*3
Coleoptera	Elateridae	Orithales serraticornis (Payk., 1800)	G		ss	*3
Coleoptera	Elateridae	Paracardiophorus musculus (Er., 1840)	1		ss	*3
Coleoptera	Elateridae	Podeonius acuticornis (Germ., 1824)	1		es	*3
Coleoptera	Elateridae	Porthmidius austriacus (Schrk., 1781)	2		ss	*3
Coleoptera	Elateridae	Procraerus tibialis (Lacord., 1835)	3		s	*3
Coleoptera	Elateridae	Prosternon tessellatum (L., 1758)	*		h	*3
Coleoptera	Elateridae	Pseudanostirus globicollis (Germ., 1843)	D		ss	*3
Coleoptera	Elateridae	Quasimus minutissimus (Germ., 1817)	3		s	*3
Coleoptera	Elateridae	Selatosomus aeneus (L., 1758)	*		h	*3
Coleoptera	Elateridae	Selatosomus cruciatus (L., 1758)	3		s	*3
Coleoptera	Elateridae	Selatosomus latus (F., 1801)	3		s	*3
Coleoptera	Elateridae	Selatosomus melancholicus (F., 1798)	D		?	*3
Coleoptera	Elateridae	Selatosomus rugosus (Germ., 1817)	R		es	*3
Coleoptera	Elateridae	Sericus brunneus (L., 1758)	*		mh	*3
Coleoptera	Elateridae	Sericus subaeneus (Redt., 1842)	3		s	*3
Coleoptera	Elateridae	Stenagostus rhombeus (Ol., 1790)	*		mh	*3
Coleoptera	Elateridae	Stenagostus rufus (De Geer, 1774)	V		s	*3
Coleoptera	Elateridae	Synaptus filiformis (F., 1781)	*		mh	*3
Coleoptera	Elateridae	Zorochros dufouri (Buyss., 1851)	*		s	*3
Coleoptera	Elateridae	Zorochros flavipes (Aubé, 1850)	D		?	*3
Coleoptera	Elateridae	Zorochros meridionalis (Cast., 1840)	*		s	*3
Coleoptera	Elateridae	Zorochros minimus (Lacord., 1835)	*		s	*3
Coleoptera	Elmidae	Elmis aenea (P.W.J. Müller, 1806)	*		sh	*1
Coleoptera	Elmidae	Elmis latreillei Bedel, 1878	V		s	*1
Coleoptera	Elmidae	Elmis maugetii Latreille, 1798	*		h	*1
Coleoptera	Elmidae	Elmis obscura (P.W.J. Müller, 1806)	3		ss	*1
Coleoptera	Elmidae	Elmis rietscheli Steffan, 1958	*		s	*1
Coleoptera	Elmidae	Elmis rioloides (Kuwert, 1890)	*		mh	*1
Coleoptera	Elmidae	Esolus angustatus (P.W.J. Müller, 1821)	*		h	*1
Coleoptera	Elmidae	Esolus parallelepipedus (P.W.J. Müller, 1806)	*		mh	*1
Coleoptera	Elmidae	Esolus pygmaeus (P.W.J. Müller, 1806)	1		es	*1
Coleoptera	Elmidae	Limnius muelleri (Erichson, 1847)	0	1977	ex	*1
Coleoptera	Elmidae	Limnius opacus P.W.J. Müller, 1806	3		ss	*1
Coleoptera	Elmidae	Limnius perrisi (Dufour, 1843)	*		h	*1
Coleoptera	Elmidae	Limnius volckmari (Panzer, 1793)	*		h	*1
Coleoptera	Elmidae	Macronychus quadrituberculatus P.W.J. Müller, 1806	3		ss	*1
Coleoptera	Elmidae	Normandia nitens (P.W.J. Müller, 1817)	1		es	*1
Coleoptera	Elmidae	Normandia sodalis (Erichson, 1847)	0	1950	ex	*1
Coleoptera	Elmidae	Oulimnius rivularis (Rosenhauer, 1856)	R		es	*1
Coleoptera	Elmidae	Oulimnius troglodytes (Gyllenhal, 1827)	2		ss	*1
Coleoptera	Elmidae	Oulimnius tuberculatus (P.W.J. Müller, 1806)	*		h	*1
Coleoptera	Elmidae	Potamophilus acuminatus (Fabricius, 1792)	2		es	*1
Coleoptera	Elmidae	Riolus cupreus (P.W.J. Müller, 1806)	V		s	*1
Coleoptera	Elmidae	Riolus illiesi Steffan, 1958	R		es	*1
Coleoptera	Elmidae	Riolus subviolaceus (P.W.J. Müller, 1817)	*		mh	*1
Coleoptera	Elmidae	Stenelmis canaliculata (Gyllenhal, 1808)	2		ss	*1
Coleoptera	Elmidae	Stenelmis consobrina Dufour, 1835	0	1949	ex	*1
Coleoptera	Endomychidae	Dapsa denticollis (Germ., 1817)	1		es	*3
Coleoptera	Endomychidae	Endomychus coccineus (L., 1758)	*		mh	*3
Coleoptera	Endomychidae	Holoparamecus caularum (Aubé, 1843)	*		s	*3
Coleoptera	Endomychidae	Leiesthes seminigra (Gyll., 1808)	R		es	*3
Coleoptera	Endomychidae	Lycoperdina bovistae (F., 1792)	*		mh	*3
Coleoptera	Endomychidae	Lycoperdina succincta (L., 1767)	*		s	*3
Coleoptera	Endomychidae	Mycetaea subterranea (Marsh., 1802)	*		sh	*3
Coleoptera	Endomychidae	Mycetina cruciata (Schall., 1783)	*		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Endomychidae	Symbiotes armatus Rtt., 1881	D		?	*3
Coleoptera	Endomychidae	Symbiotes gibberosus (Luc., 1849)	*		mh	*3
Coleoptera	Endomychidae	Symbiotes latus Redt., 1849	V		s	*3
Coleoptera	Erotylidae	Combocerus glaber (Schall., 1783)	1		ss	*3
Coleoptera	Erotylidae	Dacne bipustulata (Thunb., 1781)	*		h	*3
Coleoptera	Erotylidae	Dacne notata (Gm., 1788)	0	1950	ex	*3
Coleoptera	Erotylidae	Dacne rufifrons (F., 1775)	3		s	*3
Coleoptera	Erotylidae	Triplax aenea (Schall., 1783)	3		s	*3
Coleoptera	Erotylidae	Triplax collaris (Schall., 1783)	2		ss	*3
Coleoptera	Erotylidae	Triplax elongata Lacord., 1842	0	1955	ex	*3
Coleoptera	Erotylidae	Triplax lepida (Fald., 1835)	*		s	*3
Coleoptera	Erotylidae	Triplax melanocephala (Latr., 1804)	1		es	*3
Coleoptera	Erotylidae	Triplax rufipes (F., 1775)	V		ss	*3
Coleoptera	Erotylidae	Triplax russica (L., 1758)	*		mh	*3
Coleoptera	Erotylidae	Triplax scutellaris Chapr., 1825	R		es	*3
Coleoptera	Erotylidae	Tritoma bipustulata F., 1775	*		h	*3
Coleoptera	Erotylidae	Tritoma subbasalis (Rtt., 1896)	R		es	*3
Coleoptera	Eucinetidae	Eucinetus haemorrhoidalis (Germ., 1818)	*		mh	*3
Coleoptera	Eucinetidae	Eucinetus meridionalis (Cast., 1836)	R		es	*3
Coleoptera	Eucnemidae	Dirhagus emyi (Rouget, 1855)	V		ss	*3
Coleoptera	Eucnemidae	Dirhagus lepidus (Rosh., 1847)	*		s	*3
Coleoptera	Eucnemidae	Dirhagus palmi Olexa, 1963	R		es	*3
Coleoptera	Eucnemidae	Dirhagus pygmaeus (F., 1792)	3		s	*3
Coleoptera	Eucnemidae	Dromaeolus barnabita (Villa, 1838)	*		s	*3
Coleoptera	Eucnemidae	Epiphanis cornutus Eschz., 1829	nb		nb	*3
Coleoptera	Eucnemidae	Eucnemis capucina Ahr., 1812	3		s	*3
Coleoptera	Eucnemidae	Hylis cariniceps Rtt., 1902	3		s	*3
Coleoptera	Eucnemidae	Hylis foveicollis (Thoms., 1874)	V		mh	*3
Coleoptera	Eucnemidae	Hylis olexai Palm, 1955	V		mh	*3
Coleoptera	Eucnemidae	Hylis procerulus (Mannh., 1823)	R		es	*3
Coleoptera	Eucnemidae	Isorhipis marmottani (Bonv., 1871)	2		ss	*3
Coleoptera	Eucnemidae	Isorhipis melasoides (Cast., 1835)	3		s	*3
Coleoptera	Eucnemidae	Melasis buprestoides (L., 1761)	*		mh	*3
Coleoptera	Eucnemidae	Nematodes filum (F., 1801)	0	1900	ex	*3
Coleoptera	Eucnemidae	Rhacopus pyrenaeus (Bonv., 1872)	0	1900	ex	*3
Coleoptera	Eucnemidae	Rhacopus sahlbergi (Mannh., 1823)	1		es	*3
Coleoptera	Eucnemidae	Xylophilus corticalis (Payk., 1800)	2		ss	*3
Coleoptera	Eucnemidae	Xylophilus testaceus (Hbst., 1806)	R		es	*3
Coleoptera	Georissidae	Georissus crenulatus (Rossi, 1794)	G		s	*3
Coleoptera	Georissidae	Georissus laesicollis Germ., 1831	2		es	*3
Coleoptera	Georissidae	Georissus substriatus Heer, 1841	0	1950	ex	*3
Coleoptera	Geotrupidae	Anoplotrupes stercorosus (Scriba, 1791)	*		sh	*3
Coleoptera	Geotrupidae	Bolbelasmus unicornis (Schrank, 1789)	0	1967	ex	*3
Coleoptera	Geotrupidae	Geotrupes mutator (Marsham, 1802)	2		es	*3
Coleoptera	Geotrupidae	Geotrupes spiniger (Marsham, 1802)	*		mh	*3
Coleoptera	Geotrupidae	Geotrupes stercorarius (Linnaeus, 1758)	2		s	*3
Coleoptera	Geotrupidae	Odonteus armiger (Scopoli, 1772)	*		mh	*3
Coleoptera	Geotrupidae	Sericotrupes niger (Marsham, 1802)	0	1987	ex	*3
Coleoptera	Geotrupidae	Trypocopris alpinus (Sturm & Hagenbach, 1825)	*		ss	*3
Coleoptera	Geotrupidae	Trypocopris pyrenaeus (Charpentier, 1825)	0	1958	ex	*3
Coleoptera	Geotrupidae	Trypocopris vernalis (Linnaeus, 1758)	*		h	*3
Coleoptera	Geotrupidae	Typhaeus typhoeus (Linnaeus, 1758)	*		h	*3
Coleoptera	Gyrinidae	Aulonogyrus (Aulonogyrus) concinnus (Klug, 1834)	0	1930	ex	*1
Coleoptera	Gyrinidae	Gyrinus (Gyrinulus) minutus Fabricius, 1798	2		ss	*1
Coleoptera	Gyrinidae	Gyrinus (Gyrinus) aeratus Stephens, 1832	2		es	*1
Coleoptera	Gyrinidae	Gyrinus (Gyrinus) caspius Ménétries, 1832	R		es	*1
Coleoptera	Gyrinidae	Gyrinus (Gyrinus) colymbus Erichson, 1832	1		es	*1
Coleoptera	Gyrinidae	Gyrinus (Gyrinus) distinctus Aubé, 1836	2		ss	*1
Coleoptera	Gyrinidae	Gyrinus (Gyrinus) marinus Gyllenhal, 1808	V		mh	*1
Coleoptera	Gyrinidae	Gyrinus (Gyrinus) natator (Linnaeus, 1758)	1		es	*1
Coleoptera	Gyrinidae	Gyrinus (Gyrinus) paykulli Ochs, 1927	V		s	*1
Coleoptera	Gyrinidae	Gyrinus (Gyrinus) substriatus Stephens, 1829	*		h	*1
Coleoptera	Gyrinidae	Gyrinus (Gyrinus) suffriani Scriba, 1855	2		ss	*1
Coleoptera	Gyrinidae	Orectochilus villosus (O.F. Müller, 1776)	*		h	*1
Coleoptera	Haliplidae	Brychius elevatus (Panzer, 1794)	V		s	*1
Coleoptera	Haliplidae	Haliplus (Haliplidius) confinis Stephens, 1829	*		mh	*1
Coleoptera	Haliplidae	Haliplus (Haliplidius) obliquus (Fabricius, 1787)	*		mh	*1
Coleoptera	Haliplidae	Haliplus (Haliplidius) varius Nicolai, 1822	1		es	*1
Coleoptera	Haliplidae	Haliplus (Haliplus) apicalis Thomson, 1868	*		ss	*1
Coleoptera	Haliplidae	Haliplus (Haliplus) fluviatilis Aubé, 1836	*		h	*1
Coleoptera	Haliplidae	Haliplus (Haliplus) fulvicollis Erichson, 1837	1		ss	*1
Coleoptera	Haliplidae	Haliplus (Haliplus) furcatus Seidlitz, 1887	2		ss	*1
Coleoptera	Haliplidae	Haliplus (Haliplus) heydeni Wehncke, 1875	*		h	*1
Coleoptera	Haliplidae	Haliplus (Haliplus) immaculatus Gerhardt, 1877	*		h	*1
Coleoptera	Haliplidae	Haliplus (Haliplus) lineolatus Mannerheim, 1844	*		s	*1
Coleoptera	Haliplidae	Haliplus (Haliplus) ruficollis (De Geer, 1774)	*		sh	*1
Coleoptera	Haliplidae	Haliplus (Haliplus) sibiricus Motschulsky, 1860	*		mh	*1
Coleoptera	Haliplidae	Haliplus (Liaphlus) flavicollis Sturm, 1834	*		h	*1
Coleoptera	Haliplidae	Haliplus (Liaphlus) fulvus (Fabricius, 1801)	V		s	*1
Coleoptera	Haliplidae	Haliplus (Liaphlus) laminatus (Schaller, 1783)	*		h	*1

Order	Family	Species	K	L	P	S
Coleoptera	Haliplidae	Haliplus (Liaphlus) mucronatus Stephens, 1828	R		es	*1
Coleoptera	Haliplidae	Haliplus (Liaphlus) variegatus Sturm, 1834	2		s	*1
Coleoptera	Haliplidae	Haliplus (Neohaliplus) lineatocollis (Marsham, 1802)	*		h	*1
Coleoptera	Haliplidae	Peltodytes (Peltodytes) caesus (Duftschmid, 1805)	*		h	*1
Coleoptera	Heteroceridae	Heterocerus aureolus Schdte., 1866	D		?	*3
Coleoptera	Heteroceridae	Heterocerus crinitus Kiesw., 1850	0	1950	ex	*3
Coleoptera	Heteroceridae	Heterocerus fenestratus (Thunb., 1784)	*		h	*3
Coleoptera	Heteroceridae	Heterocerus flexuosus Steph., 1828	V		s	*3
Coleoptera	Heteroceridae	Heterocerus fossor Kiesw., 1843	0	1900	ex	*3
Coleoptera	Heteroceridae	Heterocerus fusculus Kiesw., 1843	*		h	*3
Coleoptera	Heteroceridae	Heterocerus hispidulus Kiesw., 1843	G		mh	*3
Coleoptera	Heteroceridae	Heterocerus intermedius Kiesw., 1843	G		s	*3
Coleoptera	Heteroceridae	Heterocerus marginatus (F., 1787)	*		h	*3
Coleoptera	Heteroceridae	Heterocerus maritimus Guer., 1838	*		ss	*3
Coleoptera	Heteroceridae	Heterocerus obsoletus Curt., 1828	V		s	*3
Coleoptera	Heteroceridae	Heterocerus parallelus Gebl., 1830	2		es	*3
Coleoptera	Heteroceridae	Heterocerus pruinosus Kiesw., 1851	G		ss	*3
Coleoptera	Heteroceridae	Heterocerus sericans Kiesw., 1843	G		ss	*3
Coleoptera	Heteroceridae	Micilus murinus (Kiesw., 1843)	0	1900	ex	*3
Coleoptera	Histeridae	Abraeus granulum Er., 1839	*		mh	*3
Coleoptera	Histeridae	Abraeus parvulus Aubé, 1842	G		ss	*3
Coleoptera	Histeridae	Abraeus perpusillus (Marsh., 1802)	*		sh	*3
Coleoptera	Histeridae	Acritus homoeopathicus Woll., 1857	D		ss	*3
Coleoptera	Histeridae	Acritus komai Lewis, 1879	nb		nb	*3
Coleoptera	Histeridae	Acritus minutus (Hbst., 1792)	3		s	*3
Coleoptera	Histeridae	Acritus nigricornis (Hoffm., 1803)	*		mh	*3
Coleoptera	Histeridae	Aeletes atomarius (Aubé, 1842)	3		ss	*3
Coleoptera	Histeridae	Atholus bimaculatus (L., 1758)	*		h	*3
Coleoptera	Histeridae	Atholus corvinus (Germ., 1817)	3		s	*3
Coleoptera	Histeridae	Atholus duodecimstriatus (Schrk., 1781)	*		h	*3
Coleoptera	Histeridae	Atholus praetermissus (Peyron, 1856)	R		es	*3
Coleoptera	Histeridae	Carcinops pumilio (Er., 1834)	*		h	*3
Coleoptera	Histeridae	Chaetabraeus globulus (Creutz., 1799)	G		ss	*3
Coleoptera	Histeridae	Chalcionellus decemstriatus (Rossi, 1792)	1		es	*3
Coleoptera	Histeridae	Dendrophilus punctatus (Hbst., 1792)	*		h	*3
Coleoptera	Histeridae	Dendrophilus pygmaeus (L., 1758)	*		mh	*3
Coleoptera	Histeridae	Epierus comptus Er., 1834	R		es	*3
Coleoptera	Histeridae	Eurosomides minor (Rossi, 1792)	*		mh	*3
Coleoptera	Histeridae	Gnathoncus buyssoni Auzat, 1917	*		h	*3
Coleoptera	Histeridae	Gnathoncus communis (Mars., 1862)	D		s	*3
Coleoptera	Histeridae	Gnathoncus nannetensis (Mars., 1862)	*		h	*3
Coleoptera	Histeridae	Gnathoncus nidorum Stockm., 1957	3		ss	*3
Coleoptera	Histeridae	Gnathoncus rotundatus (Kug., 1792)	*		mh	*3
Coleoptera	Histeridae	Haeterius ferrugineus (Ol., 1789)	*		mh	*3
Coleoptera	Histeridae	Hister bissexstriatus F., 1801	*		mh	*3
Coleoptera	Histeridae	Hister funestus Er., 1834	R		es	*3
Coleoptera	Histeridae	Hister helluo Truqui, 1852	*		ss	*3
Coleoptera	Histeridae	Hister illigeri Duft., 1805	1		es	*3
Coleoptera	Histeridae	Hister quadrimaculatus L., 1758	G		s	*3
Coleoptera	Histeridae	Hister quadrinotatus Scriba, 1790	G		s	*3
Coleoptera	Histeridae	Hister unicolor L., 1758	*		h	*3
Coleoptera	Histeridae	Hololepta plana (Sulzer, 1776)	*		mh	*3
Coleoptera	Histeridae	Hypocaccus dimidiatus (Ill., 1807)	3		s	*3
Coleoptera	Histeridae	Hypocaccus metallicus (Hbst., 1792)	3		s	*3
Coleoptera	Histeridae	Hypocaccus rufipes (Kug., 1792)	G		ss	*3
Coleoptera	Histeridae	Hypocaccus rugiceps (Duft., 1805)	3		s	*3
Coleoptera	Histeridae	Hypocaccus rugifrons (Payk., 1798)	V		s	*3
Coleoptera	Histeridae	Hypocaccus specularis (Mars., 1855)	1		es	*3
Coleoptera	Histeridae	Kissister minimus (Cast., 1840)	*		s	*3
Coleoptera	Histeridae	Margarinotus bipustulatus (Schrk., 1781)	G		s	*3
Coleoptera	Histeridae	Margarinotus brunneus (F., 1775)	*		h	*3
Coleoptera	Histeridae	Margarinotus carbonarius (Hoffm., 1803)	*		h	*3
Coleoptera	Histeridae	Margarinotus distinctus (Er., 1834)	G		ss	*3
Coleoptera	Histeridae	Margarinotus ignobilis (Mars., 1854)	*		s	*3
Coleoptera	Histeridae	Margarinotus marginatus (Er., 1834)	*		mh	*3
Coleoptera	Histeridae	Margarinotus merdarius (Hoffm., 1803)	*		h	*3
Coleoptera	Histeridae	Margarinotus neglectus (Germ., 1813)	*		s	*3
Coleoptera	Histeridae	Margarinotus obscurus (Kug., 1792)	*		h	*3
Coleoptera	Histeridae	Margarinotus punctiventer (Mars., 1854)	*		s	*3
Coleoptera	Histeridae	Margarinotus purpurascens (Hbst., 1792)	*		sh	*3
Coleoptera	Histeridae	Margarinotus ruficornis (Grimm, 1852)	2		ss	*3
Coleoptera	Histeridae	Margarinotus striola (Sahlb., 1819)	*		h	*3
Coleoptera	Histeridae	Margarinotus terricola (Germ., 1824)	*		s	*3
Coleoptera	Histeridae	Margarinotus ventralis (Mars., 1854)	*		h	*3
Coleoptera	Histeridae	Myrmetes paykulli Kanaar, 1979	*		mh	*3
Coleoptera	Histeridae	Onthophilus punctatus (Müll., 1776)	*		mh	*3
Coleoptera	Histeridae	Onthophilus striatus (Forst., 1771)	*		h	*3
Coleoptera	Histeridae	Paromalus flavicornis (Hbst., 1792)	*		sh	*3
Coleoptera	Histeridae	Paromalus parallelepipedus (Hbst., 1792)	*		h	*3
Coleoptera	Histeridae	Platylomalus complanatus (Panz., 1797)	0	1950	ex	*3

Order	Family	Species	K	L	P	S
Coleoptera	Histeridae	Platysoma angustatum (Thunb., 1794)	*		mh	*3
Coleoptera	Histeridae	Platysoma compressum (Hbst., 1783)	*		h	*3
Coleoptera	Histeridae	Platysoma deplanatum (Gyll., 1808)	R		es	*3
Coleoptera	Histeridae	Platysoma elongatum (Thunb., 1787)	*		s	*3
Coleoptera	Histeridae	Platysoma lineare (Er., 1834)	*		s	*3
Coleoptera	Histeridae	Plegaderus caesus (Hbst., 1792)	*		mh	*3
Coleoptera	Histeridae	Plegaderus discisus Er., 1839	R		es	*3
Coleoptera	Histeridae	Plegaderus dissectus Er., 1839	*		h	*3
Coleoptera	Histeridae	Plegaderus saucius Er., 1834	*		s	*3
Coleoptera	Histeridae	Plegaderus vulneratus (Panz., 1797)	*		mh	*3
Coleoptera	Histeridae	Saprinus aegialius Rtt., 1884	0	1950	ex	*3
Coleoptera	Histeridae	Saprinus aeneus (F., 1775)	*		h	*3
Coleoptera	Histeridae	Saprinus immundus (Gyll., 1827)	V		mh	*3
Coleoptera	Histeridae	Saprinus lautus Er., 1839	D		ss	*3
Coleoptera	Histeridae	Saprinus planiusculus Motsch., 1849	*		mh	*3
Coleoptera	Histeridae	Saprinus politus (Brahm, 1790)	D		?	*3
Coleoptera	Histeridae	Saprinus rugifer (Payk., 1809)	2		ss	*3
Coleoptera	Histeridae	Saprinus semistriatus (Scriba, 1790)	*		sh	*3
Coleoptera	Histeridae	Saprinus subnitescens Bickh., 1909	*		mh	*3
Coleoptera	Histeridae	Saprinus tenuistrius Mars., 1855	D		ss	*3
Coleoptera	Histeridae	Saprinus virescens (Payk., 1798)	G		s	*3
Coleoptera	Histeridae	Teretrius fabricii Mazur, 1972	G		ss	*3
Coleoptera	Hydraenidae	Helophorus (Atracthelophorus) arvernicus Mulsant, 1846	*		mh	*1
Coleoptera	Hydraenidae	Helophorus (Atracthelophorus) brevipalpis Bedel, 1881	*		sh	*1
Coleoptera	Hydraenidae	Helophorus (Atracthelophorus) glacialis Villa, 1883	R		es	*1
Coleoptera	Hydraenidae	Helophorus (Atracthelophorus) nivalis Giraud, 1851	*		ss	*1
Coleoptera	Hydraenidae	Helophorus (Cyphelophorus) tuberculatus Gyllenhal, 1808	1		es	*1
Coleoptera	Hydraenidae	Helophorus (Helophorus) aequalis Thomson, 1868	*		sh	*1
Coleoptera	Hydraenidae	Helophorus (Helophorus) aquaticus (Linnaeus, 1758)	*		sh	*1
Coleoptera	Hydraenidae	Helophorus (Helophorus) grandis Illiger, 1798	*		h	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) asperatus Rey, 1885	3		ss	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) croaticus Kuwert, 1886	*		s	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) dorsalis (Marsham, 1802)	2		ss	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) flavipes Fabricius, 1792	*		h	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) fulgidicollis Motschulsky, 1860	R		es	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) granularis (Linnaeus, 1761)	*		h	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) griseus Herbst, 1793	*		mh	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) laticollis Thomson, 1854	1		es	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) minutus Fabricius, 1775	*		h	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) nanus Sturm, 1836	*		mh	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) obscurus Mulsant, 1844	*		h	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) paraminutus Angus, 1986	D		s	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) pumilio Erichson, 1837	V		s	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) redtenbacheri Kuwert, 1885	3		ss	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) strigifrons Thomson, 1868	*		mh	*1
Coleoptera	Hydraenidae	Helophorus (Rhopalhelophorus) villosus Duftschmid, 1805	1		es	*1
Coleoptera	Hydraenidae	Hydraena (Haenydra) alpicola Pretner, 1931	*		s	*1
Coleoptera	Hydraenidae	Hydraena (Haenydra) belgica D'Orchymont, 1930	*		s	*1
Coleoptera	Hydraenidae	Hydraena (Haenydra) dentipes Germar, 1844	*		mh	*1
Coleoptera	Hydraenidae	Hydraena (Haenydra) excisa Kiesenwetter, 1849	*		s	*1
Coleoptera	Hydraenidae	Hydraena (Haenydra) gracilis Germar, 1824	*		sh	*1
Coleoptera	Hydraenidae	Hydraena (Haenydra) lapidicola Kiesenwetter, 1849	*		ss	*1
Coleoptera	Hydraenidae	Hydraena (Haenydra) polita Kiesenwetter, 1849	3		ss	*1
Coleoptera	Hydraenidae	Hydraena (Haenydra) saga D'Orchymont, 1930	3		ss	*1
Coleoptera	Hydraenidae	Hydraena (Haenydra) truncata Rey, 1885	*		s	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) angulosa Mulsant, 1844	3		ss	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) assimilis Rey, 1885	*		ss	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) britteni Joy, 1907	*		s	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) melas Dalla Torre, 1877	*		mh	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) minutissima Stephens, 1829	*		s	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) morio Kiesenwetter, 1849	D		?	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) nigrita Germar, 1824	*		mh	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) palustris Erichson, 1837	V		s	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) pulchella Germar, 1824	2		es	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) pygmaea Waterhouse, 1833	*		mh	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) reyi Kuwert, 1888	*		s	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) riparia Kugelann, 1794	*		h	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) rufipes Curtis, 1830	R		es	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) schuleri Ganglbauer, 1901	R		es	*1
Coleoptera	Hydraenidae	Hydraena (Hydraena) subimpressa Rey, 1884	D		ss	*1
Coleoptera	Hydraenidae	Hydraena (Phothydraena) testacea Curtis, 1830	*		mh	*1
Coleoptera	Hydraenidae	Hydrochus angustatus Germar, 1824	G		ss	*1
Coleoptera	Hydraenidae	Hydrochus brevis (Herbst, 1793)	*		s	*1
Coleoptera	Hydraenidae	Hydrochus crenatus (Fabricius, 1792)	*		mh	*1
Coleoptera	Hydraenidae	Hydrochus elongatus (Schaller, 1783)	*		s	*1
Coleoptera	Hydraenidae	Hydrochus ignicollis Motschulsky, 1860	*		s	*1
Coleoptera	Hydraenidae	Hydrochus megaphallus Van Berge Henegouwen, 1988	D		ss	*1
Coleoptera	Hydraenidae	Hydrochus nitidicollis Mulsant, 1844	R		es	*1
Coleoptera	Hydraenidae	Limnebius aluta Bedel, 1881	V		s	*1
Coleoptera	Hydraenidae	Limnebius atomus (Duftschmid, 1805)	*		s	*1

Order	Family	Species	K	L	P	S
Coleoptera	Hydraenidae	Limnebius crinifer Rey, 1885	*		mh	*1
Coleoptera	Hydraenidae	Limnebius nitidus (Marsham, 1802)	3		ss	*1
Coleoptera	Hydraenidae	Limnebius papposus Mulsant, 1844	V		s	*1
Coleoptera	Hydraenidae	Limnebius parvulus (Herbst, 1797)	V		s	*1
Coleoptera	Hydraenidae	Limnebius truncatellus (Thunberg, 1794)	*		h	*1
Coleoptera	Hydraenidae	Ochthebius (Asiobates) auriculatus Rey, 1885	2		es	*1
Coleoptera	Hydraenidae	Ochthebius (Asiobates) bicolon Germar, 1824	*		mh	*1
Coleoptera	Hydraenidae	Ochthebius (Asiobates) dilatatus Stephens, 1829	2		ss	*1
Coleoptera	Hydraenidae	Ochthebius (Asiobates) flavipes Dalla Torre, 1877	3		s	*1
Coleoptera	Hydraenidae	Ochthebius (Asiobates) minimus (Fabricius, 1792)	*		h	*1
Coleoptera	Hydraenidae	Ochthebius (Asiobates) perkinsi Pankow, 1986	0	1950	ex	*1
Coleoptera	Hydraenidae	Ochthebius (Aulacochthebius) narentinus (Reitter, 1885)	1		es	*1
Coleoptera	Hydraenidae	Ochthebius (Enicocerus) colveranus Ferro, 1979	R		es	*1
Coleoptera	Hydraenidae	Ochthebius (Enicocerus) exsculptus Germar, 1824	*		ss	*1
Coleoptera	Hydraenidae	Ochthebius (Enicocerus) gibbosus Germar, 1824	1		ss	*1
Coleoptera	Hydraenidae	Ochthebius (Enicocerus) granulatus Mulsant, 1844	3		ss	*1
Coleoptera	Hydraenidae	Ochthebius (Enicocerus) melanescens Dalla Torre, 1877	2		ss	*1
Coleoptera	Hydraenidae	Ochthebius (Ochthebius) foveolatus Germar, 1824	0	1940	ex	*1
Coleoptera	Hydraenidae	Ochthebius (Ochthebius) marinus (Paykull, 1798)	*		s	*1
Coleoptera	Hydraenidae	Ochthebius (Ochthebius) metallescens Rosenhauer, 1849	3		ss	*1
Coleoptera	Hydraenidae	Ochthebius (Ochthebius) nanus Stephens, 1829	R		es	*1
Coleoptera	Hydraenidae	Ochthebius (Ochthebius) nobilis Villa, 1835	1		es	*1
Coleoptera	Hydraenidae	Ochthebius (Ochthebius) pedicularius Kuwert, 1887	0	1931	ex	*1
Coleoptera	Hydraenidae	Ochthebius (Ochthebius) pusillus Stephens, 1835	3		ss	*1
Coleoptera	Hydraenidae	Ochthebius (Ochthebius) viridis Peyron, 1858	2		ss	*1
Coleoptera	Hydrophilidae	Anacaena bipustulata (Marsham, 1802)	*		mh	*1
Coleoptera	Hydrophilidae	Anacaena globulus (Paykull, 1798)	*		sh	*1
Coleoptera	Hydrophilidae	Anacaena limbata (Fabricius, 1792)	*		sh	*1
Coleoptera	Hydrophilidae	Anacaena lutescens (Stephens, 1829)	*		sh	*1
Coleoptera	Hydrophilidae	Berosus (Berosus) geminus Reiche & Saulcy, 1856	1		es	*1
Coleoptera	Hydrophilidae	Berosus (Berosus) luridus (Linnaeus, 1761)	*		s	*1
Coleoptera	Hydrophilidae	Berosus (Berosus) signaticollis (Charpentier, 1825)	*		mh	*1
Coleoptera	Hydrophilidae	Berosus (Enoplurus) frontifoveatus Kuwert, 1888	V		s	*1
Coleoptera	Hydrophilidae	Berosus (Enoplurus) fulvus Kuwert, 1888	1		es	*1
Coleoptera	Hydrophilidae	Berosus (Enoplurus) spinosus (Steven, 1808)	R		es	*1
Coleoptera	Hydrophilidae	Cercyon alpinus Vogt, 1969	D		ss	*3
Coleoptera	Hydrophilidae	Cercyon analis (Payk., 1798)	*		h	*3
Coleoptera	Hydrophilidae	Cercyon bifenestratus Küster, 1851	D		s	*3
Coleoptera	Hydrophilidae	Cercyon castaneipennis Vorst, 2009	D		?	*3
Coleoptera	Hydrophilidae	Cercyon convexiusculus Steph., 1829	*		mh	*3
Coleoptera	Hydrophilidae	Cercyon depressus Steph., 1829	D		ss	*3
Coleoptera	Hydrophilidae	Cercyon granarius Er., 1837	*		mh	*3
Coleoptera	Hydrophilidae	Cercyon haemorrhoidalis (F., 1775)	*		h	*3
Coleoptera	Hydrophilidae	Cercyon impressus (Sturm, 1807)	*		h	*3
Coleoptera	Hydrophilidae	Cercyon laminatus Sharp, 1873	nb		nb	*3
Coleoptera	Hydrophilidae	Cercyon lateralis (Marsh., 1802)	*		h	*3
Coleoptera	Hydrophilidae	Cercyon littoralis (Gyll., 1808)	*		s	*3
Coleoptera	Hydrophilidae	Cercyon marinus Thoms., 1853	*		mh	*3
Coleoptera	Hydrophilidae	Cercyon melanocephalus (L., 1758)	*		mh	*3
Coleoptera	Hydrophilidae	Cercyon nigriceps (Marsh., 1802)	*		mh	*3
Coleoptera	Hydrophilidae	Cercyon obsoletus (Gyll., 1808)	D		s	*3
Coleoptera	Hydrophilidae	Cercyon pygmaeus (Ill., 1801)	*		h	*3
Coleoptera	Hydrophilidae	Cercyon quisquilius (L., 1761)	*		h	*3
Coleoptera	Hydrophilidae	Cercyon renneri Hebauer, 1997	D		?	*3
Coleoptera	Hydrophilidae	Cercyon sternalis Sharp, 1918	D		s	*3
Coleoptera	Hydrophilidae	Cercyon terminatus (Marsh., 1802)	*		mh	*3
Coleoptera	Hydrophilidae	Cercyon tristis (Ill., 1801)	*		mh	*3
Coleoptera	Hydrophilidae	Cercyon unipunctatus (L., 1758)	*		h	*3
Coleoptera	Hydrophilidae	Cercyon ustulatus (Preyss., 1790)	*		h	*3
Coleoptera	Hydrophilidae	Chaetarthria seminulum (Herbst, 1797)	*		h	*1
Coleoptera	Hydrophilidae	Chaetarthria similis Wollaston, 1864	D		?	*1
Coleoptera	Hydrophilidae	Chaetarthria simillima Vogt & Cuppen, 2003	D		?	*1
Coleoptera	Hydrophilidae	Coelostoma (Coelostoma) orbiculare (Fabricius, 1775)	*		h	*1
Coleoptera	Hydrophilidae	Crenitis (Crenitis) punctatostriata (Letzner, 1840)	2		es	*1
Coleoptera	Hydrophilidae	Cryptopleurum crenatum (Panz., 1794)	D		s	*3
Coleoptera	Hydrophilidae	Cryptopleurum minutum (F., 1775)	*		h	*3
Coleoptera	Hydrophilidae	Cryptopleurum subtile Sharp, 1884	nb		nb	*3
Coleoptera	Hydrophilidae	Cymbiodyta marginella (Fabricius, 1792)	*		h	*1
Coleoptera	Hydrophilidae	Dactylosternum abdominale (F., 1792)	nb		nb	*3
Coleoptera	Hydrophilidae	Enochrus (Enochrus) melanocephalus (Olivier, 1792)	*		mh	*1
Coleoptera	Hydrophilidae	Enochrus (Lumetus) bicolor (Fabricius, 1792)	*		mh	*1
Coleoptera	Hydrophilidae	Enochrus (Lumetus) fuscipennis (Thomson, 1884)	D		?	*1
Coleoptera	Hydrophilidae	Enochrus (Lumetus) halophilus (Bedel, 1878)	*		ss	*1
Coleoptera	Hydrophilidae	Enochrus (Lumetus) ochropterus (Marsham, 1802)	*		mh	*1
Coleoptera	Hydrophilidae	Enochrus (Lumetus) quadripunctatus (Herbst, 1797)	*		h	*1
Coleoptera	Hydrophilidae	Enochrus (Lumetus) testaceus (Fabricius, 1801)	*		h	*1
Coleoptera	Hydrophilidae	Enochrus (Methydrus) affinis (Thunberg, 1794)	*		mh	*1
Coleoptera	Hydrophilidae	Enochrus (Methydrus) coarctatus (Gredler, 1863)	*		mh	*1
Coleoptera	Hydrophilidae	Enochrus (Methydrus) nigritus (Sharp, 1872)	R		es	*1
Coleoptera	Hydrophilidae	Helochares (Helochares) lividus (Forster, 1771)	*		mh	*1

Order	Family	Species	K	L	P	S
Coleoptera	Hydrophilidae	Helochares (Helochares) obscurus (O.F. Müller, 1776)	*		h	*1
Coleoptera	Hydrophilidae	Helochares (Helochares) punctatus Sharp, 1869	D		s	*1
Coleoptera	Hydrophilidae	Helophorus nubilus F., 1776	*		mh	*3
Coleoptera	Hydrophilidae	Helophorus porculus Bedel, 1881	R		es	*3
Coleoptera	Hydrophilidae	Helophorus rufipes (Bosc., 1791)	R		es	*3
Coleoptera	Hydrophilidae	Helophorus schmidti Villa, 1838	R		es	*3
Coleoptera	Hydrophilidae	Hydrobius fuscipes (Linnaeus, 1758)	*		sh	*1
Coleoptera	Hydrophilidae	Hydrochara caraboides (Linnaeus, 1758)	*		h	*1
Coleoptera	Hydrophilidae	Hydrophilus (Hydrophilus) aterrimus Eschscholtz, 1822	V		s	*1
Coleoptera	Hydrophilidae	Hydrophilus (Hydrophilus) piceus (Linnaeus, 1758)	V		s	*1
Coleoptera	Hydrophilidae	Laccobius (Dimorpholaccobius) albescens Rottenberg, 1874	1		es	*1
Coleoptera	Hydrophilidae	Laccobius (Dimorpholaccobius) atratus Rottenberg, 1874	D		ss	*1
Coleoptera	Hydrophilidae	Laccobius (Dimorpholaccobius) bipunctatus (Fabricius, 1775)	*		h	*1
Coleoptera	Hydrophilidae	Laccobius (Dimorpholaccobius) obscuratus Rottenberg, 1874	3		ss	*1
Coleoptera	Hydrophilidae	Laccobius (Dimorpholaccobius) sinuatus Motschulsky, 1849	*		mh	*1
Coleoptera	Hydrophilidae	Laccobius (Dimorpholaccobius) striatulus (Fabricius, 1801)	*		mh	*1
Coleoptera	Hydrophilidae	Laccobius (Dimorpholaccobius) ytenensis Sharp, 1910	2		es	*1
Coleoptera	Hydrophilidae	Laccobius (Laccobius) albipes Kuwert, 1890	0	1936	ex	*1
Coleoptera	Hydrophilidae	Laccobius (Laccobius) colon (Stephens, 1829)	3		s	*1
Coleoptera	Hydrophilidae	Laccobius (Laccobius) minutus (Linnaeus, 1758)	*		sh	*1
Coleoptera	Hydrophilidae	Laccobius (Microlaccobius) alternus Motschulsky, 1855	1		ss	*1
Coleoptera	Hydrophilidae	Laccobius (Microlaccobius) gracilis Motschulsky, 1855	2		ss	*1
Coleoptera	Hydrophilidae	Limnoxenus niger (Zschach, 1788)	*		mh	*1
Coleoptera	Hydrophilidae	Megasternum concinnum (Marsh., 1802)	*		sh	*3
Coleoptera	Hydrophilidae	Paracymus aeneus (Germar, 1824)	R		es	*1
Coleoptera	Hydrophilidae	Sphaeridium bipustulatum F., 1781	*		h	*3
Coleoptera	Hydrophilidae	Sphaeridium lunatum F., 1792	*		h	*3
Coleoptera	Hydrophilidae	Sphaeridium marginatum F., 1787	D		s	*3
Coleoptera	Hydrophilidae	Sphaeridium scarabaeoides (L., 1758)	*		sh	*3
Coleoptera	Hygrobiidae	Hygrobia hermanni (Fabricius, 1775)	3		s	*1
Coleoptera	Kateretidae	Brachypterolus antirrhini Murr., 1864	*		mh	*3
Coleoptera	Kateretidae	Brachypterolus linariae (Steph., 1830)	*		h	*3
Coleoptera	Kateretidae	Brachypterolus pulicarius (L., 1758)	*		h	*3
Coleoptera	Kateretidae	Brachypterolus vestitus Kiesw., 1850	*		s	*3
Coleoptera	Kateretidae	Brachypterus fulvipes Er., 1843	D		s	*3
Coleoptera	Kateretidae	Brachypterus glaber (Steph., 1832)	*		h	*3
Coleoptera	Kateretidae	Brachypterus urticae (F., 1792)	*		sh	*3
Coleoptera	Kateretidae	Heterhelus scutellaris (Heer, 1841)	*		mh	*3
Coleoptera	Kateretidae	Heterhelus solani (Heer, 1841)	D		s	*3
Coleoptera	Kateretidae	Kateretes pedicularius (L., 1758)	*		h	*3
Coleoptera	Kateretidae	Kateretes pusillus (Thunb., 1794)	G		s	*3
Coleoptera	Kateretidae	Kateretes rufilabris (Latr., 1807)	V		mh	*3
Coleoptera	Laemophloeidae	Cryptolestes abietis (Wank., 1865)	R		es	*3
Coleoptera	Laemophloeidae	Cryptolestes corticinus (Er., 1846)	*		s	*3
Coleoptera	Laemophloeidae	Cryptolestes duplicatus (Waltl, 1839)	*		mh	*3
Coleoptera	Laemophloeidae	Cryptolestes ferrugineus (Steph., 1831)	*		mh	*3
Coleoptera	Laemophloeidae	Cryptolestes pusilloides (Steel & Howe, 1952)	nb		nb	*3
Coleoptera	Laemophloeidae	Cryptolestes pusillus (Schönh., 1817)	nb		nb	*3
Coleoptera	Laemophloeidae	Cryptolestes spartii (Curt., 1834)	*		s	*3
Coleoptera	Laemophloeidae	Cryptolestes weisei (Rtt., 1879)	*		ss	*3
Coleoptera	Laemophloeidae	Laemophloeus kraussi Ganglb., 1897	3		ss	*3
Coleoptera	Laemophloeidae	Laemophloeus monilis (F., 1787)	V		s	*3
Coleoptera	Laemophloeidae	Laemophloeus muticus (F., 1781)	G		ss	*3
Coleoptera	Laemophloeidae	Lathropus sepicola (Müll., 1821)	*		s	*3
Coleoptera	Laemophloeidae	Leptophloeus alternans (Er., 1846)	*		mh	*3
Coleoptera	Laemophloeidae	Leptophloeus clematidis (Er., 1846)	*		mh	*3
Coleoptera	Laemophloeidae	Leptophloeus juniperi (Grouv., 1874)	3		ss	*3
Coleoptera	Laemophloeidae	Notolaemus castaneus (Er., 1845)	G		ss	*3
Coleoptera	Laemophloeidae	Notolaemus unifasciatus (Payk., 1801)	*		s	*3
Coleoptera	Laemophloeidae	Placonotus testaceus (F., 1787)	*		s	*3
Coleoptera	Lagriidae	Agnathus decoratus Germ., 1825	1		es	*3
Coleoptera	Lagriidae	Lagria atripes Muls. & Guillb., 1855	*		mh	*3
Coleoptera	Lagriidae	Lagria hirta (L., 1758)	*		sh	*3
Coleoptera	Lampyridae	Lamprohiza splendidula (L., 1767)	*		mh	*3
Coleoptera	Lampyridae	Lampyris noctiluca (L., 1758)	*		h	*3
Coleoptera	Lampyridae	Phosphaenus hemipterus (Goeze, 1777)	*		mh	*3
Coleoptera	Languriidae	Cryptophilus integer (Heer, 1838)	nb		nb	*3
Coleoptera	Languriidae	Cryptophilus obliteratus Rtt., 1874	nb		nb	*3
Coleoptera	Latridiidae	Adistemia watsoni (Woll., 1871)	nb		nb	*3
Coleoptera	Latridiidae	Cartodere bifasciata (Rtt., 1877)	nb		nb	*3
Coleoptera	Latridiidae	Cartodere constricta (Gyll., 1827)	*		h	*3
Coleoptera	Latridiidae	Cartodere nodifer (Westw., 1839)	nb		nb	*3
Coleoptera	Latridiidae	Cartodere norvegica (Strand, 1940)	nb		nb	*3
Coleoptera	Latridiidae	Corticaria abietorum Motsch., 1867	*		h	*3
Coleoptera	Latridiidae	Corticaria alleni Johns., 1974	D		ss	*3
Coleoptera	Latridiidae	Corticaria bella Redt., 1849	D		ss	*3
Coleoptera	Latridiidae	Corticaria crenulata (Gyll., 1827)	G		s	*3
Coleoptera	Latridiidae	Corticaria dubia Dajoz, 1970	D		ss	*3
Coleoptera	Latridiidae	Corticaria elongata (Gyll., 1827)	*		sh	*3
Coleoptera	Latridiidae	Corticaria fagi Woll., 1854	D		ss	*3

Order	Family	Species	K	L	P	S
Coleoptera	Latridiidae	Corticaria ferruginea Marsh., 1802	D		s	*3
Coleoptera	Latridiidae	Corticaria foveola (Beck, 1817)	D		s	*3
Coleoptera	Latridiidae	Corticaria fulva (Com., 1837)	*		mh	*3
Coleoptera	Latridiidae	Corticaria impressa (Ol., 1790)	*		sh	*3
Coleoptera	Latridiidae	Corticaria inconspicua Woll., 1860	*		mh	*3
Coleoptera	Latridiidae	Corticaria interstitialis Mannh., 1844	R		es	*3
Coleoptera	Latridiidae	Corticaria lapponica (Zett., 1838)	R		es	*3
Coleoptera	Latridiidae	Corticaria lateritia Mannh., 1844	R		es	*3
Coleoptera	Latridiidae	Corticaria linearis (Payk., 1798)	D		s	*3
Coleoptera	Latridiidae	Corticaria longicollis (Zett., 1838)	*		h	*3
Coleoptera	Latridiidae	Corticaria longicornis (Hbst., 1793)	R		es	*3
Coleoptera	Latridiidae	Corticaria obscura Bris., 1863	3		s	*3
Coleoptera	Latridiidae	Corticaria obsoleta Strand, 1940	R		es	*3
Coleoptera	Latridiidae	Corticaria pineti Lohse, 1960	D		s	*3
Coleoptera	Latridiidae	Corticaria polypori Sahlb., 1900	*		mh	*3
Coleoptera	Latridiidae	Corticaria pubescens (Gyll., 1827)	*		h	*3
Coleoptera	Latridiidae	Corticaria punctulata Marsh., 1802	D		s	*3
Coleoptera	Latridiidae	Corticaria saginata Mannh., 1844	3		s	*3
Coleoptera	Latridiidae	Corticaria serrata (Payk., 1798)	*		sh	*3
Coleoptera	Latridiidae	Corticaria umbilicata (Beck, 1817)	*		h	*3
Coleoptera	Latridiidae	Corticarina alemannica Schiller, 1984	D		?	*3
Coleoptera	Latridiidae	Corticarina fuscula (Gyll., 1827)	*		sh	*3
Coleoptera	Latridiidae	Corticarina lambiana (Shp., 1910)	*		s	*3
Coleoptera	Latridiidae	Corticarina latipennis (Sahlb., 1871)	D		ss	*3
Coleoptera	Latridiidae	Corticarina obfuscata Strand, 1937	D		?	*3
Coleoptera	Latridiidae	Corticarina similata (Gyll., 1827)	*		h	*3
Coleoptera	Latridiidae	Corticarina truncatella (Mannh., 1844)	*		mh	*3
Coleoptera	Latridiidae	Cortinicara gibbosa (Hbst., 1793)	*		sh	*3
Coleoptera	Latridiidae	Dienerella argus (Rtt., 1884)	D		ss	*3
Coleoptera	Latridiidae	Dienerella clathrata (Mannh., 1844)	*		h	*3
Coleoptera	Latridiidae	Dienerella costulata (Rtt., 1877)	R		es	*3
Coleoptera	Latridiidae	Dienerella elongata (Curt., 1830)	*		sh	*3
Coleoptera	Latridiidae	Dienerella filiformis (Gyll., 1827)	*		s	*3
Coleoptera	Latridiidae	Dienerella filum (Aubé, 1850)	*		mh	*3
Coleoptera	Latridiidae	Dienerella ruficollis (Marsh., 1802)	*		mh	*3
Coleoptera	Latridiidae	Dienerella schueppeli (Rtt., 1875)	D		?	*3
Coleoptera	Latridiidae	Enicmus amici Lohse, 1981	*		s	*3
Coleoptera	Latridiidae	Enicmus atriceps Hansen, 1962	*		s	*3
Coleoptera	Latridiidae	Enicmus brevicornis (Mannh., 1844)	*		mh	*3
Coleoptera	Latridiidae	Enicmus frater Weise, 1972	D		?	*3
Coleoptera	Latridiidae	Enicmus fungicola Thoms., 1868	*		mh	*3
Coleoptera	Latridiidae	Enicmus histrio Joy & Tomlin, 1910	*		sh	*3
Coleoptera	Latridiidae	Enicmus planipennis Strand, 1940	D		?	*3
Coleoptera	Latridiidae	Enicmus rugosus (Hbst., 1793)	*		sh	*3
Coleoptera	Latridiidae	Enicmus testaceus (Steph., 1830)	*		s	*3
Coleoptera	Latridiidae	Enicmus transversus (Ol., 1790)	*		sh	*3
Coleoptera	Latridiidae	Latridius anthracinus (Mannh., 1844)	*		sh	*3
Coleoptera	Latridiidae	Latridius brevicollis (Thoms., 1868)	D		ss	*3
Coleoptera	Latridiidae	Latridius consimilis (Mannh., 1844)	D		s	*3
Coleoptera	Latridiidae	Latridius hirtus (Gyll., 1827)	*		h	*3
Coleoptera	Latridiidae	Latridius minutus (L., 1767)	*		sh	*3
Coleoptera	Latridiidae	Latridius nidicola (Palm, 1944)	D		s	*3
Coleoptera	Latridiidae	Latridius pseudominutus (Strand, 1958)	*		h	*3
Coleoptera	Latridiidae	Melanophthalma curticollis (Mannh., 1844)	*		h	*3
Coleoptera	Latridiidae	Melanophthalma distinguenda (Com., 1837)	*		h	*3
Coleoptera	Latridiidae	Melanophthalma maura Motsch., 1866	*		h	*3
Coleoptera	Latridiidae	Melanophthalma phragmiteticola Franz, 1976	G		ss	*3
Coleoptera	Latridiidae	Melanophthalma sericea (Mannh., 1844)	D		?	*3
Coleoptera	Latridiidae	Melanophthalma suturalis (Mannh., 1844)	*		h	*3
Coleoptera	Latridiidae	Melanophthalma taurica (Mannh., 1844)	D		ss	*3
Coleoptera	Latridiidae	Metophthalmus serripennis (Broun, 1914)	nb		nb	*3
Coleoptera	Latridiidae	Migneauxia lederi Rtt., 1875	nb		nb	*3
Coleoptera	Latridiidae	Stephostethus alternans (Mannh., 1844)	*		mh	*3
Coleoptera	Latridiidae	Stephostethus angusticollis (Gyll., 1827)	*		sh	*3
Coleoptera	Latridiidae	Stephostethus lardarius (De Geer, 1775)	*		sh	*3
Coleoptera	Latridiidae	Stephostethus pandellei (Bris., 1863)	*		s	*3
Coleoptera	Latridiidae	Stephostethus rugicollis (Ol., 1790)	*		mh	*3
Coleoptera	Latridiidae	Stephostethus rybinskii (Rtt., 1894)	G		ss	*3
Coleoptera	Latridiidae	Stephostethus sinuatocollis (Fald., 1837)	D		ss	*3
Coleoptera	Latridiidae	Thes bergrothi (Rtt., 1880)	3		s	*3
Coleoptera	Leiodidae	Agaricophagus cephalotes Schm., 1841	G		ss	*3
Coleoptera	Leiodidae	Agathidium atrum (Payk., 1798)	*		h	*3
Coleoptera	Leiodidae	Agathidium badium Er., 1845	*		h	*3
Coleoptera	Leiodidae	Agathidium bescidicum Rtt., 1884	D		ss	*3
Coleoptera	Leiodidae	Agathidium bohemicum Rtt., 1884	*		s	*3
Coleoptera	Leiodidae	Agathidium confusum Bris., 1863	*		mh	*3
Coleoptera	Leiodidae	Agathidium convexum Shp., 1866	G		s	*3
Coleoptera	Leiodidae	Agathidium dentatum Muls. & Rey, 1861	V		s	*3
Coleoptera	Leiodidae	Agathidium discoideum Er., 1845	R		es	*3
Coleoptera	Leiodidae	Agathidium haemorrhoum Er., 1845	G		ss	*3

Order	Family	Species	K	L	P	S
Coleoptera	Leiodidae	Agathidium laevigatum Er., 1845	*		h	*3
Coleoptera	Leiodidae	Agathidium mandibulare Sturm, 1807	*		mh	*3
Coleoptera	Leiodidae	Agathidium marginatum Sturm, 1807	*		h	*3
Coleoptera	Leiodidae	Agathidium nigrinum Sturm, 1807	*		s	*3
Coleoptera	Leiodidae	Agathidium nigripenne (F., 1792)	*		h	*3
Coleoptera	Leiodidae	Agathidium nudum Hampe, 1870	D		?	*3
Coleoptera	Leiodidae	Agathidium pisanum Bris., 1872	D		?	*3
Coleoptera	Leiodidae	Agathidium plagiatum (Gyll., 1810)	2		ss	*3
Coleoptera	Leiodidae	Agathidium rotundatum (Gyll., 1827)	*		h	*3
Coleoptera	Leiodidae	Agathidium seminulum (L., 1758)	*		sh	*3
Coleoptera	Leiodidae	Agathidium varians (Beck, 1817)	*		sh	*3
Coleoptera	Leiodidae	Amphicyllis globiformis (Sahlb., 1833)	*		s	*3
Coleoptera	Leiodidae	Amphicyllis globus (F., 1792)	*		h	*3
Coleoptera	Leiodidae	Anisotoma axillaris Gyll., 1810	G		s	*3
Coleoptera	Leiodidae	Anisotoma castanea (Hbst., 1792)	*		h	*3
Coleoptera	Leiodidae	Anisotoma glabra (Kug., 1794)	*		mh	*3
Coleoptera	Leiodidae	Anisotoma humeralis (F., 1792)	*		h	*3
Coleoptera	Leiodidae	Anisotoma orbicularis (Hbst., 1792)	*		h	*3
Coleoptera	Leiodidae	Apocatops nigrita (Er., 1837)	*		h	*3
Coleoptera	Leiodidae	Colenis immunda (Sturm, 1807)	*		sh	*3
Coleoptera	Leiodidae	Cyrtoplastus seriepunctatus (Bris., 1867)	*		s	*3
Coleoptera	Leiodidae	Cyrtusa subtestacea (Gyll., 1813)	G		ss	*3
Coleoptera	Leiodidae	Hydnobius claviger Strand, 1944	D		?	*3
Coleoptera	Leiodidae	Hydnobius latifrons (Curt., 1840)	D		?	*3
Coleoptera	Leiodidae	Hydnobius multistriatus (Gyll., 1813)	*		s	*3
Coleoptera	Leiodidae	Hydnobius punctatus (Sturm, 1807)	*		mh	*3
Coleoptera	Leiodidae	Hydnobius spinipes (Gyll., 1813)	D		?	*3
Coleoptera	Leiodidae	Leiodes badia (Schm., 1841)	*		h	*3
Coleoptera	Leiodidae	Leiodes bicolor (Schm., 1841)	*		s	*3
Coleoptera	Leiodidae	Leiodes brandisi Holdh., 1902	0	1950	ex	*3
Coleoptera	Leiodidae	Leiodes brunnea (Sturm, 1807)	3		s	*3
Coleoptera	Leiodidae	Leiodes calcarata (Marsh., 1802)	*		mh	*3
Coleoptera	Leiodidae	Leiodes carpathica Ganglb., 1896	1		es	*3
Coleoptera	Leiodidae	Leiodes ciliaris (Schm., 1841)	3		s	*3
Coleoptera	Leiodidae	Leiodes cinnamomea (Panz., 1793)	D		?	*3
Coleoptera	Leiodidae	Leiodes distinguenda (Fairm., 1856)	R		es	*3
Coleoptera	Leiodidae	Leiodes dubia (Kug., 1794)	D		?	*3
Coleoptera	Leiodidae	Leiodes ferruginea (F., 1787)	*		mh	*3
Coleoptera	Leiodidae	Leiodes flavescens (Schm., 1841)	*		s	*3
Coleoptera	Leiodidae	Leiodes flavicornis (Bris., 1883)	D		?	*3
Coleoptera	Leiodidae	Leiodes fracta (Er., 1845)	0	1950	ex	*3
Coleoptera	Leiodidae	Leiodes furva (Er., 1845)	1		es	*3
Coleoptera	Leiodidae	Leiodes gallica Rtt., 1884	2		ss	*3
Coleoptera	Leiodidae	Leiodes gyllenhalii Steph., 1829	*		mh	*3
Coleoptera	Leiodidae	Leiodes hybrida (Er., 1845)	D		ss	*3
Coleoptera	Leiodidae	Leiodes litura Steph., 1832	*		s	*3
Coleoptera	Leiodidae	Leiodes longipes (Schm., 1841)	G		ss	*3
Coleoptera	Leiodidae	Leiodes lucens (Fairm., 1855)	*		s	*3
Coleoptera	Leiodidae	Leiodes lunicollis Rye, 1872	2		ss	*3
Coleoptera	Leiodidae	Leiodes macropus (Rye, 1873)	1		ss	*3
Coleoptera	Leiodidae	Leiodes nigrita Rtt., 1884	*		s	*3
Coleoptera	Leiodidae	Leiodes nitidula (Er., 1845)	R		es	*3
Coleoptera	Leiodidae	Leiodes obesa (Schm., 1841)	*		mh	*3
Coleoptera	Leiodidae	Leiodes oblonga (Er., 1845)	*		mh	*3
Coleoptera	Leiodidae	Leiodes pallens (Sturm, 1807)	3		s	*3
Coleoptera	Leiodidae	Leiodes picea (Panz., 1797)	3		s	*3
Coleoptera	Leiodidae	Leiodes rotundata (Er., 1845)	2		ss	*3
Coleoptera	Leiodidae	Leiodes rubiginosa (Schm., 1841)	3		s	*3
Coleoptera	Leiodidae	Leiodes ruficollis J. Sahlb., 1898	*		mh	*3
Coleoptera	Leiodidae	Leiodes rufipennis (Payk., 1798)	*		mh	*3
Coleoptera	Leiodidae	Leiodes rugosa Steph., 1829	*		mh	*3
Coleoptera	Leiodidae	Leiodes silesiaca (Kr., 1852)	*		s	*3
Coleoptera	Leiodidae	Leiodes skalitzkyi Ganglb., 1899	R		es	*3
Coleoptera	Leiodidae	Leiodes strigipennis Daffner, 1983	*		s	*3
Coleoptera	Leiodidae	Leiodes subconvexa Daffner, 1983	0	1943	ex	*3
Coleoptera	Leiodidae	Leiodes triepkei (Schm., 1841)	*		s	*3
Coleoptera	Leiodidae	Liocyrtusa minuta (Ahr., 1812)	*		mh	*3
Coleoptera	Leiodidae	Liocyrtusa vittata (Curt., 1840)	*		s	*3
Coleoptera	Leiodidae	Liodopria serricornis (Gyll., 1813)	*		mh	*3
Coleoptera	Leiodidae	Sogda suturalis (Zett., 1828)	1		es	*3
Coleoptera	Leiodidae	Triarthron maerkelii Schmidt, 1840	*		s	*3
Coleoptera	Leiodidae	Zeadolopus latipes Er., 1845	D		?	*3
Coleoptera	Leptinidae	Leptinus testaceus Müll., 1817	*		h	*3
Coleoptera	Leptinidae	Platypsyllus castoris Rits., 1869	*		ss	*3
Coleoptera	Limnichidae	Limnichus pygmaeus (Sturm, 1807)	3		s	*3
Coleoptera	Limnichidae	Limnichus sericeus (Duft., 1825)	3		s	*3
Coleoptera	Limnichidae	Pelochares versicolor (Waltl, 1838)	2		ss	*3
Coleoptera	Lissomidae	Drapetes cinctus (Panz., 1796)	3		s	*3
Coleoptera	Lophocateridae	Grynocharis oblonga (L., 1758)	3		s	*3
Coleoptera	Lucanidae	Aesalus scarabaeoides (Panzer, 1793)	1		es	*3

Order	Family	Species	K	L	P	S
Coleoptera	Lucanidae	Ceruchus chrysomelinus (Hochenwarth, 1785)	1		ss	*3
Coleoptera	Lucanidae	Dorcus parallelipipedus (Linnaeus, 1758)	*		h	*3
Coleoptera	Lucanidae	Lucanus cervus (Linnaeus, 1758)	2		s	*3
Coleoptera	Lucanidae	Platycerus caprea (De Geer, 1774)	*		s	*3
Coleoptera	Lucanidae	Platycerus caraboides (Linnaeus, 1758)	*		h	*3
Coleoptera	Lucanidae	Sinodendron cylindricum (Linnaeus, 1758)	*		mh	*3
Coleoptera	Lycidae	Benibotarus taygetanus (Pic, 1905)	R		es	*3
Coleoptera	Lycidae	Dictyopterus aurora (Hbst., 1784)	*		s	*3
Coleoptera	Lycidae	Lopherus rubens (Gyll., 1817)	3		ss	*3
Coleoptera	Lycidae	Lygistopterus sanguineus (L., 1758)	V		mh	*3
Coleoptera	Lycidae	Platycis cosnardi (Chevr., 1829)	3		ss	*3
Coleoptera	Lycidae	Platycis minutus (F., 1787)	*		mh	*3
Coleoptera	Lycidae	Pyropterus nigroruber (De Geer, 1774)	*		mh	*3
Coleoptera	Lyctidae	Lyctus brunneus (Steph., 1830)	nb		nb	*3
Coleoptera	Lyctidae	Lyctus cavicollis Lec., 1866	nb		nb	*3
Coleoptera	Lyctidae	Lyctus linearis (Goeze, 1777)	*		mh	*3
Coleoptera	Lyctidae	Lyctus planicollis Lec., 1858	nb		nb	*3
Coleoptera	Lyctidae	Lyctus pubescens Panz., 1793	G		ss	*3
Coleoptera	Lyctidae	Trogoxylon impressum (Com., 1837)	*		s	*3
Coleoptera	Lymexylonidae	Hylecoetus dermestoides (L., 1761)	*		mh	*3
Coleoptera	Lymexylonidae	Lymexylon navale (L., 1758)	3		s	*3
Coleoptera	Malachiidae	Anthocomus bipunctatus (Harrer, 1784)	*		mh	*3
Coleoptera	Malachiidae	Anthocomus coccineus (Schall., 1783)	*		mh	*3
Coleoptera	Malachiidae	Anthocomus fasciatus (L., 1758)	*		mh	*3
Coleoptera	Malachiidae	Attalus alpinus (Giraud, 1851)	*		ss	*3
Coleoptera	Malachiidae	Attalus analis (Panz., 1796)	*		s	*3
Coleoptera	Malachiidae	Axinotarsus marginalis (Cast., 1840)	*		h	*3
Coleoptera	Malachiidae	Axinotarsus pulicarius (F., 1775)	*		h	*3
Coleoptera	Malachiidae	Axinotarsus ruficollis (Ol., 1790)	*		mh	*3
Coleoptera	Malachiidae	Cerapheles terminatus (Menetr., 1832)	V		s	*3
Coleoptera	Malachiidae	Charopus concolor (F., 1801)	V		s	*3
Coleoptera	Malachiidae	Charopus flavipes (Payk., 1798)	*		sh	*3
Coleoptera	Malachiidae	Charopus pallipes (Ol., 1790)	*		s	*3
Coleoptera	Malachiidae	Clanoptilus elegans (Ol., 1790)	*		mh	*3
Coleoptera	Malachiidae	Clanoptilus emarginatus (Krauss, 1902)	0	1950	ex	*3
Coleoptera	Malachiidae	Clanoptilus geniculatus (Germ., 1824)	D		ss	*3
Coleoptera	Malachiidae	Clanoptilus marginellus (Ol., 1790)	G		s	*3
Coleoptera	Malachiidae	Clanoptilus spinipennis (Germ., 1824)	R		es	*3
Coleoptera	Malachiidae	Clanoptilus strangulatus (Ab., 1885)	R		es	*3
Coleoptera	Malachiidae	Cordylepherus viridis (F., 1787)	*		sh	*3
Coleoptera	Malachiidae	Ebaeus appendiculatus Er., 1840	R		es	*3
Coleoptera	Malachiidae	Ebaeus ater Kiesw., 1863	R		es	*3
Coleoptera	Malachiidae	Ebaeus flavicornis Er., 1840	*		s	*3
Coleoptera	Malachiidae	Ebaeus pedicularius (F., 1777)	G		s	*3
Coleoptera	Malachiidae	Ebaeus thoracicus (Fourcr., 1785)	G		s	*3
Coleoptera	Malachiidae	Hypebaeus flavipes (F., 1787)	3		s	*3
Coleoptera	Malachiidae	Malachius aeneus (L., 1758)	1		s	*3
Coleoptera	Malachiidae	Malachius bipustulatus (L., 1758)	*		sh	*3
Coleoptera	Malachiidae	Malachius rubidus Er., 1840	3		s	*3
Coleoptera	Malachiidae	Malachius scutellaris Er., 1840	G		ss	*3
Coleoptera	Malachiidae	Nepachys cardiacae (L., 1761)	R		es	*3
Coleoptera	Malachiidae	Paratinus femoralis (Er., 1840)	2		es	*3
Coleoptera	Malachiidae	Sphinginus lobatus (Ol., 1790)	*		ss	*3
Coleoptera	Malachiidae	Troglops albicans (L., 1767)	V		s	*3
Coleoptera	Malachiidae	Troglops cephalotes (Ol., 1790)	1		es	*3
Coleoptera	Melandryidae	Abdera affinis (Payk., 1799)	3		s	*3
Coleoptera	Melandryidae	Abdera biflexuosa (Curt., 1827)	R		es	*3
Coleoptera	Melandryidae	Abdera flexuosa (Payk., 1799)	*		s	*3
Coleoptera	Melandryidae	Abdera quadrifasciata (Curt., 1829)	3		ss	*3
Coleoptera	Melandryidae	Abdera triguttata (Gyll., 1810)	*		h	*3
Coleoptera	Melandryidae	Anisoxya fuscula (Ill., 1798)	*		mh	*3
Coleoptera	Melandryidae	Conopalpus brevicollis Kr., 1855	*		ss	*3
Coleoptera	Melandryidae	Conopalpus testaceus (Ol., 1790)	*		h	*3
Coleoptera	Melandryidae	Dircaea australis Fairm., 1856	1		es	*3
Coleoptera	Melandryidae	Eustrophus dermestoides (F., 1792)	2		s	*3
Coleoptera	Melandryidae	Hallomenus axillaris (Ill., 1807)	3		ss	*3
Coleoptera	Melandryidae	Hallomenus binotatus (Quensel, 1790)	*		mh	*3
Coleoptera	Melandryidae	Hypulus bifasciatus (F., 1792)	1		es	*3
Coleoptera	Melandryidae	Hypulus quercinus (Quensel, 1790)	3		s	*3
Coleoptera	Melandryidae	Melandrya barbata (F., 1792)	2		ss	*3
Coleoptera	Melandryidae	Melandrya caraboides (L., 1761)	V		s	*3
Coleoptera	Melandryidae	Melandrya dubia (Schall., 1783)	2		ss	*3
Coleoptera	Melandryidae	Mycetoma suturale (Panz., 1797)	2		ss	*3
Coleoptera	Melandryidae	Orchesia fasciata (Ill., 1798)	3		s	*3
Coleoptera	Melandryidae	Orchesia grandicollis Rosh., 1847	R		es	*3
Coleoptera	Melandryidae	Orchesia luteipalpis Muls., 1857	3		s	*3
Coleoptera	Melandryidae	Orchesia micans (Panz., 1794)	V		mh	*3
Coleoptera	Melandryidae	Orchesia minor Walk., 1837	*		h	*3
Coleoptera	Melandryidae	Orchesia undulata Kr., 1853	*		h	*3
Coleoptera	Melandryidae	Osphya bipunctata (F., 1775)	3		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Melandryidae	Phloiotrya rufipes (Gyll., 1810)	V		s	*3
Coleoptera	Melandryidae	Phloiotrya vaudoueri Muls., 1856	3		ss	*3
Coleoptera	Melandryidae	Phryganophilus ruficollis (F., 1798)	R		es	*3
Coleoptera	Melandryidae	Serropalpus barbatus (Schall., 1783)	*		s	*3
Coleoptera	Melandryidae	Xylita laevigata (Hell., 1786)	3		s	*3
Coleoptera	Melandryidae	Xylita livida (Sahlb., 1834)	2		es	*3
Coleoptera	Melandryidae	Zilora sericea (Sturm, 1807)	*		s	*3
Coleoptera	Meloidae	Apalus bimaculatus (L., 1761)	0	1880	ex	*3
Coleoptera	Meloidae	Cerocoma schaefferi (L., 1758)	1		es	*3
Coleoptera	Meloidae	Lytta vesicatoria (L., 1758)	2		ss	*3
Coleoptera	Meloidae	Meloe autumnalis Ol., 1792	1		es	*3
Coleoptera	Meloidae	Meloe brevicollis Panz., 1793	2		es	*3
Coleoptera	Meloidae	Meloe cicatricosus Leach, 1811	2		es	*3
Coleoptera	Meloidae	Meloe coriarius Br. & Er., 1832	1		es	*3
Coleoptera	Meloidae	Meloe decorus Br. & Er., 1832	2		es	*3
Coleoptera	Meloidae	Meloe hungarus Schrk., 1776	0	1910	ex	*3
Coleoptera	Meloidae	Meloe proscarabaeus L., 1758	3		s	*3
Coleoptera	Meloidae	Meloe rugosus Marsh., 1802	2		ss	*3
Coleoptera	Meloidae	Meloe scabriusculus Br. & Er., 1832	2		ss	*3
Coleoptera	Meloidae	Meloe variegatus Don., 1793	1		es	*3
Coleoptera	Meloidae	Meloe violaceus Marsh., 1802	3		s	*3
Coleoptera	Meloidae	Mylabris crocata (Pall., 1782)	0	1949	ex	*3
Coleoptera	Meloidae	Mylabris polymorpha (Pall., 1771)	0	1916	ex	*3
Coleoptera	Meloidae	Sitaris muralis (Forst., 1771)	G		s	*3
Coleoptera	Meloidae	Stenoria analis (Schaum, 1859)	1		es	*3
Coleoptera	Melyridae	Aplocnemus alpestris Kiesw., 1861	R		es	*3
Coleoptera	Melyridae	Aplocnemus chalconatus (Germ., 1817)	0	1950	ex	*3
Coleoptera	Melyridae	Aplocnemus impressus (Marsh., 1802)	*		h	*3
Coleoptera	Melyridae	Aplocnemus nigricornis (F., 1792)	*		h	*3
Coleoptera	Melyridae	Aplocnemus tarsalis (Sahlb., 1822)	*		ss	*3
Coleoptera	Melyridae	Aplocnemus virens (Suffr., 1843)	*		s	*3
Coleoptera	Melyridae	Danacea nigritarsis (Küst., 1850)	*		mh	*3
Coleoptera	Melyridae	Danacea pallipes (Panz., 1793)	*		mh	*3
Coleoptera	Melyridae	Dasytes aeratus Steph., 1830	*		mh	*3
Coleoptera	Melyridae	Dasytes alpigradus Kiesw., 1863	R		es	*3
Coleoptera	Melyridae	Dasytes cyaneus (F., 1775)	*		h	*3
Coleoptera	Melyridae	Dasytes fusculus (Ill., 1801)	D		s	*3
Coleoptera	Melyridae	Dasytes niger (L., 1761)	*		h	*3
Coleoptera	Melyridae	Dasytes nigrocyaneus Muls. & Rey, 1868	D		ss	*3
Coleoptera	Melyridae	Dasytes obscurus Gyll., 1813	*		s	*3
Coleoptera	Melyridae	Dasytes plumbeus (Müll., 1776)	*		sh	*3
Coleoptera	Melyridae	Dasytes subaeneus Schönh., 1817	*		s	*3
Coleoptera	Melyridae	Dasytes subalpinus Baudi, 1873	*		ss	*3
Coleoptera	Melyridae	Dasytes virens (Marsh., 1802)	*		s	*3
Coleoptera	Melyridae	Divales bipustulatus (F., 1781)	R		es	*3
Coleoptera	Melyridae	Dolichosoma lineare (Rossi, 1794)	*		mh	*3
Coleoptera	Melyridae	Psilothrix viridicoeruleus (Fourcr., 1785)	V		ss	*3
Coleoptera	Melyridae	Trichoceble floralis (Ol., 1790)	*		s	*3
Coleoptera	Melyridae	Trichoceble memnonia (Kiesw., 1861)	*		s	*3
Coleoptera	Monotomidae	Cyanostolus aeneus (Richt., 1820)	*		s	*3
Coleoptera	Monotomidae	Monotoma angusticollis (Gyll., 1827)	*		mh	*3
Coleoptera	Monotomidae	Monotoma bicolor Villa, 1835	*		h	*3
Coleoptera	Monotomidae	Monotoma brevicollis Aubé, 1837	*		h	*3
Coleoptera	Monotomidae	Monotoma conicicollis Aubé, 1837	*		s	*3
Coleoptera	Monotomidae	Monotoma longicollis (Gyll., 1827)	*		sh	*3
Coleoptera	Monotomidae	Monotoma picipes Hbst., 1793	*		h	*3
Coleoptera	Monotomidae	Monotoma quadricollis Aubé, 1837	D		?	*3
Coleoptera	Monotomidae	Monotoma quadrifoveolata Aubé, 1837	R		es	*3
Coleoptera	Monotomidae	Monotoma spinicollis Aubé, 1837	*		s	*3
Coleoptera	Monotomidae	Monotoma testacea Motsch., 1845	*		h	*3
Coleoptera	Monotomidae	Rhizophagus bipustulatus (F., 1792)	*		sh	*3
Coleoptera	Monotomidae	Rhizophagus cribratus Gyll., 1827	*		s	*3
Coleoptera	Monotomidae	Rhizophagus depressus (F., 1792)	*		h	*3
Coleoptera	Monotomidae	Rhizophagus dispar (Payk., 1800)	*		sh	*3
Coleoptera	Monotomidae	Rhizophagus ferrugineus (Payk., 1800)	*		mh	*3
Coleoptera	Monotomidae	Rhizophagus grandis Gyll., 1827	*		ss	*3
Coleoptera	Monotomidae	Rhizophagus nitidulus (F., 1798)	*		mh	*3
Coleoptera	Monotomidae	Rhizophagus oblongicollis Blatch & Horner, 1892	nb		nb	*3
Coleoptera	Monotomidae	Rhizophagus parallelocollis Gyll., 1827	*		mh	*3
Coleoptera	Monotomidae	Rhizophagus parvulus (Payk., 1800)	*		s	*3
Coleoptera	Monotomidae	Rhizophagus perforatus Er., 1845	*		mh	*3
Coleoptera	Monotomidae	Rhizophagus picipes (Ol., 1790)	*		s	*3
Coleoptera	Mordellidae	Conalia baudii Muls.Rey, 1858	R		es	*3
Coleoptera	Mordellidae	Curtimorda bisignata (Redt., 1849)	*		ss	*3
Coleoptera	Mordellidae	Curtimorda maculosa (Naez., 1794)	*		s	*3
Coleoptera	Mordellidae	Hoshihananomia gacognei (Muls., 1852)	D		?	*3
Coleoptera	Mordellidae	Hoshihananomia perlata (Sulz., 1776)	G		ss	*3
Coleoptera	Mordellidae	Mordella aculeata L., 1758	D		s	*3
Coleoptera	Mordellidae	Mordella brachyura Muls., 1856	*		h	*3
Coleoptera	Mordellidae	Mordella holomelaena Apflb., 1914	*		h	*3

Order	Family	Species	K	L	P	S
Coleoptera	Mordellidae	Mordella huetheri Erm., 1956	*		mh	*3
Coleoptera	Mordellidae	Mordella leucaspis Küst., 1849	G		s	*3
Coleoptera	Mordellidae	Mordella pygidialis Apflb., 1914	R		es	*3
Coleoptera	Mordellidae	Mordellaria aurofasciata (Com., 1837)	D		ss	*3
Coleoptera	Mordellidae	Mordellistena acuticollis Schilsky, 1895	*		h	*3
Coleoptera	Mordellidae	Mordellistena aertsi Erm., 1963	D		?	*3
Coleoptera	Mordellidae	Mordellistena austriaca Schilsky, 1898	3		s	*3
Coleoptera	Mordellidae	Mordellistena austriacensis Erm., 1956	R		es	*3
Coleoptera	Mordellidae	Mordellistena bavarica Erm., 1963	R		es	*3
Coleoptera	Mordellidae	Mordellistena bicoloripilosa Erm., 1967	*		h	*3
Coleoptera	Mordellidae	Mordellistena breddini Erm., 1963	D		?	*3
Coleoptera	Mordellidae	Mordellistena brevicauda (Boh., 1849)	*		mh	*3
Coleoptera	Mordellidae	Mordellistena brunneospinosa Erm., 1963	0	1950	ex	*3
Coleoptera	Mordellidae	Mordellistena confinis Costa, 1854	D		ss	*3
Coleoptera	Mordellidae	Mordellistena dieckmanni Erm., 1963	D		?	*3
Coleoptera	Mordellidae	Mordellistena dvoraki Erm., 1956	D		?	*3
Coleoptera	Mordellidae	Mordellistena episternaloides Erm., 1963	D		?	*3
Coleoptera	Mordellidae	Mordellistena falsoparvula Erm., 1956	D		s	*3
Coleoptera	Mordellidae	Mordellistena falsoparvuliformis Erm., 1963	D		?	*3
Coleoptera	Mordellidae	Mordellistena feigei Erm., 1956	0	1950	ex	*3
Coleoptera	Mordellidae	Mordellistena hollandica Erm., 1966	D		?	*3
Coleoptera	Mordellidae	Mordellistena horioni Erm., 1956	D		?	*3
Coleoptera	Mordellidae	Mordellistena humeralis (L., 1758)	*		h	*3
Coleoptera	Mordellidae	Mordellistena inexpectata Erm., 1967	D		ss	*3
Coleoptera	Mordellidae	Mordellistena klapperichi Erm., 1956	D		?	*3
Coleoptera	Mordellidae	Mordellistena koelleri Erm., 1956	D		?	*3
Coleoptera	Mordellidae	Mordellistena korschefskyana Erm., 1963	0	1940	ex	*3
Coleoptera	Mordellidae	Mordellistena kraatzi Em., 1876	3		s	*3
Coleoptera	Mordellidae	Mordellistena luteipalpis Schilsky, 1895	G		s	*3
Coleoptera	Mordellidae	Mordellistena michalki Erm., 1956	D		?	*3
Coleoptera	Mordellidae	Mordellistena mihoki Erm., 1977	0	1950	ex	*3
Coleoptera	Mordellidae	Mordellistena minutuloides Erm., 1966	D		?	*3
Coleoptera	Mordellidae	Mordellistena nanula Erm., 1967	D		?	*3
Coleoptera	Mordellidae	Mordellistena nanuloides Erm., 1967	R		es	*3
Coleoptera	Mordellidae	Mordellistena neuwaldeggiana (Panz., 1796)	*		h	*3
Coleoptera	Mordellidae	Mordellistena nigritarsis Horák, 1996	D		?	*3
Coleoptera	Mordellidae	Mordellistena parvula (Gyll., 1827)	V		mh	*3
Coleoptera	Mordellidae	Mordellistena pentas Muls., 1856	*		mh	*3
Coleoptera	Mordellidae	Mordellistena perroudi Muls., 1856	D		?	*3
Coleoptera	Mordellidae	Mordellistena pseudobrevicauda Erm., 1963	G		ss	*3
Coleoptera	Mordellidae	Mordellistena pseudonana Erm., 1956	G		s	*3
Coleoptera	Mordellidae	Mordellistena pseudoparvula Erm., 1956	*		h	*3
Coleoptera	Mordellidae	Mordellistena pseudopumila Erm., 1963	D		?	*3
Coleoptera	Mordellidae	Mordellistena pumila (Gyll., 1810)	*		sh	*3
Coleoptera	Mordellidae	Mordellistena purpureonigrans Erm., 1963	D		?	*3
Coleoptera	Mordellidae	Mordellistena pygmaeola Erm., 1956	G		s	*3
Coleoptera	Mordellidae	Mordellistena reichei Em., 1876	D		ss	*3
Coleoptera	Mordellidae	Mordellistena reitteri Schilsky, 1894	G		ss	*3
Coleoptera	Mordellidae	Mordellistena rhenana Erm., 1956	D		s	*3
Coleoptera	Mordellidae	Mordellistena rufifrons Schilsky, 1894	D		ss	*3
Coleoptera	Mordellidae	Mordellistena saxonica Erm., 1967	0	1950	ex	*3
Coleoptera	Mordellidae	Mordellistena secreta Horák, 1983	D		?	*3
Coleoptera	Mordellidae	Mordellistena stenidea Muls., 1856	D		?	*3
Coleoptera	Mordellidae	Mordellistena stoeckleini Erm., 1956	G		ss	*3
Coleoptera	Mordellidae	Mordellistena tarsata Muls., 1856	V		s	*3
Coleoptera	Mordellidae	Mordellistena thuringiaca Erm., 1963	D		?	*3
Coleoptera	Mordellidae	Mordellistena variegata (F., 1798)	*		h	*3
Coleoptera	Mordellidae	Mordellistena vogti Erm., 1963	0	1950	ex	*3
Coleoptera	Mordellidae	Mordellistena weisei Schilsky, 1895	*		mh	*3
Coleoptera	Mordellidae	Mordellistenula perrisi (Muls., 1856)	3		s	*3
Coleoptera	Mordellidae	Mordellistenula planifrons Stsheg.-Bar., 1930	G		ss	*3
Coleoptera	Mordellidae	Mordellochroa abdominalis (F., 1775)	*		h	*3
Coleoptera	Mordellidae	Mordellochroa milleri (Em., 1876)	R		es	*3
Coleoptera	Mordellidae	Mordellochroa tournieri Em., 1876	D		ss	*3
Coleoptera	Mordellidae	Tolida artemisiae (Muls., 1856)	R		es	*3
Coleoptera	Mordellidae	Tomoxia bucephala Costa, 1854	*		mh	*3
Coleoptera	Mordellidae	Variimorda basalis (Costa, 1854)	D		?	*3
Coleoptera	Mordellidae	Variimorda briantea (Com., 1837)	V		mh	*3
Coleoptera	Mordellidae	Variimorda mendax Meq., 1946	D		?	*3
Coleoptera	Mordellidae	Variimorda villosa (Schrk., 1781)	*		h	*3
Coleoptera	Mycetophagidae	Berginus tamarisci Woll., 1854	nb		nb	*3
Coleoptera	Mycetophagidae	Litargus balteatus Lec., 1856	nb		nb	*3
Coleoptera	Mycetophagidae	Litargus connexus (Fourcr., 1785)	*		sh	*3
Coleoptera	Mycetophagidae	Mycetophagus ater (Rtt., 1879)	R		es	*3
Coleoptera	Mycetophagidae	Mycetophagus atomarius (F., 1792)	*		h	*3
Coleoptera	Mycetophagidae	Mycetophagus decempunctatus F., 1801	2		ss	*3
Coleoptera	Mycetophagidae	Mycetophagus fulvicollis F., 1792	2		ss	*3
Coleoptera	Mycetophagidae	Mycetophagus multipunctatus F., 1792	*		mh	*3
Coleoptera	Mycetophagidae	Mycetophagus piceus (F., 1792)	V		mh	*3
Coleoptera	Mycetophagidae	Mycetophagus populi F., 1798	3		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Mycetophagidae	Mycetophagus quadriguttatus Müll., 1821	*		h	*3
Coleoptera	Mycetophagidae	Mycetophagus quadripustulatus (L., 1761)	*		h	*3
Coleoptera	Mycetophagidae	Mycetophagus salicis Bris., 1862	G		ss	*3
Coleoptera	Mycetophagidae	Pseudotriphyllus suturalis (F., 1801)	R		es	*3
Coleoptera	Mycetophagidae	Triphyllus bicolor (F., 1792)	3		s	*3
Coleoptera	Mycetophagidae	Typhaea decipiens Lohse, 1989	nb		nb	*3
Coleoptera	Mycetophagidae	Typhaea stercorea (L., 1758)	*		sh	*3
Coleoptera	Mycteridae	Mycterus curculioides (F., 1781)	1		es	*3
Coleoptera	Nemonychidae	Nemonyx lepturoides (Fabricius, 1801)	1		es	*3
Coleoptera	Nitidulidae	Amphotis marginata (F., 1781)	*		mh	*3
Coleoptera	Nitidulidae	Carpophilus bipustulatus (Heer, 1841)	nb		nb	*3
Coleoptera	Nitidulidae	Carpophilus dimidiatus (F., 1792)	nb		nb	*3
Coleoptera	Nitidulidae	Carpophilus hemipterus (L., 1758)	*		h	*3
Coleoptera	Nitidulidae	Carpophilus ligneus Murr., 1864	nb		nb	*3
Coleoptera	Nitidulidae	Carpophilus marginellus Motsch., 1858	*		h	*3
Coleoptera	Nitidulidae	Carpophilus mutilatus Er., 1843	nb		nb	*3
Coleoptera	Nitidulidae	Carpophilus nepos Murray, 1864	nb		nb	*3
Coleoptera	Nitidulidae	Carpophilus obsoletus Er., 1843	nb		nb	*3
Coleoptera	Nitidulidae	Carpophilus quadrisignatus Er., 1843	nb		nb	*3
Coleoptera	Nitidulidae	Carpophilus sexpustulatus (F., 1791)	*		mh	*3
Coleoptera	Nitidulidae	Carpophilus truncatus Murray, 1864	nb		nb	*3
Coleoptera	Nitidulidae	Cryptarcha strigata (F., 1787)	*		h	*3
Coleoptera	Nitidulidae	Cryptarcha undata (Ol., 1790)	*		h	*3
Coleoptera	Nitidulidae	Cychramus luteus (F., 1787)	*		h	*3
Coleoptera	Nitidulidae	Cychramus variegatus (Hbst., 1792)	*		s	*3
Coleoptera	Nitidulidae	Cyllodes ater (Hbst., 1792)	R		es	*3
Coleoptera	Nitidulidae	Dendroxena quadrimaculata (Scop., 1772)	*		mh	*3
Coleoptera	Nitidulidae	Epuraea aestiva (L., 1758)	*		h	*3
Coleoptera	Nitidulidae	Epuraea angustula Sturm, 1844	*		ss	*3
Coleoptera	Nitidulidae	Epuraea biguttata (Thunb., 1784)	D		?	*3
Coleoptera	Nitidulidae	Epuraea binotata Rtt., 1872	*		s	*3
Coleoptera	Nitidulidae	Epuraea boreella (Zett., 1828)	*		ss	*3
Coleoptera	Nitidulidae	Epuraea deubeli Rtt., 1898	R		es	*3
Coleoptera	Nitidulidae	Epuraea distincta (Grimm., 1841)	*		s	*3
Coleoptera	Nitidulidae	Epuraea excisicollis Rtt., 1872	D		?	*3
Coleoptera	Nitidulidae	Epuraea fageticola Audisio, 1991	0	1950	ex	*3
Coleoptera	Nitidulidae	Epuraea fuscicollis (Steph., 1832)	*		s	*3
Coleoptera	Nitidulidae	Epuraea guttata (Ol., 1811)	*		mh	*3
Coleoptera	Nitidulidae	Epuraea laeviuscula (Gyll., 1827)	*		s	*3
Coleoptera	Nitidulidae	Epuraea limbata (F., 1787)	*		mh	*3
Coleoptera	Nitidulidae	Epuraea longiclavis Sjöb., 1939	*		s	*3
Coleoptera	Nitidulidae	Epuraea longula Er., 1845	*		h	*3
Coleoptera	Nitidulidae	Epuraea marseuli Rtt., 1872	*		h	*3
Coleoptera	Nitidulidae	Epuraea melanocephala (Marsh., 1802)	*		sh	*3
Coleoptera	Nitidulidae	Epuraea melina Er., 1843	*		mh	*3
Coleoptera	Nitidulidae	Epuraea muehli Rtt., 1908	*		s	*3
Coleoptera	Nitidulidae	Epuraea neglecta (Heer, 1841)	*		mh	*3
Coleoptera	Nitidulidae	Epuraea oblonga (Hbst., 1793)	*		ss	*3
Coleoptera	Nitidulidae	Epuraea ocularis Fairm., 1849	nb		nb	*3
Coleoptera	Nitidulidae	Epuraea pallescens (Steph., 1832)	*		h	*3
Coleoptera	Nitidulidae	Epuraea pygmaea (Gyll., 1808)	*		mh	*3
Coleoptera	Nitidulidae	Epuraea rufomarginata (Steph., 1830)	*		s	*3
Coleoptera	Nitidulidae	Epuraea silacea (Hbst., 1784)	*		s	*3
Coleoptera	Nitidulidae	Epuraea terminalis (Mannh., 1843)	*		h	*3
Coleoptera	Nitidulidae	Epuraea thoracica Tourn., 1872	*		s	*3
Coleoptera	Nitidulidae	Epuraea unicolor (Ol., 1790)	*		sh	*3
Coleoptera	Nitidulidae	Epuraea variegata (Hbst., 1793)	*		mh	*3
Coleoptera	Nitidulidae	Glischrochilus hortensis (Fourcr., 1785)	*		h	*3
Coleoptera	Nitidulidae	Glischrochilus quadriguttatus (F., 1776)	*		h	*3
Coleoptera	Nitidulidae	Glischrochilus quadripunctatus (L., 1758)	*		h	*3
Coleoptera	Nitidulidae	Glischrochilus quadrisignatus (Say, 1835)	nb		nb	*3
Coleoptera	Nitidulidae	Ipidia binotata Rtt., 1875	R		es	*3
Coleoptera	Nitidulidae	Meligethes aciculatus Bris., 1863	3		s	*3
Coleoptera	Nitidulidae	Meligethes aeneus (F., 1775)	*		sh	*3
Coleoptera	Nitidulidae	Meligethes anthracinus Bris., 1863	V		s	*3
Coleoptera	Nitidulidae	Meligethes assimilis Sturm, 1845	V		s	*3
Coleoptera	Nitidulidae	Meligethes ater Bris., 1863	D		?	*3
Coleoptera	Nitidulidae	Meligethes atramentarius Foerst., 1849	*		mh	*3
Coleoptera	Nitidulidae	Meligethes atratus (Ol., 1790)	D		?	*3
Coleoptera	Nitidulidae	Meligethes bidens Bris., 1863	G		s	*3
Coleoptera	Nitidulidae	Meligethes bidentatus Bris., 1863	3		s	*3
Coleoptera	Nitidulidae	Meligethes brachialis Er., 1845	*		mh	*3
Coleoptera	Nitidulidae	Meligethes brevis Sturm, 1845	3		s	*3
Coleoptera	Nitidulidae	Meligethes brunnicornis Sturm, 1845	*		h	*3
Coleoptera	Nitidulidae	Meligethes buyssoni Bris., 1882	R		es	*3
Coleoptera	Nitidulidae	Meligethes carinulatus Foerst., 1849	*		h	*3
Coleoptera	Nitidulidae	Meligethes caudatus Guillb., 1897	D		?	*3
Coleoptera	Nitidulidae	Meligethes coeruleovirens Foerst., 1849	V		mh	*3
Coleoptera	Nitidulidae	Meligethes coracinus Sturm, 1845	*		mh	*3
Coleoptera	Nitidulidae	Meligethes corvinus Er., 1845	D		ss	*3

Order	Family	Species	K	L	P	S
Coleoptera	Nitidulidae	Meligethes czwalinai Rtt., 1871	*		s	*3
Coleoptera	Nitidulidae	Meligethes denticulatus (Heer, 1841)	*		mh	*3
Coleoptera	Nitidulidae	Meligethes devillei Grouv., 1912	0	1880	ex	*3
Coleoptera	Nitidulidae	Meligethes difficilis (Heer, 1841)	*		h	*3
Coleoptera	Nitidulidae	Meligethes distinctus Sturm, 1845	3		s	*3
Coleoptera	Nitidulidae	Meligethes egenus Er., 1845	*		s	*3
Coleoptera	Nitidulidae	Meligethes erichsoni Bris., 1863	3		s	*3
Coleoptera	Nitidulidae	Meligethes exilis Sturm., 1845	3		s	*3
Coleoptera	Nitidulidae	Meligethes flavimanus Steph., 1830	*		mh	*3
Coleoptera	Nitidulidae	Meligethes fulvipes Bris., 1863	*		ss	*3
Coleoptera	Nitidulidae	Meligethes gagatinus Er., 1845	*		s	*3
Coleoptera	Nitidulidae	Meligethes haemorrhoidalis Foerst., 1849	*		mh	*3
Coleoptera	Nitidulidae	Meligethes humerosus Rtt., 1871	R		es	*3
Coleoptera	Nitidulidae	Meligethes incanus Sturm, 1845	G		ss	*3
Coleoptera	Nitidulidae	Meligethes jelineki Audisio, 1976	R		es	*3
Coleoptera	Nitidulidae	Meligethes kunzei Er., 1845	*		s	*3
Coleoptera	Nitidulidae	Meligethes lepidii Mill., 1852	*		s	*3
Coleoptera	Nitidulidae	Meligethes longulus Schilsky, 1894	R		es	*3
Coleoptera	Nitidulidae	Meligethes lugubris Sturm, 1845	V		mh	*3
Coleoptera	Nitidulidae	Meligethes matronalis Audisio & Spornr., 1990	*		mh	*3
Coleoptera	Nitidulidae	Meligethes maurus Sturm, 1845	V		s	*3
Coleoptera	Nitidulidae	Meligethes morosus Er., 1845	*		mh	*3
Coleoptera	Nitidulidae	Meligethes nanus Er., 1845	1		es	*3
Coleoptera	Nitidulidae	Meligethes nigrescens Steph., 1830	*		h	*3
Coleoptera	Nitidulidae	Meligethes obscurus Er., 1845	*		mh	*3
Coleoptera	Nitidulidae	Meligethes ochropus Sturm, 1845	V		s	*3
Coleoptera	Nitidulidae	Meligethes ovatus Sturm, 1845	*		h	*3
Coleoptera	Nitidulidae	Meligethes pedicularius (Gyll., 1808)	*		mh	*3
Coleoptera	Nitidulidae	Meligethes persicus Fald., 1837	G		s	*3
Coleoptera	Nitidulidae	Meligethes planiusculus (Heer, 1841)	V		mh	*3
Coleoptera	Nitidulidae	Meligethes reitteri Schilsky, 1894	R		es	*3
Coleoptera	Nitidulidae	Meligethes rosenhaueri Rtt., 1871	3		s	*3
Coleoptera	Nitidulidae	Meligethes rotundicollis Bris., 1863	D		?	*3
Coleoptera	Nitidulidae	Meligethes ruficornis (Marsh., 1802)	*		h	*3
Coleoptera	Nitidulidae	Meligethes serripes (Gyll., 1827)	G		s	*3
Coleoptera	Nitidulidae	Meligethes solidus (Ill., 1798)	3		s	*3
Coleoptera	Nitidulidae	Meligethes subaeneus Sturm, 1845	D		s	*3
Coleoptera	Nitidulidae	Meligethes subrugosus (Gyll., 1808)	D		?	*3
Coleoptera	Nitidulidae	Meligethes sulcatus Bris., 1863	*		mh	*3
Coleoptera	Nitidulidae	Meligethes symphyti (Heer, 1841)	*		h	*3
Coleoptera	Nitidulidae	Meligethes tristis Sturm, 1845	*		h	*3
Coleoptera	Nitidulidae	Meligethes umbrosus Sturm, 1845	D		?	*3
Coleoptera	Nitidulidae	Meligethes viridescens (F., 1787)	*		h	*3
Coleoptera	Nitidulidae	Nitidula bipunctata (L., 1758)	*		mh	*3
Coleoptera	Nitidulidae	Nitidula carnaria (Schall., 1783)	*		mh	*3
Coleoptera	Nitidulidae	Nitidula rufipes (L., 1767)	*		mh	*3
Coleoptera	Nitidulidae	Omosita colon (L., 1758)	*		h	*3
Coleoptera	Nitidulidae	Omosita depressa (L., 1758)	*		s	*3
Coleoptera	Nitidulidae	Omosita discoidea (F., 1775)	*		h	*3
Coleoptera	Nitidulidae	Pityophagus ferrugineus (L., 1761)	*		h	*3
Coleoptera	Nitidulidae	Pityophagus laevior Ab., 1872	*		ss	*3
Coleoptera	Nitidulidae	Pocadioides wajdelota (Wank., 1869)	R		es	*3
Coleoptera	Nitidulidae	Pocadius adustus Rtt., 1888	*		h	*3
Coleoptera	Nitidulidae	Pocadius ferrugineus (F., 1775)	*		h	*3
Coleoptera	Nitidulidae	Pria dulcamarae (Scop., 1763)	*		mh	*3
Coleoptera	Nitidulidae	Soronia grisea (L., 1758)	*		h	*3
Coleoptera	Nitidulidae	Soronia punctatissima (Ill., 1794)	*		mh	*3
Coleoptera	Nitidulidae	Stelidota geminata (Say, 1825)	nb		nb	*3
Coleoptera	Nitidulidae	Thalycra fervida (Ol., 1790)	*		s	*3
Coleoptera	Nosodendridae	Nosodendron fasciculare (Ol., 1790)	3		s	*3
Coleoptera	Noteridae	Noterus clavicornis (De Geer, 1774)	*		sh	*1
Coleoptera	Noteridae	Noterus crassicornis (O.F. Müller, 1776)	*		h	*1
Coleoptera	Oedemeridae	Anogcodes ferruginea (Schrk., 1776)	D		s	*3
Coleoptera	Oedemeridae	Anogcodes fulvicollis (Scop., 1763)	D		s	*3
Coleoptera	Oedemeridae	Anogcodes rufiventris (Scop., 1763)	*		s	*3
Coleoptera	Oedemeridae	Anogcodes ustulata (F., 1787)	*		mh	*3
Coleoptera	Oedemeridae	Calopus serraticornis (L., 1758)	*		s	*3
Coleoptera	Oedemeridae	Chrysanthia nigricornis Westh., 1882	*		h	*3
Coleoptera	Oedemeridae	Chrysanthia viridissima (L., 1758)	*		mh	*3
Coleoptera	Oedemeridae	Ditylus laevis (F., 1787)	1		es	*3
Coleoptera	Oedemeridae	Ischnomera caerulea (L., 1758)	G		s	*3
Coleoptera	Oedemeridae	Ischnomera cinerascens (Pand., 1867)	D		s	*3
Coleoptera	Oedemeridae	Ischnomera cyanea (F., 1792)	*		h	*3
Coleoptera	Oedemeridae	Ischnomera sanguinicollis (F., 1787)	3		s	*3
Coleoptera	Oedemeridae	Nacerdes carniolica (Gistl., 1832)	*		s	*3
Coleoptera	Oedemeridae	Nacerdes melanura (L., 1758)	V		s	*3
Coleoptera	Oedemeridae	Oedemera croceicollis (Gyll., 1827)	3		ss	*3
Coleoptera	Oedemeridae	Oedemera femoralis (Ol., 1803)	G		ss	*3
Coleoptera	Oedemeridae	Oedemera femorata (Scop., 1763)	*		h	*3
Coleoptera	Oedemeridae	Oedemera flavipes (F., 1792)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Oedemeridae	Oedemera lurida (Marsh., 1802)	*		sh	*3
Coleoptera	Oedemeridae	Oedemera monticola Svihla, 1978	D		s	*3
Coleoptera	Oedemeridae	Oedemera nobilis (Scop., 1763)	*		h	*3
Coleoptera	Oedemeridae	Oedemera podagrariae (L., 1767)	*		mh	*3
Coleoptera	Oedemeridae	Oedemera subulata Ol., 1794	3		s	*3
Coleoptera	Oedemeridae	Oedemera tristis Schm., 1846	G		s	*3
Coleoptera	Oedemeridae	Oedemera virescens (L., 1767)	*		sh	*3
Coleoptera	Omalisidae	Omalisus fontisbellaquaei Fourcr., 1785	*		mh	*3
Coleoptera	Peltidae	Calitys scabra (Thunb., 1784)	1		es	*3
Coleoptera	Peltidae	Ostoma ferruginea (L., 1758)	3		ss	*3
Coleoptera	Peltidae	Peltis grossa (L., 1758)	1		es	*3
Coleoptera	Peltidae	Thymalus limbatus (F., 1787)	3		s	*3
Coleoptera	Phalacridae	Olibrus aeneus (F., 1792)	*		h	*3
Coleoptera	Phalacridae	Olibrus affinis (Sturm, 1807)	*		h	*3
Coleoptera	Phalacridae	Olibrus baudueri Flach, 1888	G		s	*3
Coleoptera	Phalacridae	Olibrus bicolor (F., 1792)	G		mh	*3
Coleoptera	Phalacridae	Olibrus bimaculatus Küst., 1848	G		s	*3
Coleoptera	Phalacridae	Olibrus bisignatus (Menetr., 1849)	3		s	*3
Coleoptera	Phalacridae	Olibrus corticalis (Panz., 1797)	*		h	*3
Coleoptera	Phalacridae	Olibrus flavicornis (Sturm, 1807)	*		mh	*3
Coleoptera	Phalacridae	Olibrus gerhardti Flach, 1888	*		s	*3
Coleoptera	Phalacridae	Olibrus liquidus Er., 1845	*		mh	*3
Coleoptera	Phalacridae	Olibrus millefolii (Payk., 1800)	*		mh	*3
Coleoptera	Phalacridae	Olibrus norvegicus Munst., 1901	D		?	*3
Coleoptera	Phalacridae	Olibrus pygmaeus (Sturm, 1807)	V		s	*3
Coleoptera	Phalacridae	Phalacrus caricis Sturm, 1807	*		mh	*3
Coleoptera	Phalacridae	Phalacrus championi Guillb., 1892	*		s	*3
Coleoptera	Phalacridae	Phalacrus coruscus (Panz., 1797)	D		?	*3
Coleoptera	Phalacridae	Phalacrus fimetarius (F., 1775)	V		s	*3
Coleoptera	Phalacridae	Phalacrus grossus Er., 1845	D		s	*3
Coleoptera	Phalacridae	Phalacrus substriatus Gyll., 1813	D		s	*3
Coleoptera	Phalacridae	Stilbus atomarius (L., 1767)	*		mh	*3
Coleoptera	Phalacridae	Stilbus oblongus (Er., 1845)	*		mh	*3
Coleoptera	Phalacridae	Stilbus testaceus (Panz., 1797)	*		sh	*3
Coleoptera	Phloeostichidae	Phloeostichus denticollis Redt., 1842	*		ss	*3
Coleoptera	Phloiophilidae	Phloiophilus edwardsii Steph., 1830	*		ss	*3
Coleoptera	Platypodidae	Platypus cylindrus (F., 1792)	*		mh	*3
Coleoptera	Prostomidae	Prostomis mandibularis (F., 1801)	2		es	*3
Coleoptera	Pselaphidae	Amauronyx maerkelii (Aubé, 1844)	G		ss	*3
Coleoptera	Pselaphidae	Batrisodes adnexus (Hampe, 1863)	D		s	*3
Coleoptera	Pselaphidae	Batrisodes buqueti (Aubé, 1833)	*		s	*3
Coleoptera	Pselaphidae	Batrisodes delaporti (Aubé, 1833)	*		h	*3
Coleoptera	Pselaphidae	Batrisodes oculatus (Aubé, 1833)	R		es	*3
Coleoptera	Pselaphidae	Batrisodes unisexualis Bes., 1988	*		mh	*3
Coleoptera	Pselaphidae	Batrisodes venustus (Reichb., 1816)	*		h	*3
Coleoptera	Pselaphidae	Batrisus formicarius Aubé, 1833	V		s	*3
Coleoptera	Pselaphidae	Bibloplectus ambiguus (Reichb., 1816)	*		h	*3
Coleoptera	Pselaphidae	Bibloplectus minutissimus (Aubé, 1833)	V		s	*3
Coleoptera	Pselaphidae	Bibloplectus obtusus Guillb., 1888	1		es	*3
Coleoptera	Pselaphidae	Bibloplectus pusillus (Denny, 1825)	V		s	*3
Coleoptera	Pselaphidae	Bibloplectus spinosus (Raffr., 1814)	G		s	*3
Coleoptera	Pselaphidae	Bibloplectus tenebrosus (Rtt., 1880)	V		s	*3
Coleoptera	Pselaphidae	Bibloporus bicolor (Denny, 1825)	*		h	*3
Coleoptera	Pselaphidae	Bibloporus mayeti Guillb., 1888	*		s	*3
Coleoptera	Pselaphidae	Bibloporus minutus Raffr., 1914	*		h	*3
Coleoptera	Pselaphidae	Bibloporus ultimus Guillb., 1892	R		es	*3
Coleoptera	Pselaphidae	Brachygluta fossulata (Reichb., 1816)	*		sh	*3
Coleoptera	Pselaphidae	Brachygluta haematica (Reichb., 1816)	*		h	*3
Coleoptera	Pselaphidae	Brachygluta helferi (Schm., 1836)	3		s	*3
Coleoptera	Pselaphidae	Brachygluta klimschi Holdh., 1902	3		ss	*3
Coleoptera	Pselaphidae	Brachygluta lefebvrei (Aubé, 1833)	D		?	*3
Coleoptera	Pselaphidae	Brachygluta pandellei (Saulcy, 1876)	0	1958	ex	*3
Coleoptera	Pselaphidae	Brachygluta perforata (Aubé, 1833)	*		s	*3
Coleoptera	Pselaphidae	Brachygluta simplicior Raffr., 1904	*		mh	*3
Coleoptera	Pselaphidae	Brachygluta sinuata (Aubé, 1833)	*		mh	*3
Coleoptera	Pselaphidae	Brachygluta trigonoprocta (Ganglb., 1895)	D		?	*3
Coleoptera	Pselaphidae	Brachygluta tristis (Hampe, 1863)	G		s	*3
Coleoptera	Pselaphidae	Brachygluta westfalica Brachat, 2004	R		es	*3
Coleoptera	Pselaphidae	Brachygluta xanthoptera (Reichb., 1816)	G		s	*3
Coleoptera	Pselaphidae	Bryaxis bulbifer (Reichb., 1816)	*		h	*3
Coleoptera	Pselaphidae	Bryaxis carinula (Rey, 1888)	*		mh	*3
Coleoptera	Pselaphidae	Bryaxis clavicornis (Panz., 1809)	*		mh	*3
Coleoptera	Pselaphidae	Bryaxis collaris (Baudi, 1859)	*		s	*3
Coleoptera	Pselaphidae	Bryaxis curtisii (Leach, 1817)	*		h	*3
Coleoptera	Pselaphidae	Bryaxis femoratus (Aubé, 1844)	G		ss	*3
Coleoptera	Pselaphidae	Bryaxis nigripennis (Aubé, 1844)	*		ss	*3
Coleoptera	Pselaphidae	Bryaxis nodicornis (Aubé, 1833)	*		h	*3
Coleoptera	Pselaphidae	Bryaxis puncticollis (Denny, 1825)	*		mh	*3
Coleoptera	Pselaphidae	Bryaxis ulrichii (Motsch., 1851)	*		ss	*3
Coleoptera	Pselaphidae	Bythinus burrellii Denny, 1825	*		h	*3

Order	Family	Species	K	L	P	S
Coleoptera	Pselaphidae	Bythinus confusus Bes., 1974	*		s	*3
Coleoptera	Pselaphidae	Bythinus macropalpus Aubé, 1833	*		sh	*3
Coleoptera	Pselaphidae	Bythinus reichenbachi (Mach., 1928)	*		ss	*3
Coleoptera	Pselaphidae	Bythinus securiger (Reichb., 1816)	*		ss	*3
Coleoptera	Pselaphidae	Centrotoma lucifuga Heyd., 1849	1		es	*3
Coleoptera	Pselaphidae	Chennium bituberculatum Latr., 1807	1		es	*3
Coleoptera	Pselaphidae	Claviger longicornis Müll., 1818	2		s	*3
Coleoptera	Pselaphidae	Claviger testaceus Preyssl., 1790	2		s	*3
Coleoptera	Pselaphidae	Ctenistes palpalis Reichb., 1816	0	1913	ex	*3
Coleoptera	Pselaphidae	Euplectus bescidicus Rtt., 1882	D		ss	*3
Coleoptera	Pselaphidae	Euplectus bonvouloiri Rtt., 1881	R		es	*3
Coleoptera	Pselaphidae	Euplectus brunneus (Grimm., 1841)	*		mh	*3
Coleoptera	Pselaphidae	Euplectus decipiens Raffr., 1910	R		es	*3
Coleoptera	Pselaphidae	Euplectus duponti Aubé, 1833	R		es	*3
Coleoptera	Pselaphidae	Euplectus infirmus Raffr., 1910	D		ss	*3
Coleoptera	Pselaphidae	Euplectus karstenii Reichb., 1816	*		sh	*3
Coleoptera	Pselaphidae	Euplectus kirbii Denny, 1825	*		s	*3
Coleoptera	Pselaphidae	Euplectus mutator Fauv., 1895	*		s	*3
Coleoptera	Pselaphidae	Euplectus nanus (Reichb., 1816)	*		h	*3
Coleoptera	Pselaphidae	Euplectus piceus Motsch., 1835	*		h	*3
Coleoptera	Pselaphidae	Euplectus punctatus Muls. & Rey, 1861	*		h	*3
Coleoptera	Pselaphidae	Euplectus sanguineus Denny, 1825	*		h	*3
Coleoptera	Pselaphidae	Euplectus signatus (Reichb., 1816)	*		mh	*3
Coleoptera	Pselaphidae	Euplectus sparsus Bes., 1964	*		ss	*3
Coleoptera	Pselaphidae	Euplectus tholini Guillb., 1888	*		s	*3
Coleoptera	Pselaphidae	Leptoplectus spinolae (Aubé, 1844)	*		s	*3
Coleoptera	Pselaphidae	Meliceria sulciventris (Guillb., 1888)	R		es	*3
Coleoptera	Pselaphidae	Plectophloeus erichsoni (Aubé, 1844)	*		ss	*3
Coleoptera	Pselaphidae	Plectophloeus fischeri (Aubé, 1833)	*		mh	*3
Coleoptera	Pselaphidae	Plectophloeus fleischeri Mach., 1929	*		ss	*3
Coleoptera	Pselaphidae	Plectophloeus nitidus (Fairm., 1858)	*		mh	*3
Coleoptera	Pselaphidae	Plectophloeus nubigena (Rtt., 1877)	*		s	*3
Coleoptera	Pselaphidae	Plectophloeus rhenanus (Rtt., 1882)	R		es	*3
Coleoptera	Pselaphidae	Pselaphaulax dresdensis (Hbst., 1792)	G		ss	*3
Coleoptera	Pselaphidae	Pselaphus heisei Hbst., 1792	*		h	*3
Coleoptera	Pselaphidae	Pseudoplectus perplexus (Duval, 1854)	0	1900	ex	*3
Coleoptera	Pselaphidae	Reichenbachia juncorum (Leach, 1817)	*		h	*3
Coleoptera	Pselaphidae	Rybaxis longicornis (Leach, 1817)	*		h	*3
Coleoptera	Pselaphidae	Saulcyella schmidtii (Märk., 1845)	R		es	*3
Coleoptera	Pselaphidae	Trichonyx sulcicollis (Reichb., 1816)	V		s	*3
Coleoptera	Pselaphidae	Trimium aemonae Rtt., 1882	R		es	*3
Coleoptera	Pselaphidae	Trimium brevicorne (Reichb., 1816)	*		h	*3
Coleoptera	Pselaphidae	Trissemus antennatus (Aubé, 1833)	*		s	*3
Coleoptera	Pselaphidae	Tychobythinus bavaricus Daffner, 1984	R		es	*3
Coleoptera	Pselaphidae	Tychobythinus glabratus (Rye, 1870)	R		es	*3
Coleoptera	Pselaphidae	Tychus monilicornis Rtt., 1880	1		es	*3
Coleoptera	Pselaphidae	Tychus niger (Payk., 1800)	*		h	*3
Coleoptera	Pselaphidae	Tychus normandi Jeann., 1950	1		es	*3
Coleoptera	Pselaphidae	Tyrus mucronatus (Panz., 1805)	*		mh	*3
Coleoptera	Psephenidae	Eubria palustris Germar, 1818	2		ss	*3
Coleoptera	Ptiliidae	Acrotrichis arnoldi Rossk., 1935	*		mh	*3
Coleoptera	Ptiliidae	Acrotrichis atomaria (De Geer, 1774)	*		h	*3
Coleoptera	Ptiliidae	Acrotrichis brevipennis (Er., 1845)	*		s	*3
Coleoptera	Ptiliidae	Acrotrichis cephalotes (Allib., 1844)	D		ss	*3
Coleoptera	Ptiliidae	Acrotrichis cognata (Matth., 1877)	nb		nb	*3
Coleoptera	Ptiliidae	Acrotrichis danica Sundt, 1958	D		ss	*3
Coleoptera	Ptiliidae	Acrotrichis dispar (Matth., 1865)	*		h	*3
Coleoptera	Ptiliidae	Acrotrichis fascicularis (Hbst., 1792)	*		h	*3
Coleoptera	Ptiliidae	Acrotrichis grandicollis (Mannh., 1844)	*		h	*3
Coleoptera	Ptiliidae	Acrotrichis henrici (Matth., 1872)	nb		nb	*3
Coleoptera	Ptiliidae	Acrotrichis insularis (Mäkl., 1852)	*		h	*3
Coleoptera	Ptiliidae	Acrotrichis intermedia (Gillm., 1845)	*		sh	*3
Coleoptera	Ptiliidae	Acrotrichis lucidula Rossk., 1935	G		s	*3
Coleoptera	Ptiliidae	Acrotrichis montandonii (Allib., 1844)	*		h	*3
Coleoptera	Ptiliidae	Acrotrichis nana Strand, 1946	D		?	*3
Coleoptera	Ptiliidae	Acrotrichis parva Rossk., 1935	D		s	*3
Coleoptera	Ptiliidae	Acrotrichis pumila (Er., 1845)	D		s	*3
Coleoptera	Ptiliidae	Acrotrichis rosskotheni Sundt, 1971	D		s	*3
Coleoptera	Ptiliidae	Acrotrichis rugulosa Rossk., 1935	D		s	*3
Coleoptera	Ptiliidae	Acrotrichis sericans (Heer, 1841)	*		mh	*3
Coleoptera	Ptiliidae	Acrotrichis silvatica Rossk., 1935	*		s	*3
Coleoptera	Ptiliidae	Acrotrichis sitkaensis (Motsch., 1845)	*		h	*3
Coleoptera	Ptiliidae	Acrotrichis sjobergi Sundt, 1958	*		ss	*3
Coleoptera	Ptiliidae	Acrotrichis thoracica (Waltl, 1838)	*		s	*3
Coleoptera	Ptiliidae	Acrotrichis volans (Motsch., 1845)	nb		nb	*3
Coleoptera	Ptiliidae	Actidium boudieri (Allib., 1844)	D		s	*3
Coleoptera	Ptiliidae	Actidium coarctatum (Halid., 1855)	D		ss	*3
Coleoptera	Ptiliidae	Actidium variolatum Flach, 1887	0	1950	ex	*3
Coleoptera	Ptiliidae	Baeocrara japonica (Matth., 1884)	nb		nb	*3
Coleoptera	Ptiliidae	Baeocrara variolosa (Muls. & Rey, 1867)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Ptiliidae	Bambara contorta (Dybas, 1966)	nb		nb	*3
Coleoptera	Ptiliidae	Bambara fusca Dybas, 1966	nb		nb	*3
Coleoptera	Ptiliidae	Euryptilium saxonicum (Gillm., 1845)	*		h	*3
Coleoptera	Ptiliidae	Micridium halidaii (Matth., 1868)	G		s	*3
Coleoptera	Ptiliidae	Microptilium palustre Kuntzen, 1914	D		ss	*3
Coleoptera	Ptiliidae	Microptilium pulchellum (Allib., 1844)	D		ss	*3
Coleoptera	Ptiliidae	Nephanes titan (Newm., 1834)	*		h	*3
Coleoptera	Ptiliidae	Nossidium pilosellum (Marsh., 1802)	V		s	*3
Coleoptera	Ptiliidae	Oligella foveolata (Allib., 1844)	*		mh	*3
Coleoptera	Ptiliidae	Oligella insignis (Matth., 1861)	D		?	*3
Coleoptera	Ptiliidae	Oligella intermedia Bes., 1971	D		ss	*3
Coleoptera	Ptiliidae	Ptenidium brenskei Flach, 1887	G		s	*3
Coleoptera	Ptiliidae	Ptenidium fuscicorne Er., 1845	*		mh	*3
Coleoptera	Ptiliidae	Ptenidium gressneri Er., 1845	3		s	*3
Coleoptera	Ptiliidae	Ptenidium intermedium Wank., 1869	*		sh	*3
Coleoptera	Ptiliidae	Ptenidium laevigatum Er., 1845	*		h	*3
Coleoptera	Ptiliidae	Ptenidium longicorne Fuss, 1868	G		ss	*3
Coleoptera	Ptiliidae	Ptenidium myrmicophilum Kr., 1851	*		mh	*3
Coleoptera	Ptiliidae	Ptenidium nitidum (Heer, 1841)	*		sh	*3
Coleoptera	Ptiliidae	Ptenidium punctatum (Gyll., 1827)	*		s	*3
Coleoptera	Ptiliidae	Ptenidium pusillum (Gyll., 1808)	*		sh	*3
Coleoptera	Ptiliidae	Ptenidium reitteri Flach, 1887	G		ss	*3
Coleoptera	Ptiliidae	Ptenidium turgidum Thoms., 1855	G		s	*3
Coleoptera	Ptiliidae	Pteryx suturalis (Heer, 1841)	*		sh	*3
Coleoptera	Ptiliidae	Ptiliola brevicollis (Matth., 1860)	D		?	*3
Coleoptera	Ptiliidae	Ptiliola kunzei (Heer, 1841)	*		mh	*3
Coleoptera	Ptiliidae	Ptiliolum caledonicum (Shp., 1871)	D		ss	*3
Coleoptera	Ptiliidae	Ptiliolum fuscum (Er., 1845)	*		sh	*3
Coleoptera	Ptiliidae	Ptiliolum marginatum (Aubé, 1850)	D		ss	*3
Coleoptera	Ptiliidae	Ptiliolum sahlbergi Flach, 1888	0	1950	ex	*3
Coleoptera	Ptiliidae	Ptiliolum schwarzi (Flach, 1887)	*		s	*3
Coleoptera	Ptiliidae	Ptiliolum spencei (Allib., 1844)	*		mh	*3
Coleoptera	Ptiliidae	Ptiliolum wuesthoffi Rossk., 1934	*		s	*3
Coleoptera	Ptiliidae	Ptilium affine Er., 1845	D		ss	*3
Coleoptera	Ptiliidae	Ptilium caesum Er., 1845	0	1950	ex	*3
Coleoptera	Ptiliidae	Ptilium exaratum (Allib., 1844)	D		ss	*3
Coleoptera	Ptiliidae	Ptilium horioni Rossk., 1934	0	1950	ex	*3
Coleoptera	Ptiliidae	Ptilium latum (Gillm., 1845)	D		ss	*3
Coleoptera	Ptiliidae	Ptilium modestum Wank., 1869	D		ss	*3
Coleoptera	Ptiliidae	Ptilium myrmecophilum (Allib., 1844)	D		s	*3
Coleoptera	Ptiliidae	Ptinella aptera (Guer., 1839)	*		h	*3
Coleoptera	Ptiliidae	Ptinella britannica Matth., 1858	*		s	*3
Coleoptera	Ptiliidae	Ptinella denticollis (Fairm., 1857)	G		ss	*3
Coleoptera	Ptiliidae	Ptinella errabunda Johns., 1975	*		s	*3
Coleoptera	Ptiliidae	Ptinella limbata (Heer, 1841)	*		h	*3
Coleoptera	Ptiliidae	Ptinella microscopica (Gillm., 1845)	G		ss	*3
Coleoptera	Ptiliidae	Ptinella tenella (Er., 1845)	G		s	*3
Coleoptera	Ptiliidae	Smicrus filicornis (Fairm. & Lab., 1855)	*		mh	*3
Coleoptera	Ptinidae	Gibbium psylloides (Czemp., 1778)	D		?	*3
Coleoptera	Ptinidae	Mezium affine Boield., 1856	D		?	*3
Coleoptera	Ptinidae	Mezium sulcatum (F., 1781)	D		?	*3
Coleoptera	Ptinidae	Niptus hololeucus (Fald., 1836)	2		s	*3
Coleoptera	Ptinidae	Paraniptus globulus (Ill., 1807)	D		?	*3
Coleoptera	Ptinidae	Pseudeurostus hilleri (Rtt., 1877)	D		?	*3
Coleoptera	Ptinidae	Ptinus bicinctus Sturm, 1837	D		s	*3
Coleoptera	Ptinidae	Ptinus calcaratus Kiesw., 1877	R		es	*3
Coleoptera	Ptinidae	Ptinus clavipes Panz., 1806	V		mh	*3
Coleoptera	Ptinidae	Ptinus coarcticollis Sturm, 1837	G		ss	*3
Coleoptera	Ptinidae	Ptinus dubius Sturm, 1837	*		s	*3
Coleoptera	Ptinidae	Ptinus fur (L., 1758)	*		sh	*3
Coleoptera	Ptinidae	Ptinus latro F.,1775	D		?	*3
Coleoptera	Ptinidae	Ptinus lichenum Marsh., 1802	3		s	*3
Coleoptera	Ptinidae	Ptinus pilosus Müll., 1821	V		s	*3
Coleoptera	Ptinidae	Ptinus pusillus Sturm, 1837	3		s	*3
Coleoptera	Ptinidae	Ptinus raptor Sturm, 1837	2		s	*3
Coleoptera	Ptinidae	Ptinus rufipes Ol., 1790	*		h	*3
Coleoptera	Ptinidae	Ptinus sexpunctatus Panz., 1795	*		mh	*3
Coleoptera	Ptinidae	Ptinus subpilosus Sturm, 1837	*		mh	*3
Coleoptera	Ptinidae	Ptinus tectus Boield., 1856	*		h	*3
Coleoptera	Ptinidae	Ptinus variegatus Rossi, 1794	D		?	*3
Coleoptera	Ptinidae	Ptinus villiger Rtt., 1884	D		?	*3
Coleoptera	Ptinidae	Sphaericus gibboides (Boield., 1854)	*		s	*3
Coleoptera	Ptinidae	Tipnus unicolor (Pill. & Mitt., 1783)	3		s	*3
Coleoptera	Ptinidae	Trigonogenius globulus Sol., 1869	D		?	*3
Coleoptera	Pyrochroidae	Pyrochroa coccinea (L., 1761)	*		h	*3
Coleoptera	Pyrochroidae	Pyrochroa serraticornis (Scop., 1763)	*		h	*3
Coleoptera	Pyrochroidae	Schizotus pectinicornis (L., 1758)	*		h	*3
Coleoptera	Pythidae	Pytho abieticola Sahlb., 1875	0	1959	ex	*3
Coleoptera	Pythidae	Pytho depressus (L., 1767)	*		s	*3
Coleoptera	Rhipiphoridae	Metoecus paradoxus (L., 1761)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Rhipiphoridae	Pelecotoma fennica (Payk., 1799)	2		ss	*3
Coleoptera	Rhipiphoridae	Ripidius quadriceps Ab., 1872	R		es	*3
Coleoptera	Rhynchitidae	Auletobius sanguisorbae (Schrank, 1798)	1		es	*3
Coleoptera	Rhynchitidae	Byctiscus betulae (Linnaeus, 1758)	*		mh	*3
Coleoptera	Rhynchitidae	Byctiscus populi (Linnaeus, 1758)	*		mh	*3
Coleoptera	Rhynchitidae	Caenorhinus mannerheimii (Hummel, 1823)	3		s	*3
Coleoptera	Rhynchitidae	Deporaus betulae (Linnaeus, 1758)	*		h	*3
Coleoptera	Rhynchitidae	Involvulus caeruleus (DeGeer, 1775)	V		s	*3
Coleoptera	Rhynchitidae	Involvulus cupreus (Linnaeus, 1758)	*		mh	*3
Coleoptera	Rhynchitidae	Involvulus pubescens (Fabricius, 1775)	2		ss	*3
Coleoptera	Rhynchitidae	Lasiorhynchites cavifrons (Gyllenhal, 1833)	*		mh	*3
Coleoptera	Rhynchitidae	Lasiorhynchites coeruleocephalus (Schaller, 1783)	V		s	*3
Coleoptera	Rhynchitidae	Lasiorhynchites olivaceus (Gyllenhal, 1833)	*		s	*3
Coleoptera	Rhynchitidae	Lasiorhynchites sericeus (Herbst, 1797)	*		s	*3
Coleoptera	Rhynchitidae	Mecorhis aethiops (Bach, 1854)	3		ss	*3
Coleoptera	Rhynchitidae	Neocoenorrhinus germanicus (Herbst, 1797)	*		h	*3
Coleoptera	Rhynchitidae	Neocoenorrhinus interpunctatus (Stephens, 1831)	*		s	*3
Coleoptera	Rhynchitidae	Neocoenorrhinus minutus (Herbst, 1797)	*		mh	*3
Coleoptera	Rhynchitidae	Neocoenorrhinus pauxillus (Germar, 1824)	*		h	*3
Coleoptera	Rhynchitidae	Rhynchaenus xylostei Clairville, 1798	G		s	*3
Coleoptera	Rhynchitidae	Rhynchites auratus (Scopoli, 1763)	*		mh	*3
Coleoptera	Rhynchitidae	Rhynchites bacchus (Linnaeus, 1758)	G		s	*3
Coleoptera	Rhynchitidae	Tatianaerhynchites aequatus (Linnaeus, 1767)	*		h	*3
Coleoptera	Rhynchitidae	Temnocerus coeruleus (Fabricius, 1798)	*		mh	*3
Coleoptera	Rhynchitidae	Temnocerus longiceps (Thomson, 1888)	*		mh	*3
Coleoptera	Rhynchitidae	Temnocerus nanus (Paykull, 1792)	*		h	*3
Coleoptera	Salpingidae	Colposis mutilatus (Beck, 1817)	1		es	*3
Coleoptera	Salpingidae	Lissodema cursor (Gyll., 1813)	*		h	*3
Coleoptera	Salpingidae	Lissodema denticolle (Gyll., 1813)	*		h	*3
Coleoptera	Salpingidae	Rabocerus foveolatus (Ljungh, 1823)	*		s	*3
Coleoptera	Salpingidae	Rabocerus gabrieli (Gerh., 1901)	*		s	*3
Coleoptera	Salpingidae	Salpingus aeneus (Ol., 1790)	R		es	*3
Coleoptera	Salpingidae	Salpingus planirostris (F., 1787)	*		sh	*3
Coleoptera	Salpingidae	Salpingus ruficollis (L., 1761)	*		h	*3
Coleoptera	Salpingidae	Sphaeriestes aeratus (Muls., 1859)	D		ss	*3
Coleoptera	Salpingidae	Sphaeriestes bimaculatus (Gyll., 1810)	R		es	*3
Coleoptera	Salpingidae	Sphaeriestes castaneus (Panz., 1796)	*		h	*3
Coleoptera	Salpingidae	Sphaeriestes reyi (Ab., 1874)	D		ss	*3
Coleoptera	Salpingidae	Sphaeriestes stockmanni (Biström, 1977)	D		ss	*3
Coleoptera	Salpingidae	Vincenzellus ruficollis (Panz., 1794)	*		h	*3
Coleoptera	Scarabaeidae	Acanthobodilus immundus (Creutzer, 1799)	0	1957	ex	*3
Coleoptera	Scarabaeidae	Acrossus depressus (Kugelann, 1792)	*		sh	*3
Coleoptera	Scarabaeidae	Acrossus luridus (Fabricius, 1775)	*		mh	*3
Coleoptera	Scarabaeidae	Acrossus rufipes (Linnaeus, 1758)	*		sh	*3
Coleoptera	Scarabaeidae	Aegialia arenaria (Fabricius, 1787)	*		mh	*3
Coleoptera	Scarabaeidae	Alocoderus hydrochaeris (Fabricius, 1798)	0	1959	ex	*3
Coleoptera	Scarabaeidae	Amidorus obscurus (Fabricius, 1792)	*		h	*3
Coleoptera	Scarabaeidae	Ammoecius brevis Erichson, 1848	1		ss	*3
Coleoptera	Scarabaeidae	Amphimallon assimile (Herbst, 1790)	2		ss	*3
Coleoptera	Scarabaeidae	Amphimallon atrum (Herbst, 1790)	2		ss	*3
Coleoptera	Scarabaeidae	Amphimallon burmeisteri Brenske, 1886	R		es	*3
Coleoptera	Scarabaeidae	Amphimallon fallenii (Gyllenhal, 1817)	0	1913	ex	*3
Coleoptera	Scarabaeidae	Amphimallon majale (Razoumowsky, 1789)	R		es	*3
Coleoptera	Scarabaeidae	Amphimallon ruficorne (Fabricius, 1775)	2		ss	*3
Coleoptera	Scarabaeidae	Amphimallon solstitiale (Linnaeus, 1758)	*		sh	*3
Coleoptera	Scarabaeidae	Anisoplia erichsoni Reitter, 1889	1		ss	*3
Coleoptera	Scarabaeidae	Anisoplia villosa (Goeze, 1777)	2		s	*3
Coleoptera	Scarabaeidae	Anomala dubia (Scopoli, 1763)	*		mh	*3
Coleoptera	Scarabaeidae	Anoxia villosa (Fabricius, 1781)	V		mh	*3
Coleoptera	Scarabaeidae	Aphodius cardinalis Reitter, 1892	*		mh	*3
Coleoptera	Scarabaeidae	Aphodius coniugatus (Panzer, 1795)	0	1910	ex	*3
Coleoptera	Scarabaeidae	Aphodius fimetarius (Linnaeus, 1758)	*		sh	*3
Coleoptera	Scarabaeidae	Aphodius foetidus (Herbst, 1783)	1		ss	*3
Coleoptera	Scarabaeidae	Biralus satellitius (Herbst, 1789)	R		es	*3
Coleoptera	Scarabaeidae	Bisnius cephalotes (Grav., 1802)	*		mh	*3
Coleoptera	Scarabaeidae	Bisnius fimetarius (Grav., 1802)	*		sh	*3
Coleoptera	Scarabaeidae	Bisnius nigriventris (Thoms., 1867)	*		mh	*3
Coleoptera	Scarabaeidae	Bisnius nitidulus (Grav., 1802)	V		mh	*3
Coleoptera	Scarabaeidae	Bisnius parcus (Sharp, 1874)	*		h	*3
Coleoptera	Scarabaeidae	Bisnius pseudoparcus pseudoparcus (Brunne, 1976)	*		mh	*3
Coleoptera	Scarabaeidae	Bisnius puella (Nordm., 1837)	*		s	*3
Coleoptera	Scarabaeidae	Bisnius scribae (Fauv., 1867)	D		ss	*3
Coleoptera	Scarabaeidae	Bisnius sordidus (Grav., 1802)	*		sh	*3
Coleoptera	Scarabaeidae	Bisnius sparsus (Lucas, 1846)	*		s	*3
Coleoptera	Scarabaeidae	Bisnius spermophili (Ganglb., 1897)	*		s	*3
Coleoptera	Scarabaeidae	Bisnius subuliformis (Grav., 1802)	*		h	*3
Coleoptera	Scarabaeidae	Bodiloides ictericus (Laicharting, 1781)	3		mh	*3
Coleoptera	Scarabaeidae	Bodilopsis rufa (Moll, 1782)	*		sh	*3
Coleoptera	Scarabaeidae	Bodilopsis sordida (Fabricius, 1775)	V		mh	*3
Coleoptera	Scarabaeidae	Caccobius schreberi (Linnaeus, 1767)	0	1976	ex	*3

Order	Family	Species	K	L	P	S
Coleoptera	Scarabaeidae	Calamosternus granarius (Linnaeus, 1767)	*		sh	*3
Coleoptera	Scarabaeidae	Cetonia aurata (Linnaeus, 1758)	*		h	*3
Coleoptera	Scarabaeidae	Chaetopteroplia segetum (Herbst, 1783)	*		h	*3
Coleoptera	Scarabaeidae	Chilothorax conspurcatus (Linnaeus, 1758)	*		s	*3
Coleoptera	Scarabaeidae	Chilothorax distinctus (O.F. Müller, 1776)	*		sh	*3
Coleoptera	Scarabaeidae	Chilothorax melanostictus (W.L.E. Schmidt, 1840)	0	1965	ex	*3
Coleoptera	Scarabaeidae	Chilothorax paykulli (Bedel, 1908)	*		h	*3
Coleoptera	Scarabaeidae	Chilothorax pictus (Sturm, 1805)	1		ss	*3
Coleoptera	Scarabaeidae	Colobopterus erraticus (Linnaeus, 1758)	*		sh	*3
Coleoptera	Scarabaeidae	Compsapoderus erythropterus (Gmelin, 1790)	0	1950	ex	*3
Coleoptera	Scarabaeidae	Coprimorphus scrutator (Herbst, 1789)	D		?	*3
Coleoptera	Scarabaeidae	Copris lunaris (Linnaeus, 1758)	2		s	*3
Coleoptera	Scarabaeidae	Diastictus vulneratus (Sturm, 1805)	2		ss	*3
Coleoptera	Scarabaeidae	Esymus merdarius (Fabricius, 1775)	1		ss	*3
Coleoptera	Scarabaeidae	Esymus pusillus (Herbst, 1789)	*		sh	*3
Coleoptera	Scarabaeidae	Eudolus quadriguttatus (Herbst, 1783)	0	1953	ex	*3
Coleoptera	Scarabaeidae	Euheptaulacus sus (Herbst, 1783)	1		es	*3
Coleoptera	Scarabaeidae	Euheptaulacus villosus (Gyllenhal, 1806)	2		ss	*3
Coleoptera	Scarabaeidae	Euoniticellus fulvus (Goeze, 1777)	R		es	*3
Coleoptera	Scarabaeidae	Euonthophagus gibbosus (Scriba, 1790)	0	1887	ex	*3
Coleoptera	Scarabaeidae	Euorodalus coenosus (Panzer, 1798)	*		mh	*3
Coleoptera	Scarabaeidae	Euorodalus paracoenosus (Balthasar & Hrubant, 1960)	2		ss	*3
Coleoptera	Scarabaeidae	Eupleurus subterraneus (Linnaeus, 1758)	*		mh	*3
Coleoptera	Scarabaeidae	Gnorimus nobilis (Linnaeus, 1758)	3		s	*3
Coleoptera	Scarabaeidae	Gnorimus variabilis (Linnaeus, 1758)	1		ss	*3
Coleoptera	Scarabaeidae	Gymnopleurus geoffroyi (Fuesslin, 1775)	0	1950	ex	*3
Coleoptera	Scarabaeidae	Gymnopleurus mopsus (Pallas, 1781)	0	1924	ex	*3
Coleoptera	Scarabaeidae	Heptaulacus testudinarius (Fabricius, 1775)	R		es	*3
Coleoptera	Scarabaeidae	Holochelus aequinoctialis (Herbst, 1790)	0	1947	ex	*3
Coleoptera	Scarabaeidae	Hoplia argentea (Poda, 1761)	*		mh	*3
Coleoptera	Scarabaeidae	Hoplia graminicola (Fabricius, 1792)	3		s	*3
Coleoptera	Scarabaeidae	Hoplia hungarica Burmeister, 1844	1		es	*3
Coleoptera	Scarabaeidae	Hoplia philanthus (Fuesslin, 1775)	*		h	*3
Coleoptera	Scarabaeidae	Hoplia praticola Duftschmid, 1805	2		s	*3
Coleoptera	Scarabaeidae	Labarrus lividus (Olivier, 1789)	0	1927	ex	*3
Coleoptera	Scarabaeidae	Limarus maculatus (Sturm, 1800)	*		mh	*3
Coleoptera	Scarabaeidae	Limarus zenkeri (Germar, 1813)	*		mh	*3
Coleoptera	Scarabaeidae	Liothorax niger (Illiger, 1798)	1		ss	*3
Coleoptera	Scarabaeidae	Liothorax plagiatus (Linnaeus, 1767)	*		s	*3
Coleoptera	Scarabaeidae	Maladera holosericea (Scopoli, 1772)	V		s	*3
Coleoptera	Scarabaeidae	Melinopterus consputus (Creutzer, 1799)	2		ss	*3
Coleoptera	Scarabaeidae	Melinopterus prodromus (Brahm, 1790)	*		sh	*3
Coleoptera	Scarabaeidae	Melinopterus punctatosulcatus (Sturm, 1805)	2		ss	*3
Coleoptera	Scarabaeidae	Melinopterus reyi (Reitter, 1892)	R		es	*3
Coleoptera	Scarabaeidae	Melinopterus sphacelatus (Panzer, 1798)	*		sh	*3
Coleoptera	Scarabaeidae	Melolontha hippocastani Fabricius, 1801	*		mh	*3
Coleoptera	Scarabaeidae	Melolontha melolontha (Linnaeus, 1758)	*		h	*3
Coleoptera	Scarabaeidae	Melolontha pectoralis Megerle, 1812	1		es	*3
Coleoptera	Scarabaeidae	Neagolius montivagus (Erichson, 1848)	0	1955	ex	*3
Coleoptera	Scarabaeidae	Nialus varians (Duftschmid, 1805)	1		es	*3
Coleoptera	Scarabaeidae	Nimbus contaminatus (Herbst, 1783)	*		sh	*3
Coleoptera	Scarabaeidae	Nimbus obliteratus (Panzer, 1823)	2		ss	*3
Coleoptera	Scarabaeidae	Ochodaeus chrysomeloides (Schrank, 1781)	1		ss	*3
Coleoptera	Scarabaeidae	Omaloplia nigromarginata (Herbst, 1786)	3		s	*3
Coleoptera	Scarabaeidae	Omaloplia ruricola (Fabricius, 1775)	3		s	*3
Coleoptera	Scarabaeidae	Onthophagus baraudi Nicolas, 1964	R		es	*3
Coleoptera	Scarabaeidae	Onthophagus coenobita (Herbst, 1783)	*		sh	*3
Coleoptera	Scarabaeidae	Onthophagus fracticornis (Preyssler, 1790)	*		sh	*3
Coleoptera	Scarabaeidae	Onthophagus furcatus (Fabricius, 1781)	0	1975	ex	*3
Coleoptera	Scarabaeidae	Onthophagus illyricus (Scopoli, 1763)	2		ss	*3
Coleoptera	Scarabaeidae	Onthophagus joannae Goljan, 1953	*		sh	*3
Coleoptera	Scarabaeidae	Onthophagus lemur (Fabricius, 1781)	1		ss	*3
Coleoptera	Scarabaeidae	Onthophagus medius (Kugelann, 1792)	3		s	*3
Coleoptera	Scarabaeidae	Onthophagus nuchicornis (Linnaeus, 1758)	*		mh	*3
Coleoptera	Scarabaeidae	Onthophagus ovatus (Linnaeus, 1767)	*		sh	*3
Coleoptera	Scarabaeidae	Onthophagus semicornis (Panzer, 1798)	3		ss	*3
Coleoptera	Scarabaeidae	Onthophagus similis (Scriba, 1790)	*		sh	*3
Coleoptera	Scarabaeidae	Onthophagus taurus (Schreber, 1759)	*		mh	*3
Coleoptera	Scarabaeidae	Onthophagus vacca (Linnaeus, 1767)	0	1987	ex	*3
Coleoptera	Scarabaeidae	Onthophagus verticicornis (Laicharting, 1781)	*		mh	*3
Coleoptera	Scarabaeidae	Onthophagus vitulus (Fabricius, 1777)	0	1987	ex	*3
Coleoptera	Scarabaeidae	Oromus alpinus (Scopoli, 1763)	*		s	*3
Coleoptera	Scarabaeidae	Oryctes nasicornis (Linnaeus, 1758)	*		h	*3
Coleoptera	Scarabaeidae	Osmoderma barnabita (Motschulsky, 1845)	2		s	*3
Coleoptera	Scarabaeidae	Osmoderma eremita (Scopoli, 1763)	2		s	*3
Coleoptera	Scarabaeidae	Otophorus haemorrhoidalis (Linnaeus, 1758)	*		sh	*3
Coleoptera	Scarabaeidae	Oxyomus sylvestris (Scopoli, 1763)	*		h	*3
Coleoptera	Scarabaeidae	Oxythyrea funesta (Poda, 1761)	*		s	*3
Coleoptera	Scarabaeidae	Parammoecius corvinus (Erichson, 1848)	*		h	*3
Coleoptera	Scarabaeidae	Parammoecius gibbus (Germar, 1816)	*		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Scarabaeidae	Phalacronothus biguttatus (Germar, 1824)	3		s	*3
Coleoptera	Scarabaeidae	Phalacronothus quadrimaculatus (Linnaeus, 1760)	1		ss	*3
Coleoptera	Scarabaeidae	Phyllopertha horticola (Linnaeus, 1758)	*		sh	*3
Coleoptera	Scarabaeidae	Planolinoides borealis (Gyllenhal, 1827)	*		s	*3
Coleoptera	Scarabaeidae	Planolinus fasciatus (Olivier, 1789)	*		h	*3
Coleoptera	Scarabaeidae	Pleurophorus caesus (Panzer, 1796)	*		h	*3
Coleoptera	Scarabaeidae	Polyphylla fullo (Linnaeus, 1758)	3		s	*3
Coleoptera	Scarabaeidae	Protaetia cuprea (Fabricius, 1775)	*		h	*3
Coleoptera	Scarabaeidae	Protaetia fieberi (Kraatz, 1880)	1		ss	*3
Coleoptera	Scarabaeidae	Protaetia marmorata (Fabricius, 1792)	V		s	*3
Coleoptera	Scarabaeidae	Protaetia speciosissima (Scopoli, 1786)	V		s	*3
Coleoptera	Scarabaeidae	Psammodius asper (Fabricius, 1775)	*		mh	*3
Coleoptera	Scarabaeidae	Psammoporus mimicus Pittino, 2006	1		es	*3
Coleoptera	Scarabaeidae	Psammoporus sabuleti (Panzer, 1797)	0	1922	ex	*3
Coleoptera	Scarabaeidae	Pubinus tomentosus (O.F. Müller, 1776)	R		es	*3
Coleoptera	Scarabaeidae	Rhizotrogus aestivus (Olivier, 1789)	*		mh	*3
Coleoptera	Scarabaeidae	Rhizotrogus cicatricosus Mulsant, 1842	2		ss	*3
Coleoptera	Scarabaeidae	Rhizotrogus maculicollis Villa, 1833	R		es	*3
Coleoptera	Scarabaeidae	Rhizotrogus marginipes Mulsant, 1842	1		ss	*3
Coleoptera	Scarabaeidae	Rhodaphodius foetens (Fabricius, 1787)	*		mh	*3
Coleoptera	Scarabaeidae	Rhysothorax rufus (Fabricius, 1792)	1		es	*3
Coleoptera	Scarabaeidae	Rhyssemus germanus (Linnaeus, 1767)	D		?	*3
Coleoptera	Scarabaeidae	Rhyssemus puncticollis Brown, 1929	D		?	*3
Coleoptera	Scarabaeidae	Serica brunnea (Linnaeus, 1758)	*		sh	*3
Coleoptera	Scarabaeidae	Sigorus porcus (Fabricius, 1792)	3		ss	*3
Coleoptera	Scarabaeidae	Sisyphus schaefferi (Linnaeus, 1758)	2		s	*3
Coleoptera	Scarabaeidae	Teuchestes fossor (Linnaeus, 1758)	*		sh	*3
Coleoptera	Scarabaeidae	Trichius fasciatus (Linnaeus, 1758)	*		h	*3
Coleoptera	Scarabaeidae	Trichius gallicus Dejean, 1821	*		mh	*3
Coleoptera	Scarabaeidae	Trichius sexualis Bedel, 1906	*		s	*3
Coleoptera	Scarabaeidae	Trichonotulus scrofa (Fabricius, 1787)	3		s	*3
Coleoptera	Scarabaeidae	Tropinota hirta (Poda, 1761)	3		s	*3
Coleoptera	Scarabaeidae	Valgus hemipterus (Linnaeus, 1758)	*		mh	*3
Coleoptera	Scarabaeidae	Volinus sticticus (Panzer, 1798)	*		sh	*3
Coleoptera	Scarabaeidae	Agoliinus nemoralis (Erichson, 1848)	*		s	*3
Coleoptera	Scarabaeidae	Agoliinus piceus (Gyllenhal, 1808)	R		es	*3
Coleoptera	Scarabaeidae	Agoliinus satyrus (Reitter, 1892)	R		es	*3
Coleoptera	Scarabaeidae	Agolius abdominalis (Bonelli, 1812)	*		s	*3
Coleoptera	Scarabaeidae	Agrilinus ater (De Geer, 1774)	*		sh	*3
Coleoptera	Scarabaeidae	Agrilinus convexus (Erichson, 1848)	*		mh	*3
Coleoptera	Scirtidae	Cyphon coarctatus Payk., 1799	*		sh	*3
Coleoptera	Scirtidae	Cyphon hilaris Nyholm, 1944	G		s	*3
Coleoptera	Scirtidae	Cyphon kongsbergensis Munst., 1924	G		s	*3
Coleoptera	Scirtidae	Cyphon laevipennis Tourn., 1868	*		h	*3
Coleoptera	Scirtidae	Cyphon ochraceus Steph., 1830	D		mh	*3
Coleoptera	Scirtidae	Cyphon padi (L., 1758)	*		sh	*3
Coleoptera	Scirtidae	Cyphon palustris Thoms., 1855	*		h	*3
Coleoptera	Scirtidae	Cyphon pubescens (F., 1792)	*		h	*3
Coleoptera	Scirtidae	Cyphon punctipennis Sharp, 1873	G		s	*3
Coleoptera	Scirtidae	Cyphon putonii Bris., 1863	D		?	*3
Coleoptera	Scirtidae	Cyphon ruficeps Tourn., 1868	G		mh	*3
Coleoptera	Scirtidae	Cyphon variabilis (Thunb., 1787)	*		mh	*3
Coleoptera	Scirtidae	Elodes elongata Tourn., 1868	G		s	*3
Coleoptera	Scirtidae	Elodes johni Klausn., 1975	G		s	*3
Coleoptera	Scirtidae	Elodes minuta (L., 1767)	*		h	*3
Coleoptera	Scirtidae	Elodes pseudominuta (Klausn., 1971)	D		?	*3
Coleoptera	Scirtidae	Elodes tricuspis Nyholm, 1985	G		s	*3
Coleoptera	Scirtidae	Hydrocyphon deflexicollis (P.W.J. Müller, 1821)	G		s	*3
Coleoptera	Scirtidae	Microcara testacea (L., 1767)	*		h	*3
Coleoptera	Scirtidae	Odeles gredleri (Kiesw., 1863)	D		?	*3
Coleoptera	Scirtidae	Odeles hausmanni (Gredl., 1857)	G		ss	*3
Coleoptera	Scirtidae	Odeles marginata (F., 1798)	*		mh	*3
Coleoptera	Scirtidae	Prionocyphon serricornis (P.W.J. Müller, 1821)	G		s	*3
Coleoptera	Scirtidae	Scirtes hemisphaericus (L., 1767)	*		h	*3
Coleoptera	Scirtidae	Scirtes orbicularis (Panz., 1793)	D		s	*3
Coleoptera	Scolytidae	Carphoborus minimus (F., 1801)	2		es	*3
Coleoptera	Scolytidae	Cryphalus abietis (Ratz., 1837)	*		sh	*3
Coleoptera	Scolytidae	Cryphalus intermedius Ferrari, 1867	D		?	*3
Coleoptera	Scolytidae	Cryphalus piceae (Ratz., 1837)	*		mh	*3
Coleoptera	Scolytidae	Cryphalus saltuarius Weise, 1891	D		s	*3
Coleoptera	Scolytidae	Crypturgus cinereus (Hbst., 1793)	*		mh	*3
Coleoptera	Scolytidae	Crypturgus hispidulus Thoms., 1870	*		mh	*3
Coleoptera	Scolytidae	Crypturgus pusillus (Gyll., 1813)	*		sh	*3
Coleoptera	Scolytidae	Crypturgus subcribrosus Eggers, 1933	D		?	*3
Coleoptera	Scolytidae	Cyclorhipidion bodoanum (Rtt., 1913)	nb		nb	*3
Coleoptera	Scolytidae	Dendroctonus micans (Kug., 1794)	*		s	*3
Coleoptera	Scolytidae	Dryocoetes alni (Georg, 1856)	*		s	*3
Coleoptera	Scolytidae	Dryocoetes autographus (Ratz., 1837)	*		sh	*3
Coleoptera	Scolytidae	Dryocoetes hectographus Rtt., 1913	*		ss	*3
Coleoptera	Scolytidae	Dryocoetes villosus (F., 1792)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Scolytidae	Ernoporicus caucasicus Lindem., 1876	*		s	*3
Coleoptera	Scolytidae	Ernoporicus fagi (F., 1778)	*		sh	*3
Coleoptera	Scolytidae	Ernoporus tiliae (Panz., 1793)	*		mh	*3
Coleoptera	Scolytidae	Gnathotrichus materiarius (Fitch, 1858)	nb		nb	*3
Coleoptera	Scolytidae	Hylastes angustatus (Hbst., 1793)	*		mh	*3
Coleoptera	Scolytidae	Hylastes ater (Payk., 1800)	*		mh	*3
Coleoptera	Scolytidae	Hylastes attenuatus Er., 1836	*		mh	*3
Coleoptera	Scolytidae	Hylastes brunneus Er., 1836	*		mh	*3
Coleoptera	Scolytidae	Hylastes cunicularius Er., 1836	*		sh	*3
Coleoptera	Scolytidae	Hylastes linearis Er., 1836	3		ss	*3
Coleoptera	Scolytidae	Hylastes opacus Er., 1836	*		s	*3
Coleoptera	Scolytidae	Hylastinus obscurus (Marsh., 1802)	*		s	*3
Coleoptera	Scolytidae	Hylesinus crenatus (F., 1787)	*		mh	*3
Coleoptera	Scolytidae	Hylesinus oleiperda (F., 1792)	*		mh	*3
Coleoptera	Scolytidae	Hylurgops glabratus (Zett., 1828)	*		s	*3
Coleoptera	Scolytidae	Hylurgops palliatus (Gyll., 1813)	*		sh	*3
Coleoptera	Scolytidae	Hylurgus ligniperda (F., 1792)	*		mh	*3
Coleoptera	Scolytidae	Ips acuminatus (Gyll., 1827)	*		mh	*3
Coleoptera	Scolytidae	Ips amitinus (Eichh., 1871)	*		s	*3
Coleoptera	Scolytidae	Ips cembrae (Heer, 1836)	*		mh	*3
Coleoptera	Scolytidae	Ips duplicatus (Sahlb., 1836)	D		?	*3
Coleoptera	Scolytidae	Ips sexdentatus (Boerner, 1767)	*		mh	*3
Coleoptera	Scolytidae	Ips typographus (L., 1758)	*		sh	*3
Coleoptera	Scolytidae	Kissophagus hederae (Schmitt, 1843)	*		s	*3
Coleoptera	Scolytidae	Leperisinus fraxini (Panz., 1799)	*		sh	*3
Coleoptera	Scolytidae	Leperisinus orni (Fuchs, 1906)	D		mh	*3
Coleoptera	Scolytidae	Lymantor aceris Lindem., 1875	R		es	*3
Coleoptera	Scolytidae	Lymantor coryli (Perris, 1855)	*		mh	*3
Coleoptera	Scolytidae	Orthotomicus laricis (F., 1792)	*		h	*3
Coleoptera	Scolytidae	Orthotomicus longicollis (Gyll., 1827)	R		es	*3
Coleoptera	Scolytidae	Orthotomicus proximus (Eichh., 1867)	*		s	*3
Coleoptera	Scolytidae	Orthotomicus suturalis (Gyll., 1827)	*		s	*3
Coleoptera	Scolytidae	Phloeophthorus rhododactylus (Marsh., 1802)	*		h	*3
Coleoptera	Scolytidae	Phloeosinus aubei (Perris, 1855)	*		s	*3
Coleoptera	Scolytidae	Phloeosinus thujae (Perris, 1855)	*		mh	*3
Coleoptera	Scolytidae	Phloeotribus caucasicus Rtt., 1891	R		es	*3
Coleoptera	Scolytidae	Phthorophloeus spinulosus Rey, 1883	*		s	*3
Coleoptera	Scolytidae	Pityogenes bidentatus (Hbst., 1783)	*		mh	*3
Coleoptera	Scolytidae	Pityogenes chalcographus (L., 1761)	*		sh	*3
Coleoptera	Scolytidae	Pityogenes conjunctus (Rtt., 1887)	3		s	*3
Coleoptera	Scolytidae	Pityogenes irkutensis Eggers, 1910	R		es	*3
Coleoptera	Scolytidae	Pityogenes quadridens (Hartig, 1834)	*		mh	*3
Coleoptera	Scolytidae	Pityogenes trepanatus (Nördl., 1848)	*		ss	*3
Coleoptera	Scolytidae	Pityokteines curvidens (Germ., 1824)	*		mh	*3
Coleoptera	Scolytidae	Pityokteines spinidens (Rtt., 1894)	*		s	*3
Coleoptera	Scolytidae	Pityokteines vorontzowi (Jacobs., 1895)	*		s	*3
Coleoptera	Scolytidae	Pityophthorus carniolicus Wichm., 1910	R		es	*3
Coleoptera	Scolytidae	Pityophthorus exsculptus (Ratz., 1837)	*		ss	*3
Coleoptera	Scolytidae	Pityophthorus glabratus Eichh., 1879	*		mh	*3
Coleoptera	Scolytidae	Pityophthorus henscheli Seitn., 1887	*		ss	*3
Coleoptera	Scolytidae	Pityophthorus knoteki Rtt., 1898	*		ss	*3
Coleoptera	Scolytidae	Pityophthorus lichtensteini (Ratz., 1837)	*		mh	*3
Coleoptera	Scolytidae	Pityophthorus micrographus (L. 1758)	0	1946	ex	*3
Coleoptera	Scolytidae	Pityophthorus pityographus (Ratz., 1837)	*		sh	*3
Coleoptera	Scolytidae	Pityophthorus pubescens (Marsh., 1802)	*		mh	*3
Coleoptera	Scolytidae	Polygraphus grandiclava Thoms., 1886	*		mh	*3
Coleoptera	Scolytidae	Polygraphus poligraphus (L., 1758)	*		h	*3
Coleoptera	Scolytidae	Polygraphus subopacus Thoms., 1871	D		?	*3
Coleoptera	Scolytidae	Pteleobius kraatzi Eichh., 1864	3		ss	*3
Coleoptera	Scolytidae	Pteleobius vittatus (F., 1787)	V		s	*3
Coleoptera	Scolytidae	Scolytus carpini (Ratz., 1837)	*		mh	*3
Coleoptera	Scolytidae	Scolytus ensifer Eichh., 1881	R		es	*3
Coleoptera	Scolytidae	Scolytus intricatus (Ratz., 1837)	*		h	*3
Coleoptera	Scolytidae	Scolytus kirschii Skal., 1876	R		es	*3
Coleoptera	Scolytidae	Scolytus laevis Chap., 1873	3		s	*3
Coleoptera	Scolytidae	Scolytus mali (Bechst., 1805)	*		h	*3
Coleoptera	Scolytidae	Scolytus multistriatus (Marsh., 1802)	*		mh	*3
Coleoptera	Scolytidae	Scolytus pygmaeus (F., 1787)	*		mh	*3
Coleoptera	Scolytidae	Scolytus ratzeburgi Janson, 1856	*		mh	*3
Coleoptera	Scolytidae	Scolytus rugulosus (Müll., 1818)	*		h	*3
Coleoptera	Scolytidae	Scolytus scolytus (F., 1775)	3		s	*3
Coleoptera	Scolytidae	Taphrorychus bicolor (Hbst., 1793)	*		sh	*3
Coleoptera	Scolytidae	Taphrorychus villifrons (Duf., 1843)	*		s	*3
Coleoptera	Scolytidae	Thamnurgus kaltenbachii (Bach, 1849)	*		ss	*3
Coleoptera	Scolytidae	Thamnurgus varipes Eichh., 1878	R		es	*3
Coleoptera	Scolytidae	Tomicus minor (Hartig, 1834)	*		mh	*3
Coleoptera	Scolytidae	Tomicus piniperda (L., 1758)	*		h	*3
Coleoptera	Scolytidae	Trypophloeus asperatus (Gyll., 1813)	*		mh	*3
Coleoptera	Scolytidae	Trypophloeus granulatus (Ratz., 1837)	R		es	*3
Coleoptera	Scolytidae	Trypophloeus rybinskii Rtt., 1894	R		es	*3

Order	Family	Species	K	L	P	S
Coleoptera	Scolytidae	Xyleborus alni Niijima, 1909	nb		nb	*3
Coleoptera	Scolytidae	Xyleborus cryptographus (Ratz., 1837)	*		s	*3
Coleoptera	Scolytidae	Xyleborus dispar (F., 1792)	*		h	*3
Coleoptera	Scolytidae	Xyleborus dryographus (Ratz., 1837)	*		mh	*3
Coleoptera	Scolytidae	Xyleborus eurygraphus (Ratz., 1837)	0	1950	ex	*3
Coleoptera	Scolytidae	Xyleborus germanus Blandf., 1894	nb		nb	*3
Coleoptera	Scolytidae	Xyleborus monographus (F., 1792)	*		mh	*3
Coleoptera	Scolytidae	Xyleborus pfeili (Ratz., 1837)	2		es	*3
Coleoptera	Scolytidae	Xyleborus saxeseni (Ratz., 1837)	*		sh	*3
Coleoptera	Scolytidae	Xylechinus pilosus (Ratz., 1837)	*		s	*3
Coleoptera	Scolytidae	Xylocleptes bispinus (Duft., 1825)	*		h	*3
Coleoptera	Scolytidae	Xyloterus domesticus (L., 1758)	*		mh	*3
Coleoptera	Scolytidae	Xyloterus laevis (Eggers, 1939)	R		es	*3
Coleoptera	Scolytidae	Xyloterus lineatus (Ol., 1795)	*		sh	*3
Coleoptera	Scolytidae	Xyloterus signatus (F., 1787)	*		h	*3
Coleoptera	Scraptiidae	Anaspis bohemica Schilsky, 1899	R		es	*3
Coleoptera	Scraptiidae	Anaspis brunnipes Muls., 1856	V		mh	*3
Coleoptera	Scraptiidae	Anaspis costai Em., 1876	D		s	*3
Coleoptera	Scraptiidae	Anaspis flava (L., 1758)	*		sh	*3
Coleoptera	Scraptiidae	Anaspis frontalis (L., 1758)	*		sh	*3
Coleoptera	Scraptiidae	Anaspis garneysi Fowl., 1889	D		ss	*3
Coleoptera	Scraptiidae	Anaspis humeralis (F., 1775)	*		h	*3
Coleoptera	Scraptiidae	Anaspis kiesenwetteri Em., 1826	D		ss	*3
Coleoptera	Scraptiidae	Anaspis kriegei Erm., 1963	0	1950	ex	*3
Coleoptera	Scraptiidae	Anaspis labiata Costa, 1854	D		?	*3
Coleoptera	Scraptiidae	Anaspis lurida Steph., 1832	*		s	*3
Coleoptera	Scraptiidae	Anaspis maculata (Fourcr., 1785)	*		sh	*3
Coleoptera	Scraptiidae	Anaspis melanostoma Costa, 1854	*		s	*3
Coleoptera	Scraptiidae	Anaspis mulsanti Bris., 1859	R		es	*3
Coleoptera	Scraptiidae	Anaspis palpalis (Gerh., 1876)	D		s	*3
Coleoptera	Scraptiidae	Anaspis pulicaria Costa, 1854	D		s	*3
Coleoptera	Scraptiidae	Anaspis pyrenaea Fairm. & Bris., 1859	D		?	*3
Coleoptera	Scraptiidae	Anaspis quadrimaculata Gyll., 1817	D		ss	*3
Coleoptera	Scraptiidae	Anaspis regimbarti Schilsky, 1895	*		h	*3
Coleoptera	Scraptiidae	Anaspis ruficollis (F., 1792)	*		s	*3
Coleoptera	Scraptiidae	Anaspis rufilabris (Gyll., 1827)	*		sh	*3
Coleoptera	Scraptiidae	Anaspis septentrionalis Champion, 1891	D		s	*3
Coleoptera	Scraptiidae	Anaspis thoracica (L., 1758)	*		sh	*3
Coleoptera	Scraptiidae	Anaspis varians Muls., 1856	G		s	*3
Coleoptera	Scraptiidae	Cyrtanaspis phalerata (Germ., 1831)	G		ss	*3
Coleoptera	Scraptiidae	Pentaria badia (Rosh., 1847)	0	1900	ex	*3
Coleoptera	Scraptiidae	Scraptia fuscula Müll., 1821	*		mh	*3
Coleoptera	Scydmaenidae	Cephennium carnicum Rtt., 1881	*		ss	*3
Coleoptera	Scydmaenidae	Cephennium gallicum Ganglb., 1899	*		h	*3
Coleoptera	Scydmaenidae	Cephennium majus Rtt., 1881	R		es	*3
Coleoptera	Scydmaenidae	Cephennium thoracicum Müll. & Kunze, 1822	*		h	*3
Coleoptera	Scydmaenidae	Euconnus campestris (Schaufuss, 1866)	nb		nb	*3
Coleoptera	Scydmaenidae	Euconnus carinthiacus Ganglb., 1896	R		es	*3
Coleoptera	Scydmaenidae	Euconnus chrysocomus (Saulcy, 1864)	0	1950	ex	*3
Coleoptera	Scydmaenidae	Euconnus claviger (Müll. & Kunze, 1822)	G		s	*3
Coleoptera	Scydmaenidae	Euconnus denticornis (Müll. & Kunze, 1822)	G		s	*3
Coleoptera	Scydmaenidae	Euconnus fimetarius (Chaud., 1845)	*		mh	*3
Coleoptera	Scydmaenidae	Euconnus hirticollis (Ill., 1798)	*		h	*3
Coleoptera	Scydmaenidae	Euconnus maklinii (Mannh., 1844)	G		s	*3
Coleoptera	Scydmaenidae	Euconnus motschulskii (Motsch., 1837)	0	1922	ex	*3
Coleoptera	Scydmaenidae	Euconnus oblongus (Sturm, 1838)	R		es	*3
Coleoptera	Scydmaenidae	Euconnus pragensis (Mach., 1923)	G		s	*3
Coleoptera	Scydmaenidae	Euconnus pubicollis (Müll. & Kunze, 1822)	*		mh	*3
Coleoptera	Scydmaenidae	Euconnus rutilipennis (Müll. & Kunze, 1822)	G		s	*3
Coleoptera	Scydmaenidae	Euconnus styriacus (Grimm., 1841)	R		es	*3
Coleoptera	Scydmaenidae	Euconnus wetterhallii (Gyll., 1813)	G		s	*3
Coleoptera	Scydmaenidae	Euthiconus conicicollis (Fairm. & Lab., 1855)	2		ss	*3
Coleoptera	Scydmaenidae	Microscydmus minimus (Chaud., 1845)	*		mh	*3
Coleoptera	Scydmaenidae	Microscydmus nanus (Schaum, 1844)	*		h	*3
Coleoptera	Scydmaenidae	Neuraphes angulatus (Müll. & Kunze, 1822)	*		h	*3
Coleoptera	Scydmaenidae	Neuraphes carinatoides (Rtt., 1909)	*		h	*3
Coleoptera	Scydmaenidae	Neuraphes carinatus (Muls. & Rey, 1861)	R		es	*3
Coleoptera	Scydmaenidae	Neuraphes coecus Rtt., 1887	R		es	*3
Coleoptera	Scydmaenidae	Neuraphes coronatus J. Sahlb., 1881	R		es	*3
Coleoptera	Scydmaenidae	Neuraphes elongatulus (Müll. & Kunze, 1822)	*		sh	*3
Coleoptera	Scydmaenidae	Neuraphes parallelus (Chaud., 1845)	R		es	*3
Coleoptera	Scydmaenidae	Neuraphes plicicollis Rtt., 1879	*		h	*3
Coleoptera	Scydmaenidae	Neuraphes praeteritus Rye, 1872	*		s	*3
Coleoptera	Scydmaenidae	Neuraphes rubicundus (Schaum, 1841)	*		s	*3
Coleoptera	Scydmaenidae	Neuraphes ruthenus Mach., 1925	*		s	*3
Coleoptera	Scydmaenidae	Neuraphes talparum Lokay, 1920	V		s	*3
Coleoptera	Scydmaenidae	Scydmaenus hellwigii (Hbst., 1792)	G		s	*3
Coleoptera	Scydmaenidae	Scydmaenus perrisi Rtt., 1881	G		s	*3
Coleoptera	Scydmaenidae	Scydmaenus rufus Müll. & Kunze, 1822	*		s	*3
Coleoptera	Scydmaenidae	Scydmaenus tarsatus Müll. & Kunze, 1822	*		sh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Scydmaenidae	Scydmoraphes helvolus (Schaum, 1844)	*		h	*3
Coleoptera	Scydmaenidae	Scydmoraphes minutus (Chaud., 1845)	G		s	*3
Coleoptera	Scydmaenidae	Scydmoraphes sparshalli (Denny, 1825)	G		ss	*3
Coleoptera	Scydmaenidae	Stenichnus bicolor (Denny, 1825)	*		h	*3
Coleoptera	Scydmaenidae	Stenichnus collaris (Müll. & Kunze, 1822)	*		sh	*3
Coleoptera	Scydmaenidae	Stenichnus foveola Rey, 1888	1		ss	*3
Coleoptera	Scydmaenidae	Stenichnus godarti (Latr., 1806)	*		h	*3
Coleoptera	Scydmaenidae	Stenichnus poweri (Fowler, 1884)	1		es	*3
Coleoptera	Scydmaenidae	Stenichnus pusillus (Müll. & Kunze, 1822)	D		?	*3
Coleoptera	Scydmaenidae	Stenichnus scutellaris (Müll. & Kunze, 1822)	*		sh	*3
Coleoptera	Scydmaenidae	Stenichnus subseriatus Franz, 1960	*		h	*3
Coleoptera	Silphidae	Ablattaria laevigata (F., 1775)	2		ss	*3
Coleoptera	Silphidae	Aclypea opaca (L., 1758)	G		s	*3
Coleoptera	Silphidae	Aclypea undata (Müll., 1776)	G		ss	*3
Coleoptera	Silphidae	Arrhenopeplus tesserula Curt., 1828	*		s	*3
Coleoptera	Silphidae	Necrodes littoralis (L., 1758)	*		s	*3
Coleoptera	Silphidae	Nicrophorus fossor Er., 1837	*		mh	*3
Coleoptera	Silphidae	Nicrophorus germanicus (L., 1758)	1		es	*3
Coleoptera	Silphidae	Nicrophorus humator (Gled., 1767)	*		h	*3
Coleoptera	Silphidae	Nicrophorus investigator Zett., 1824	*		h	*3
Coleoptera	Silphidae	Nicrophorus sepultor Charp., 1825	D		s	*3
Coleoptera	Silphidae	Nicrophorus vespillo (L., 1758)	*		sh	*3
Coleoptera	Silphidae	Nicrophorus vespilloides Hbst., 1783	*		sh	*3
Coleoptera	Silphidae	Nicrophorus vestigator Herschel, 1807	*		s	*3
Coleoptera	Silphidae	Oiceoptoma thoracicum (L., 1758)	*		h	*3
Coleoptera	Silphidae	Phosphuga atrata (L., 1758)	*		sh	*3
Coleoptera	Silphidae	Silpha carinata Hbst., 1783	*		mh	*3
Coleoptera	Silphidae	Silpha obscura L., 1758	*		h	*3
Coleoptera	Silphidae	Silpha tristis Ill., 1798	*		sh	*3
Coleoptera	Silphidae	Silpha tyrolensis Laich., 1781	*		ss	*3
Coleoptera	Silphidae	Thanatophilus dispar (Hbst., 1793)	D		s	*3
Coleoptera	Silphidae	Thanatophilus rugosus (L., 1758)	*		h	*3
Coleoptera	Silphidae	Thanatophilus sinuatus (F., 1775)	*		sh	*3
Coleoptera	Silvanidae	Ahasverus advena (Waltl, 1834)	*		sh	*3
Coleoptera	Silvanidae	Airaphilus elongatus (Gyll., 1813)	G		s	*3
Coleoptera	Silvanidae	Dendrophagus crenatus (Payk., 1799)	3		s	*3
Coleoptera	Silvanidae	Oryzaephilus mercator (Fauv., 1889)	nb		nb	*3
Coleoptera	Silvanidae	Oryzaephilus surinamensis (L., 1758)	nb		nb	*3
Coleoptera	Silvanidae	Psammoecus bipunctatus (F., 1792)	*		h	*3
Coleoptera	Silvanidae	Silvanoprus fagi (Guer., 1844)	*		s	*3
Coleoptera	Silvanidae	Silvanus bidentatus (F., 1792)	*		h	*3
Coleoptera	Silvanidae	Silvanus unidentatus (F., 1792)	*		h	*3
Coleoptera	Silvanidae	Uleiota planata (L., 1761)	*		sh	*3
Coleoptera	Spercheidae	Spercheus emarginatus (Schaller, 1783)	*		s	*1
Coleoptera	Sphaeritidae	Sphaerites glabratus (F., 1792)	*		s	*3
Coleoptera	Sphaeriusidae	Sphaerius acaroides Waltl, 1838	G		s	*3
Coleoptera	Sphaerosomatidae	Sphaerosoma globosum (Sturm, 1807)	*		ss	*3
Coleoptera	Sphaerosomatidae	Sphaerosoma piliferum (Müll., 1821)	*		s	*3
Coleoptera	Sphaerosomatidae	Sphaerosoma pilosum (Panz., 1793)	*		s	*3
Coleoptera	Staphylinidae	Achenium depressum (Grav., 1802)	D		ss	*3
Coleoptera	Staphylinidae	Achenium humile (Nicol., 1822)	D		s	*3
Coleoptera	Staphylinidae	Acidota crenata (F., 1793)	*		h	*3
Coleoptera	Staphylinidae	Acidota cruentata (Mannh., 1830)	*		h	*3
Coleoptera	Staphylinidae	Acrolocha amabilis (Heer, 1841)	*		s	*3
Coleoptera	Staphylinidae	Acrolocha minuta (Ol., 1795)	*		mh	*3
Coleoptera	Staphylinidae	Acrolocha pliginskii (Bernh., 1912)	*		s	*3
Coleoptera	Staphylinidae	Acrolocha sulcula (Steph., 1834)	*		s	*3
Coleoptera	Staphylinidae	Acrotona aterrima (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Acrotona benicki (Allen, 1940)	*		s	*3
Coleoptera	Staphylinidae	Acrotona convergens (Strand, 1958)	D		?	*3
Coleoptera	Staphylinidae	Acrotona exigua (Er., 1837)	*		s	*3
Coleoptera	Staphylinidae	Acrotona muscorum (Bris., 1860)	*		mh	*3
Coleoptera	Staphylinidae	Acrotona obfuscata (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Acrotona parens (Muls. & Rey, 1852)	*		mh	*3
Coleoptera	Staphylinidae	Acrotona parvula (Mannh., 1830)	*		mh	*3
Coleoptera	Staphylinidae	Acrotona pseudotenera (Cam., 1933)	nb		nb	*3
Coleoptera	Staphylinidae	Acrotona pygmaea (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Acrotona sylvicola (Kr., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Acrotona troglodytes (Motsch., 1858)	D		s	*3
Coleoptera	Staphylinidae	Acrulia inflata (Gyll., 1813)	*		mh	*3
Coleoptera	Staphylinidae	Acylophorus glaberrimus (Hbst., 1784)	G		ss	*3
Coleoptera	Staphylinidae	Acylophorus wagenschieberi Kiesw., 1850	2		ss	*3
Coleoptera	Staphylinidae	Agaricochara latissima (Steph., 1832)	*		h	*3
Coleoptera	Staphylinidae	Alaobia scapularis (Sahlb., 1831)	*		mh	*3
Coleoptera	Staphylinidae	Aleochara bellonata Krasa, 1922	R		es	*3
Coleoptera	Staphylinidae	Aleochara bilineata Gyll., 1810	*		sh	*3
Coleoptera	Staphylinidae	Aleochara binotata Kr., 1856	*		mh	*3
Coleoptera	Staphylinidae	Aleochara bipustulata (L., 1760)	*		sh	*3
Coleoptera	Staphylinidae	Aleochara brevipennis Grav., 1806	*		h	*3
Coleoptera	Staphylinidae	Aleochara cuniculorum Kr., 1858	*		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Aleochara curtula (Goeze, 1777)	*		sh	*3
Coleoptera	Staphylinidae	Aleochara discipennis Muls. & Rey, 1853	0	1935	ex	*3
Coleoptera	Staphylinidae	Aleochara erythroptera Grav., 1806	*		s	*3
Coleoptera	Staphylinidae	Aleochara fumata Grav., 1802	*		s	*3
Coleoptera	Staphylinidae	Aleochara funebris Woll., 1864	*		mh	*3
Coleoptera	Staphylinidae	Aleochara ganglbaueri Bernh., 1901	R		es	*3
Coleoptera	Staphylinidae	Aleochara grisea Kr., 1856	*		ss	*3
Coleoptera	Staphylinidae	Aleochara haemoptera Kr., 1858	*		mh	*3
Coleoptera	Staphylinidae	Aleochara helvetica Likovsky, 1982	R		es	*3
Coleoptera	Staphylinidae	Aleochara inconspicua Aubé, 1850	*		mh	*3
Coleoptera	Staphylinidae	Aleochara intricata Mannh., 1830	*		mh	*3
Coleoptera	Staphylinidae	Aleochara irmgardis Vogt, 1954	*		s	*3
Coleoptera	Staphylinidae	Aleochara kamila Likovsky, 1984	D		s	*3
Coleoptera	Staphylinidae	Aleochara laevigata Gyll., 1810	*		h	*3
Coleoptera	Staphylinidae	Aleochara lanuginosa Grav., 1802	*		h	*3
Coleoptera	Staphylinidae	Aleochara lata Grav., 1802	*		s	*3
Coleoptera	Staphylinidae	Aleochara laticornis Kr., 1856	D		ss	*3
Coleoptera	Staphylinidae	Aleochara leonhardi Likovsky, 1982	*		s	*3
Coleoptera	Staphylinidae	Aleochara lygaea Kr., 1862	D		s	*3
Coleoptera	Staphylinidae	Aleochara maculata Bris., 1863	D		ss	*3
Coleoptera	Staphylinidae	Aleochara major Fairm., 1858	*		s	*3
Coleoptera	Staphylinidae	Aleochara marmotae Deville, 1927	R		es	*3
Coleoptera	Staphylinidae	Aleochara moerens Gyll., 1827	D		s	*3
Coleoptera	Staphylinidae	Aleochara moesta Grav., 1802	*		s	*3
Coleoptera	Staphylinidae	Aleochara obscurella Grav., 1806	*		ss	*3
Coleoptera	Staphylinidae	Aleochara peeziana Lohse, 1961	R		es	*3
Coleoptera	Staphylinidae	Aleochara penicillata Bernh., 1943	R		es	*3
Coleoptera	Staphylinidae	Aleochara peusi Wagn., 1949	R		es	*3
Coleoptera	Staphylinidae	Aleochara puberula Klug, 1832	R		es	*3
Coleoptera	Staphylinidae	Aleochara punctatella Motsch., 1858	*		ss	*3
Coleoptera	Staphylinidae	Aleochara ruficornis Grav., 1802	*		h	*3
Coleoptera	Staphylinidae	Aleochara sanguinea (L., 1758)	*		mh	*3
Coleoptera	Staphylinidae	Aleochara signata J. Sahlb., 1876	R		es	*3
Coleoptera	Staphylinidae	Aleochara spadicea (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Aleochara sparsa Heer, 1839	*		sh	*3
Coleoptera	Staphylinidae	Aleochara spissicornis Er., 1839	D		ss	*3
Coleoptera	Staphylinidae	Aleochara stichai Likovsky, 1965	*		h	*3
Coleoptera	Staphylinidae	Aleochara tristis Grav., 1806	*		mh	*3
Coleoptera	Staphylinidae	Aleochara vagepunctata Kr., 1856	0	1922	ex	*3
Coleoptera	Staphylinidae	Aleochara verna Say, 1833	D		s	*3
Coleoptera	Staphylinidae	Aleochara villosa Mannh., 1830	*		s	*3
Coleoptera	Staphylinidae	Alevonota egregia (Rye, 1876)	*		s	*3
Coleoptera	Staphylinidae	Alevonota elegantula (Bris., 1863)	D		?	*3
Coleoptera	Staphylinidae	Alevonota gracilenta (Er., 1839)	D		s	*3
Coleoptera	Staphylinidae	Alevonota rufotestacea (Kr., 1856)	D		s	*3
Coleoptera	Staphylinidae	Alianta incana (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Aloconota appulsa (Scriba, 1868)	G		ss	*3
Coleoptera	Staphylinidae	Aloconota cambrica (Woll., 1855)	*		s	*3
Coleoptera	Staphylinidae	Aloconota coulsoni (Last, 1952)	D		ss	*3
Coleoptera	Staphylinidae	Aloconota currax (Kr., 1856)	V		s	*3
Coleoptera	Staphylinidae	Aloconota debilicornis (Er., 1839)	0	1929	ex	*3
Coleoptera	Staphylinidae	Aloconota eichhoffi (Scriba, 1868)	D		ss	*3
Coleoptera	Staphylinidae	Aloconota ernestinae (Bernh., 1898)	0	1952	ex	*3
Coleoptera	Staphylinidae	Aloconota gregaria (Er., 1839)	*		sh	*3
Coleoptera	Staphylinidae	Aloconota insecta (Thoms., 1856)	*		h	*3
Coleoptera	Staphylinidae	Aloconota languida (Er., 1837)	D		s	*3
Coleoptera	Staphylinidae	Aloconota longicollis (Muls. & Rey, 1852)	*		mh	*3
Coleoptera	Staphylinidae	Aloconota mihoki (Bernh., 1913)	D		s	*3
Coleoptera	Staphylinidae	Aloconota pfefferi (Roub., 1929)	G		ss	*3
Coleoptera	Staphylinidae	Aloconota planifrons (Wtrh., 1863)	*		mh	*3
Coleoptera	Staphylinidae	Aloconota subgrandis (Brundin, 1954)	D		ss	*3
Coleoptera	Staphylinidae	Aloconota sulcifrons (Steph., 1832)	*		h	*3
Coleoptera	Staphylinidae	Aloconota ultima (Benick & Lohse, 1959)	D		s	*3
Coleoptera	Staphylinidae	Amarochara bonnairei (Fauv., 1865)	D		ss	*3
Coleoptera	Staphylinidae	Amarochara forticornis (Lac., 1835)	D		s	*3
Coleoptera	Staphylinidae	Amarochara umbrosa (Er., 1837)	D		s	*3
Coleoptera	Staphylinidae	Amidobia talpa (Heer, 1841)	*		mh	*3
Coleoptera	Staphylinidae	Amischa analis (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Amischa bifoveolata (Mannh., 1830)	*		h	*3
Coleoptera	Staphylinidae	Amischa decipiens (Shp., 1869)	*		mh	*3
Coleoptera	Staphylinidae	Amischa filum Muls. & Rey, 1870	R		es	*3
Coleoptera	Staphylinidae	Amischa forcipata Muls. & Rey, 1873	*		s	*3
Coleoptera	Staphylinidae	Amischa nigrofusca (Steph., 1832)	*		sh	*3
Coleoptera	Staphylinidae	Amphichroum canaliculatum (Er., 1840)	*		s	*3
Coleoptera	Staphylinidae	Amphichroum hirtellum (Heer, 1839)	R		es	*3
Coleoptera	Staphylinidae	Anaulacaspis nigra (Grav., 1802)	V		s	*3
Coleoptera	Staphylinidae	Anomognathus cuspidatus (Er., 1839)	*		h	*3
Coleoptera	Staphylinidae	Anotylus bernhaueri (Ganglb., 1898)	R		es	*3
Coleoptera	Staphylinidae	Anotylus clypeonitens (Pand., 1867)	*		s	*3
Coleoptera	Staphylinidae	Anotylus complanatus (Er., 1839)	*		h	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Anotylus fairmairei (Pand., 1867)	R		es	*3
Coleoptera	Staphylinidae	Anotylus hamatus (Fairm. & Lab., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Anotylus hammondi Schülke, 2009	D		ss	*3
Coleoptera	Staphylinidae	Anotylus insecatus (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Anotylus inustus (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Anotylus maritimus Thoms., 1861	3		ss	*3
Coleoptera	Staphylinidae	Anotylus mendus Herman, 1970	D		?	*3
Coleoptera	Staphylinidae	Anotylus mutator (Lohse, 1963)	*		mh	*3
Coleoptera	Staphylinidae	Anotylus nitidulus (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Anotylus politus (Er., 1840)	D		?	*3
Coleoptera	Staphylinidae	Anotylus pumilus (Er., 1839)	0	1955	ex	*3
Coleoptera	Staphylinidae	Anotylus rugifrons (Hochh., 1849)	V		s	*3
Coleoptera	Staphylinidae	Anotylus rugosus (F., 1775)	*		sh	*3
Coleoptera	Staphylinidae	Anotylus saulcyi (Pand., 1867)	*		s	*3
Coleoptera	Staphylinidae	Anotylus sculpturatus (Grav., 1806)	*		sh	*3
Coleoptera	Staphylinidae	Anotylus tetracarinatus (Block, 1799)	*		sh	*3
Coleoptera	Staphylinidae	Anthobium atrocephalum (Gyll., 1827)	*		sh	*3
Coleoptera	Staphylinidae	Anthobium fusculum (Er., 1839)	G		ss	*3
Coleoptera	Staphylinidae	Anthobium melanocephalum (Ill., 1794)	*		mh	*3
Coleoptera	Staphylinidae	Anthobium unicolor (Marsh., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Anthophagus aeneicollis Fauv., 1873	0	1934	ex	*3
Coleoptera	Staphylinidae	Anthophagus alpestris Heer, 1839	*		s	*3
Coleoptera	Staphylinidae	Anthophagus alpinus (Payk., 1790)	*		ss	*3
Coleoptera	Staphylinidae	Anthophagus angusticollis (Mannh., 1830)	*		mh	*3
Coleoptera	Staphylinidae	Anthophagus bicornis (Block, 1799)	*		s	*3
Coleoptera	Staphylinidae	Anthophagus caraboides (L., 1758)	*		mh	*3
Coleoptera	Staphylinidae	Anthophagus fallax Kiesw., 1848	*		s	*3
Coleoptera	Staphylinidae	Anthophagus forticornis Kiesw., 1846	*		ss	*3
Coleoptera	Staphylinidae	Anthophagus melanocephalus Heer, 1839	R		es	*3
Coleoptera	Staphylinidae	Anthophagus omalinus arrowi Koch, 1933	*		ss	*3
Coleoptera	Staphylinidae	Anthophagus praeustus Müll., 1821	*		s	*3
Coleoptera	Staphylinidae	Anthophagus rotundicollis Heer, 1839	*		ss	*3
Coleoptera	Staphylinidae	Anthophagus scutellaris Er., 1840	R		es	*3
Coleoptera	Staphylinidae	Anthophagus spectabilis Heer, 1839	G		ss	*3
Coleoptera	Staphylinidae	Apimela macella (Er., 1839)	3		s	*3
Coleoptera	Staphylinidae	Apimela mulsanti (Ganglb., 1895)	G		ss	*3
Coleoptera	Staphylinidae	Aploderus caelatus (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Aploderus caesus (Er., 1839)	G		ss	*3
Coleoptera	Staphylinidae	Arena tabida (Kiesw., 1850)	R		es	*3
Coleoptera	Staphylinidae	Arpedium brachypterum (Grav., 1802)	3		s	*3
Coleoptera	Staphylinidae	Arpedium quadrum (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Astenus gracilis (Payk., 1789)	*		mh	*3
Coleoptera	Staphylinidae	Astenus immaculatus Steph., 1833	V		mh	*3
Coleoptera	Staphylinidae	Astenus lyonessius Joy, 1908	V		mh	*3
Coleoptera	Staphylinidae	Astenus procerus (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Astenus pulchellus (Heer, 1839)	*		h	*3
Coleoptera	Staphylinidae	Astenus serpentinus Motsch., 1858	*		ss	*3
Coleoptera	Staphylinidae	Astrapaeus ulmi (Rossi, 1790)	D		?	*3
Coleoptera	Staphylinidae	Atanygnathus terminalis (Er., 1839)	1		ss	*3
Coleoptera	Staphylinidae	Atheta acutiventris Vogel, 2003	D		ss	*3
Coleoptera	Staphylinidae	Atheta aegra (Heer, 1841)	*		s	*3
Coleoptera	Staphylinidae	Atheta aeneicollis (Shp., 1869)	*		h	*3
Coleoptera	Staphylinidae	Atheta aeneipennis (Thoms., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Atheta allocera Epph., 1893	D		ss	*3
Coleoptera	Staphylinidae	Atheta alpigrada (Fauv., 1900)	0	1955	ex	*3
Coleoptera	Staphylinidae	Atheta amicorum Lohse, 1973	D		?	*3
Coleoptera	Staphylinidae	Atheta amicula (Steph., 1832)	*		sh	*3
Coleoptera	Staphylinidae	Atheta ammanni Benick, 1970	R		es	*3
Coleoptera	Staphylinidae	Atheta amplicollis (Muls. & Rey, 1874)	*		mh	*3
Coleoptera	Staphylinidae	Atheta aquatica (Thoms., 1952)	*		h	*3
Coleoptera	Staphylinidae	Atheta aquatilis (Thoms., 1867)	*		mh	*3
Coleoptera	Staphylinidae	Atheta arctica (Thoms., 1856)	V		s	*3
Coleoptera	Staphylinidae	Atheta atomaria (Kr., 1856)	D		ss	*3
Coleoptera	Staphylinidae	Atheta atramentaria (Gyll., 1810)	*		h	*3
Coleoptera	Staphylinidae	Atheta atricolor (Shp., 1869)	*		s	*3
Coleoptera	Staphylinidae	Atheta autumnalis (Er., 1839)	D		s	*3
Coleoptera	Staphylinidae	Atheta balcanicola Scheerp., 1968	D		ss	*3
Coleoptera	Staphylinidae	Atheta basicornis (Muls. & Rey, 1852)	V		s	*3
Coleoptera	Staphylinidae	Atheta benickiella Brundin, 1948	*		mh	*3
Coleoptera	Staphylinidae	Atheta boehmei Linke, 1934	D		ss	*3
Coleoptera	Staphylinidae	Atheta boletophila (Thoms., 1856)	G		ss	*3
Coleoptera	Staphylinidae	Atheta boreella Brundin, 1948	*		s	*3
Coleoptera	Staphylinidae	Atheta botildae Brundin, 1954	G		ss	*3
Coleoptera	Staphylinidae	Atheta britanniae Bernh. & Scheerp., 1926	*		h	*3
Coleoptera	Staphylinidae	Atheta britteni Joy, 1913	D		ss	*3
Coleoptera	Staphylinidae	Atheta brunneipennis (Thoms., 1852)	*		s	*3
Coleoptera	Staphylinidae	Atheta cadaverina (Bris., 1860)	*		mh	*3
Coleoptera	Staphylinidae	Atheta canescens (Shp., 1869)	*		h	*3
Coleoptera	Staphylinidae	Atheta castanoptera (Mannh., 1830)	*		h	*3
Coleoptera	Staphylinidae	Atheta cauta (Er., 1837)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Atheta celata (Er., 1837)	*		sh	*3
Coleoptera	Staphylinidae	Atheta cinnamoptera (Thoms., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Atheta clientula (Er., 1839)	D		s	*3
Coleoptera	Staphylinidae	Atheta contristata (Kr., 1856)	D		s	*3
Coleoptera	Staphylinidae	Atheta coriaria (Kr., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Atheta corvina (Thoms., 1856)	*		h	*3
Coleoptera	Staphylinidae	Atheta crassicornis (F., 1793)	*		sh	*3
Coleoptera	Staphylinidae	Atheta cribrata (Kr., 1856)	*		s	*3
Coleoptera	Staphylinidae	Atheta cribripennis J. Sahlb., 1890	0	1950	ex	*3
Coleoptera	Staphylinidae	Atheta dadopora Thoms., 1867	*		h	*3
Coleoptera	Staphylinidae	Atheta debilis (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Atheta debiloides Strand, 1962	D		?	*3
Coleoptera	Staphylinidae	Atheta deformis (Kr., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Atheta depressicollis (Fauv., 1875)	0	1950	ex	*3
Coleoptera	Staphylinidae	Atheta difficilis (Brisout, 1860)	D		ss	*3
Coleoptera	Staphylinidae	Atheta dilaticornis (Kr., 1856)	D		ss	*3
Coleoptera	Staphylinidae	Atheta diversa (Shp., 1869)	*		s	*3
Coleoptera	Staphylinidae	Atheta divisa (Märk., 1845)	*		mh	*3
Coleoptera	Staphylinidae	Atheta ebenina (Muls. & Rey, 1873)	*		s	*3
Coleoptera	Staphylinidae	Atheta elongatula (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Atheta episcopalis Bernh., 1910	*		mh	*3
Coleoptera	Staphylinidae	Atheta ermischi Benick, 1934	D		ss	*3
Coleoptera	Staphylinidae	Atheta europaea Lik., 1984	*		s	*3
Coleoptera	Staphylinidae	Atheta euryptera (Steph., 1832)	*		mh	*3
Coleoptera	Staphylinidae	Atheta excellens (Kr., 1856)	D		s	*3
Coleoptera	Staphylinidae	Atheta excelsa Bernh., 1911	0	1955	ex	*3
Coleoptera	Staphylinidae	Atheta excisa (Epph., 1883)	R		es	*3
Coleoptera	Staphylinidae	Atheta excisoides Benick, 1974	D		?	*3
Coleoptera	Staphylinidae	Atheta fallaciosa (Shp., 1869)	G		s	*3
Coleoptera	Staphylinidae	Atheta fimorum (Bris., 1860)	D		ss	*3
Coleoptera	Staphylinidae	Atheta foveicollis (Kr., 1856)	D		?	*3
Coleoptera	Staphylinidae	Atheta fungi (Grav., 1806)	*		sh	*3
Coleoptera	Staphylinidae	Atheta fungicola (Thoms., 1852)	*		s	*3
Coleoptera	Staphylinidae	Atheta fungivora (Thoms., 1867)	*		mh	*3
Coleoptera	Staphylinidae	Atheta fussi Bernh., 1908	D		ss	*3
Coleoptera	Staphylinidae	Atheta gagatina (Baudi, 1848)	*		h	*3
Coleoptera	Staphylinidae	Atheta ganglbaueri Brundin, 1948	*		s	*3
Coleoptera	Staphylinidae	Atheta glabricula Thoms., 1867	*		s	*3
Coleoptera	Staphylinidae	Atheta graminicola (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Atheta grisea (Thoms., 1852)	G		s	*3
Coleoptera	Staphylinidae	Atheta gyllenhalii (Thoms., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Atheta hansseni Strand, 1946	*		s	*3
Coleoptera	Staphylinidae	Atheta harwoodi Will., 1930	*		h	*3
Coleoptera	Staphylinidae	Atheta heymesi Hubth., 1913	D		s	*3
Coleoptera	Staphylinidae	Atheta hybrida (Shp., 1869)	*		mh	*3
Coleoptera	Staphylinidae	Atheta hygrobia (Thoms., 1856)	*		s	*3
Coleoptera	Staphylinidae	Atheta hygrotopora (Kr., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Atheta hypnorum (Kiesw., 1850)	*		h	*3
Coleoptera	Staphylinidae	Atheta incognita (Shp., 1869)	*		h	*3
Coleoptera	Staphylinidae	Atheta incommoda Brundin, 1848	R		es	*3
Coleoptera	Staphylinidae	Atheta indubia (Shp., 1869)	*		s	*3
Coleoptera	Staphylinidae	Atheta inquinula (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Atheta intermedia (Thoms., 1852)	*		mh	*3
Coleoptera	Staphylinidae	Atheta ischnocera (Thoms., 1870)	*		mh	*3
Coleoptera	Staphylinidae	Atheta kaiseriana Brundin, 1944	D		ss	*3
Coleoptera	Staphylinidae	Atheta kerstensi Benick, 1968	D		ss	*3
Coleoptera	Staphylinidae	Atheta knabli Benick, 1938	D		ss	*3
Coleoptera	Staphylinidae	Atheta kochi Roub., 1937	R		es	*3
Coleoptera	Staphylinidae	Atheta laevana (Muls. & Rey, 1852)	*		h	*3
Coleoptera	Staphylinidae	Atheta laevicauda J. Sahlb., 1876	*		ss	*3
Coleoptera	Staphylinidae	Atheta laticeps (Thoms., 1856)	G		ss	*3
Coleoptera	Staphylinidae	Atheta laticollis (Steph., 1832)	*		h	*3
Coleoptera	Staphylinidae	Atheta lativentris (Kr., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Atheta leonhardi Bernh., 1911	*		ss	*3
Coleoptera	Staphylinidae	Atheta liliputana (Bris., 1860)	D		s	*3
Coleoptera	Staphylinidae	Atheta liturata (Steph., 1832)	G		ss	*3
Coleoptera	Staphylinidae	Atheta longicornis (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Atheta lucida Dod., 1922	D		ss	*3
Coleoptera	Staphylinidae	Atheta luridipennis (Mannh., 1830)	*		mh	*3
Coleoptera	Staphylinidae	Atheta luteipes (Er., 1837)	V		mh	*3
Coleoptera	Staphylinidae	Atheta macrocera (Thoms., 1856)	*		s	*3
Coleoptera	Staphylinidae	Atheta malleiformis G. Benick, 1975	D		ss	*3
Coleoptera	Staphylinidae	Atheta malleus Joy, 1913	*		h	*3
Coleoptera	Staphylinidae	Atheta marcida (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Atheta melanaria (Mannh., 1830)	D		s	*3
Coleoptera	Staphylinidae	Atheta melanocera (Thoms., 1856)	*		h	*3
Coleoptera	Staphylinidae	Atheta membranata G. Benick, 1974	D		ss	*3
Coleoptera	Staphylinidae	Atheta minuscula (Bris., 1860)	D		ss	*3
Coleoptera	Staphylinidae	Atheta monacha Bernh., 1898	R		es	*3
Coleoptera	Staphylinidae	Atheta monticola (Thoms., 1852)	*		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Atheta mortuorum Thoms., 1867	*		s	*3
Coleoptera	Staphylinidae	Atheta negligens (Muls. & Rey, 1873)	*		h	*3
Coleoptera	Staphylinidae	Atheta nidicola (Joh., 1914)	*		s	*3
Coleoptera	Staphylinidae	Atheta nigra (Kr., 1856)	*		sh	*3
Coleoptera	Staphylinidae	Atheta nigripes (Thoms., 1856)	*		sh	*3
Coleoptera	Staphylinidae	Atheta nigritula (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Atheta nitella Brundin, 1948	D		ss	*3
Coleoptera	Staphylinidae	Atheta oblita (Er., 1839)	*		h	*3
Coleoptera	Staphylinidae	Atheta obtusangula Joy, 1913	G		s	*3
Coleoptera	Staphylinidae	Atheta occulta (Er., 1839)	*		mh	*3
Coleoptera	Staphylinidae	Atheta orbata (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Atheta orphana (Er., 1837)	*		mh	*3
Coleoptera	Staphylinidae	Atheta palleola (Er., 1837)	*		s	*3
Coleoptera	Staphylinidae	Atheta pallidicornis (Thoms., 1856)	*		h	*3
Coleoptera	Staphylinidae	Atheta palustris (Kiesw., 1844)	*		sh	*3
Coleoptera	Staphylinidae	Atheta pandionis Scheerp., 1958	D		ss	*3
Coleoptera	Staphylinidae	Atheta paracrassicornis Brundin, 1954	*		s	*3
Coleoptera	Staphylinidae	Atheta parapicipennis Brundin, 1954	R		es	*3
Coleoptera	Staphylinidae	Atheta parca (Muls. & Rey, 1873)	*		mh	*3
Coleoptera	Staphylinidae	Atheta pervagata Benick, 1975	D		s	*3
Coleoptera	Staphylinidae	Atheta pfaundleri Benick, 1940	D		?	*3
Coleoptera	Staphylinidae	Atheta picipes (Thoms., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Atheta pilicornis (Thoms., 1852)	*		mh	*3
Coleoptera	Staphylinidae	Atheta pittionii Scheerp., 1950	*		h	*3
Coleoptera	Staphylinidae	Atheta procera (Kr., 1856)	D		s	*3
Coleoptera	Staphylinidae	Atheta pseudoelongatula Bernh., 1907	nb		nb	*3
Coleoptera	Staphylinidae	Atheta puberula (Shp., 1869)	D		ss	*3
Coleoptera	Staphylinidae	Atheta puncticollis Benick, 1938	*		s	*3
Coleoptera	Staphylinidae	Atheta putrida (Kr., 1856)	*		s	*3
Coleoptera	Staphylinidae	Atheta ravilla (Er., 1839)	*		h	*3
Coleoptera	Staphylinidae	Atheta reissi Benick, 1936	0	1950	ex	*3
Coleoptera	Staphylinidae	Atheta rhenana Benick, 1965	G		ss	*3
Coleoptera	Staphylinidae	Atheta ripicola Hanssen, 1932	G		s	*3
Coleoptera	Staphylinidae	Atheta rugulosa (Heer, 1839)	G		ss	*3
Coleoptera	Staphylinidae	Atheta scotica (Ell., 1909)	G		s	*3
Coleoptera	Staphylinidae	Atheta sequanica (Bris., 1860)	V		s	*3
Coleoptera	Staphylinidae	Atheta serrata Benick, 1938	D		s	*3
Coleoptera	Staphylinidae	Atheta setigera (Shp., 1869)	*		mh	*3
Coleoptera	Staphylinidae	Atheta sodalis (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Atheta sodermani Bernh., 1931	D		ss	*3
Coleoptera	Staphylinidae	Atheta sordidula (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Atheta sparreschneideri Munst., 1923	R		es	*3
Coleoptera	Staphylinidae	Atheta spatula (Fauv., 1875)	D		ss	*3
Coleoptera	Staphylinidae	Atheta speluncicollis Bernh., 1909	D		?	*3
Coleoptera	Staphylinidae	Atheta strandiella Brundin, 1954	*		s	*3
Coleoptera	Staphylinidae	Atheta subglabra (Shp., 1869)	*		s	*3
Coleoptera	Staphylinidae	Atheta subrugosa (Märk. & Kiesw., 1848)	D		?	*3
Coleoptera	Staphylinidae	Atheta subsinuata (Er., 1839)	D		s	*3
Coleoptera	Staphylinidae	Atheta subtilis (Scriba, 1866)	*		mh	*3
Coleoptera	Staphylinidae	Atheta taxiceroides Munst., 1932	D		?	*3
Coleoptera	Staphylinidae	Atheta terminalis (Grav., 1806)	*		s	*3
Coleoptera	Staphylinidae	Atheta testaceipes (Heer, 1839)	*		s	*3
Coleoptera	Staphylinidae	Atheta tibialis (Heer, 1839)	*		s	*3
Coleoptera	Staphylinidae	Atheta tmolosensis Bernh., 1940	G		s	*3
Coleoptera	Staphylinidae	Atheta transitoria Benick, 1940	D		ss	*3
Coleoptera	Staphylinidae	Atheta triangulum (Kr., 1856)	*		sh	*3
Coleoptera	Staphylinidae	Atheta tricholomatobia Sem., 2002	D		ss	*3
Coleoptera	Staphylinidae	Atheta trinotata (Kr., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Atheta vaga (Heer, 1839)	*		sh	*3
Coleoptera	Staphylinidae	Atheta varendorffiana Bernh.& Scheerp., 1926	3		ss	*3
Coleoptera	Staphylinidae	Atheta vestita (Grav., 1806)	*		ss	*3
Coleoptera	Staphylinidae	Atheta vilis (Er., 1837)	*		s	*3
Coleoptera	Staphylinidae	Atheta voeslauensis Bernh., 1944	*		s	*3
Coleoptera	Staphylinidae	Atheta volans (Scriba, 1859)	*		h	*3
Coleoptera	Staphylinidae	Atheta xanthopus (Thoms., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Atheta zosterae (Thoms., 1856)	*		mh	*3
Coleoptera	Staphylinidae	Atrecus affinis (Payk., 1789)	*		h	*3
Coleoptera	Staphylinidae	Atrecus longiceps (Fauv., 1873)	R		es	*3
Coleoptera	Staphylinidae	Atrecus pilicornis (Payk., 1790)	*		ss	*3
Coleoptera	Staphylinidae	Autalia impressa (Ol., 1795)	*		sh	*3
Coleoptera	Staphylinidae	Autalia longicornis Scheerp., 1947	*		h	*3
Coleoptera	Staphylinidae	Autalia puncticollis Shp., 1864	*		ss	*3
Coleoptera	Staphylinidae	Autalia rivularis (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Bellatheta fatrica Roub., 1928	R		es	*3
Coleoptera	Staphylinidae	Bledius agricultor Heer, 1841	3		s	*3
Coleoptera	Staphylinidae	Bledius atricapillus (Germ., 1825)	*		ss	*3
Coleoptera	Staphylinidae	Bledius baudii Fauv., 1872	D		s	*3
Coleoptera	Staphylinidae	Bledius bicornis (Germ., 1823)	3		ss	*3
Coleoptera	Staphylinidae	Bledius crassicollis Lac., 1835	V		s	*3
Coleoptera	Staphylinidae	Bledius cribricollis Heer, 1839	G		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Bledius defensus Fauv., 1872	G		s	*3
Coleoptera	Staphylinidae	Bledius denticollis Fauv., 1872	G		ss	*3
Coleoptera	Staphylinidae	Bledius diota Schdte., 1866	2		ss	*3
Coleoptera	Staphylinidae	Bledius dissimilis Er., 1840	V		s	*3
Coleoptera	Staphylinidae	Bledius erraticus Er., 1839	*		mh	*3
Coleoptera	Staphylinidae	Bledius femoralis (Gyll., 1827)	V		s	*3
Coleoptera	Staphylinidae	Bledius fergussoni Joy, 1912	*		ss	*3
Coleoptera	Staphylinidae	Bledius filipes Shp., 1911	G		ss	*3
Coleoptera	Staphylinidae	Bledius fontinalis Bernh., 1929	R		es	*3
Coleoptera	Staphylinidae	Bledius frisius Lohse, 1978	V		s	*3
Coleoptera	Staphylinidae	Bledius furcatus (Ol., 1811)	1		es	*3
Coleoptera	Staphylinidae	Bledius gallicus (Grav., 1806)	*		sh	*3
Coleoptera	Staphylinidae	Bledius littoralis Heer, 1839	G		ss	*3
Coleoptera	Staphylinidae	Bledius longulus Er., 1839	*		mh	*3
Coleoptera	Staphylinidae	Bledius nanus Er., 1840	V		mh	*3
Coleoptera	Staphylinidae	Bledius occidentalis Bondr., 1907	G		ss	*3
Coleoptera	Staphylinidae	Bledius opacus (Block, 1799)	*		sh	*3
Coleoptera	Staphylinidae	Bledius pallipes (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Bledius procerulus Er., 1840	3		s	*3
Coleoptera	Staphylinidae	Bledius pygmaeus Er., 1839	2		ss	*3
Coleoptera	Staphylinidae	Bledius secessus Bondr., 1912	0	1923	ex	*3
Coleoptera	Staphylinidae	Bledius spectabilis Kr., 1857	3		ss	*3
Coleoptera	Staphylinidae	Bledius strictus Fauv., 1872	G		ss	*3
Coleoptera	Staphylinidae	Bledius subniger Schneid., 1898	*		ss	*3
Coleoptera	Staphylinidae	Bledius subterraneus Er., 1839	*		h	*3
Coleoptera	Staphylinidae	Bledius talpa (Gyll., 1810)	1		es	*3
Coleoptera	Staphylinidae	Bledius terebrans Schdte., 1866	G		s	*3
Coleoptera	Staphylinidae	Bledius tibialis Heer, 1839	G		s	*3
Coleoptera	Staphylinidae	Bledius tricornis (Hbst., 1784)	*		s	*3
Coleoptera	Staphylinidae	Bledius unicornis (Germ., 1825)	1		es	*3
Coleoptera	Staphylinidae	Bledius vilis Maekl., 1878	R		es	*3
Coleoptera	Staphylinidae	Blepharhymenus breiti Scheerp., 1954	0	1935	ex	*3
Coleoptera	Staphylinidae	Bohemiellina flavipennis (Cameron, 1920)	nb		nb	*3
Coleoptera	Staphylinidae	Bolitobius castaneus (Steph., 1832)	*		h	*3
Coleoptera	Staphylinidae	Bolitobius cingulatus Mannh., 1830	*		h	*3
Coleoptera	Staphylinidae	Bolitochara bella Märk., 1844	*		mh	*3
Coleoptera	Staphylinidae	Bolitochara lucida (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Bolitochara mulsanti Shp., 1875	*		s	*3
Coleoptera	Staphylinidae	Bolitochara obliqua Er., 1837	*		sh	*3
Coleoptera	Staphylinidae	Bolitochara pulchra (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Bolitochara tecta Assing, 2014	*		h	*3
Coleoptera	Staphylinidae	Borboropora kraatzii Fuss, 1862	R		es	*3
Coleoptera	Staphylinidae	Boreaphilus henningianus Sahlb., 1832	R		es	*3
Coleoptera	Staphylinidae	Boreophilia eremita (Rye, 1866)	V		s	*3
Coleoptera	Staphylinidae	Boreophilia hercynica (Renk., 1936)	D		ss	*3
Coleoptera	Staphylinidae	Brachida exigua (Heer, 1839)	V		s	*3
Coleoptera	Staphylinidae	Brachyusa concolor (Er., 1839)	*		mh	*3
Coleoptera	Staphylinidae	Brundinia marina (Muls. & Rey, 1853)	*		s	*3
Coleoptera	Staphylinidae	Brundinia meridionalis (Muls. & Rey, 1853)	G		ss	*3
Coleoptera	Staphylinidae	Bryophacis crassicornis (Mäkl., 1847)	*		s	*3
Coleoptera	Staphylinidae	Bryophacis rufus (Er., 1839)	*		s	*3
Coleoptera	Staphylinidae	Bryophacis rugipennis Pand., 1869	0	1958	ex	*3
Coleoptera	Staphylinidae	Bryoporus cernuus (Grav., 1806)	*		s	*3
Coleoptera	Staphylinidae	Cafius xantholoma (Grav., 1806)	*		s	*3
Coleoptera	Staphylinidae	Callicerus obscurus Grav., 1802	*		h	*3
Coleoptera	Staphylinidae	Callicerus rigidicornis (Er., 1839)	*		s	*3
Coleoptera	Staphylinidae	Calodera aethiops (Grav., 1802)	D		?	*3
Coleoptera	Staphylinidae	Calodera cochlearis Assing, 1996	D		ss	*3
Coleoptera	Staphylinidae	Calodera nigrita Mannh., 1830	*		mh	*3
Coleoptera	Staphylinidae	Calodera protensa Mannh., 1830	*		s	*3
Coleoptera	Staphylinidae	Calodera riparia Er., 1837	D		?	*3
Coleoptera	Staphylinidae	Calodera rubens Er., 1837	G		ss	*3
Coleoptera	Staphylinidae	Calodera rufescens Kr., 1856	D		?	*3
Coleoptera	Staphylinidae	Calodera stiliformis Assing, 1996	D		ss	*3
Coleoptera	Staphylinidae	Calodera uliginosa Er., 1837	3		s	*3
Coleoptera	Staphylinidae	Carpelimus bilineatus Steph., 1834	*		h	*3
Coleoptera	Staphylinidae	Carpelimus corticinus (Grav., 1806)	*		sh	*3
Coleoptera	Staphylinidae	Carpelimus despectus (Baudi, 1870)	V		mh	*3
Coleoptera	Staphylinidae	Carpelimus elongatulus (Er., 1839)	*		sh	*3
Coleoptera	Staphylinidae	Carpelimus erichsoni (Sharp, 1871)	*		s	*3
Coleoptera	Staphylinidae	Carpelimus exiguus (Er., 1839)	G		ss	*3
Coleoptera	Staphylinidae	Carpelimus foveolatus (Sahlb., 1823)	V		s	*3
Coleoptera	Staphylinidae	Carpelimus fuliginosus (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Carpelimus ganglbaueri (Bernh., 1901)	2		ss	*3
Coleoptera	Staphylinidae	Carpelimus gracilis (Mannh., 1830)	*		h	*3
Coleoptera	Staphylinidae	Carpelimus gusarovi Gildenkov, 1997	nb		nb	*3
Coleoptera	Staphylinidae	Carpelimus halophilus (Kiesw., 1844)	3		ss	*3
Coleoptera	Staphylinidae	Carpelimus impressus (Boisd. & Lac., 1835)	*		h	*3
Coleoptera	Staphylinidae	Carpelimus lindrothi (Palm, 1943)	*		mh	*3
Coleoptera	Staphylinidae	Carpelimus manchuricus subtilicornis (Roub., 1946)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Carpelimus modestus (Casey, 1889)	*		mh	*3
Coleoptera	Staphylinidae	Carpelimus nitidus (Baudi, 1848)	G		s	*3
Coleoptera	Staphylinidae	Carpelimus obesus (Kiesw., 1844)	*		h	*3
Coleoptera	Staphylinidae	Carpelimus opacus (Baudi, 1848)	D		ss	*3
Coleoptera	Staphylinidae	Carpelimus punctatellus (Er., 1840)	V		s	*3
Coleoptera	Staphylinidae	Carpelimus pusillus (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Carpelimus rivularis (Motsch., 1860)	*		sh	*3
Coleoptera	Staphylinidae	Carpelimus schneideri (Ganglb., 1895)	2		ss	*3
Coleoptera	Staphylinidae	Carpelimus similis (Smet., 1967)	*		h	*3
Coleoptera	Staphylinidae	Carpelimus subtilis (Er., 1839)	V		s	*3
Coleoptera	Staphylinidae	Carpelimus zealandicus (Shp., 1900)	nb		nb	*3
Coleoptera	Staphylinidae	Carphacis striatus (Ol., 1795)	V		s	*3
Coleoptera	Staphylinidae	Cephalocousya nivicola (Thoms., 1871)	0	1939	ex	*3
Coleoptera	Staphylinidae	Cephennodes latus (Motsch., 1851)	0	1935	ex	*3
Coleoptera	Staphylinidae	Chanoma vorbringeri (Bernh., 1907)	0	1930	ex	*3
Coleoptera	Staphylinidae	Cilea exilis (Boh., 1848)	nb		nb	*3
Coleoptera	Staphylinidae	Cilea silphoides (L., 1767)	*		mh	*3
Coleoptera	Staphylinidae	Coenonica puncticollis Kr., 1857	nb		nb	*3
Coleoptera	Staphylinidae	Coprophilus pseudopiceus Gildenkov, 2015	G		ss	*3
Coleoptera	Staphylinidae	Coprophilus striatulus (F., 1793)	*		h	*3
Coleoptera	Staphylinidae	Coproporus immigrans Schülke, 2007	nb		nb	*3
Coleoptera	Staphylinidae	Cordalia obscura (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Coryphium angusticolle Steph., 1834	*		s	*3
Coleoptera	Staphylinidae	Cousya longitarsis (Thoms., 1867)	G		s	*3
Coleoptera	Staphylinidae	Cousya nigrata (Fairm. & Lab., 1854)	D		?	*3
Coleoptera	Staphylinidae	Crataraea suturalis (Mannh., 1830)	*		sh	*3
Coleoptera	Staphylinidae	Creophilus maxillosus (L., 1758)	*		h	*3
Coleoptera	Staphylinidae	Cypha apicalis (Bris., 1863)	*		ss	*3
Coleoptera	Staphylinidae	Cypha aprilis Rey, 1882	*		s	*3
Coleoptera	Staphylinidae	Cypha discoidea (Er., 1839)	*		mh	*3
Coleoptera	Staphylinidae	Cypha laeviuscula (Mannh., 1830)	*		mh	*3
Coleoptera	Staphylinidae	Cypha longicornis (Payk., 1800)	*		sh	*3
Coleoptera	Staphylinidae	Cypha ovulum (Heer, 1839)	D		ss	*3
Coleoptera	Staphylinidae	Cypha pirazzolii (Baudi, 1869)	0	1953	ex	*3
Coleoptera	Staphylinidae	Cypha pulicaria (Er., 1839)	*		mh	*3
Coleoptera	Staphylinidae	Cypha punctum (Motsch., 1857)	D		ss	*3
Coleoptera	Staphylinidae	Cypha seminulum (Er., 1839)	D		ss	*3
Coleoptera	Staphylinidae	Cypha suecica (Palm, 1935)	D		ss	*3
Coleoptera	Staphylinidae	Cypha tarsalis (Luze, 1902)	*		s	*3
Coleoptera	Staphylinidae	Cyphea curtula (Er., 1837)	*		mh	*3
Coleoptera	Staphylinidae	Dacrila fallax (Kr., 1856)	V		s	*3
Coleoptera	Staphylinidae	Dadobia immersa (Er., 1837)	*		mh	*3
Coleoptera	Staphylinidae	Dasycerus sulcatus Brongn., 1800	*		h	*3
Coleoptera	Staphylinidae	Dasygnypeta velata (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Deinopsis erosa (Steph., 1832)	V		mh	*3
Coleoptera	Staphylinidae	Deleaster dichrous (Grav., 1802)	V		mh	*3
Coleoptera	Staphylinidae	Deliphrosoma macrocephalum (Epph., 1873)	0	1949	ex	*3
Coleoptera	Staphylinidae	Deliphrosoma prolongatum (Rott., 1873)	R		es	*3
Coleoptera	Staphylinidae	Deliphrum algidum Er., 1840	*		ss	*3
Coleoptera	Staphylinidae	Deliphrum tectum (Payk., 1789)	G		s	*3
Coleoptera	Staphylinidae	Derocala rugatipennis (Kr., 1885)	D		?	*3
Coleoptera	Staphylinidae	Devia prospera (Er., 1839)	1		ss	*3
Coleoptera	Staphylinidae	Dexiogyia corticina (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Dexiogyia forticornis Strand, 1939	D		ss	*3
Coleoptera	Staphylinidae	Dianous coerulescens (Gyll., 1810)	*		mh	*3
Coleoptera	Staphylinidae	Diglotta mersa (Halid., 1837)	V		s	*3
Coleoptera	Staphylinidae	Diglotta sinuaticollis (Muls. & Rey, 1870)	3		ss	*3
Coleoptera	Staphylinidae	Dinaraea aequata (Er., 1837)	*		sh	*3
Coleoptera	Staphylinidae	Dinaraea angustula (Gyll., 1810)	*		sh	*3
Coleoptera	Staphylinidae	Dinaraea arcana (Er., 1839)	D		ss	*3
Coleoptera	Staphylinidae	Dinaraea linearis (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Dinarda dentata (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Dinarda hagensii Wasm., 1889	3		s	*3
Coleoptera	Staphylinidae	Dinarda maerkelii Kiesw., 1843	*		mh	*3
Coleoptera	Staphylinidae	Dinarda pygmaea Wasm., 1894	*		ss	*3
Coleoptera	Staphylinidae	Dinothenarus fossor (Scop., 1771)	*		h	*3
Coleoptera	Staphylinidae	Dinothenarus pubescens (De Geer, 1774)	V		s	*3
Coleoptera	Staphylinidae	Dochmonota clancula (Er., 1837)	V		s	*3
Coleoptera	Staphylinidae	Dochmonota rudiventris (Epph., 1886)	G		ss	*3
Coleoptera	Staphylinidae	Domene scabricollis (Er., 1840)	*		mh	*3
Coleoptera	Staphylinidae	Dropephylla gracilicornis (Fairm. & Lab., 1856)	*		ss	*3
Coleoptera	Staphylinidae	Dropephylla ioptera (Steph., 1834)	*		sh	*3
Coleoptera	Staphylinidae	Dropephylla koltzei Jászay & Hlaváč, 2006	*		s	*3
Coleoptera	Staphylinidae	Dropephylla linearis (Zett., 1828)	D		ss	*3
Coleoptera	Staphylinidae	Dropephylla vilis (Er., 1840)	R		es	*3
Coleoptera	Staphylinidae	Drusilla canaliculata (F., 1787)	*		sh	*3
Coleoptera	Staphylinidae	Edaphus lederi Epph., 1878	*		s	*3
Coleoptera	Staphylinidae	Emus hirtus (L., 1758)	3		s	*3
Coleoptera	Staphylinidae	Enalodroma hepatica (Er., 1839)	*		mh	*3
Coleoptera	Staphylinidae	Encephalus complicans Steph., 1832	V		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Erichsonius cinerascens (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Erichsonius signaticornis (Muls. & Rey, 1863)	V		s	*3
Coleoptera	Staphylinidae	Erichsonius subopacus (Hochh., 1851)	V		s	*3
Coleoptera	Staphylinidae	Erichsonius ytenensis (Shp., 1913)	R		es	*3
Coleoptera	Staphylinidae	Euaesthetus bipunctatus (Ljungh, 1804)	*		mh	*3
Coleoptera	Staphylinidae	Euaesthetus laeviusculus Mannh., 1844	*		mh	*3
Coleoptera	Staphylinidae	Euaesthetus ruficapillus (Lac., 1835)	*		h	*3
Coleoptera	Staphylinidae	Euaesthetus superlatus Peyrhff., 1937	D		s	*3
Coleoptera	Staphylinidae	Eudectus giraudi Redt., 1857	1		es	*3
Coleoptera	Staphylinidae	Euryalea decumana (Er., 1839)	R		es	*3
Coleoptera	Staphylinidae	Euryporus picipes (Payk., 1800)	*		s	*3
Coleoptera	Staphylinidae	Euryusa castanoptera Kr., 1856	*		mh	*3
Coleoptera	Staphylinidae	Euryusa coarctata Märk., 1845	G		ss	*3
Coleoptera	Staphylinidae	Euryusa optabilis Heer, 1839	*		mh	*3
Coleoptera	Staphylinidae	Euryusa pipitzi (Epph., 1887)	*		ss	*3
Coleoptera	Staphylinidae	Euryusa sinuata Er., 1837	G		s	*3
Coleoptera	Staphylinidae	Eusphalerum alpinum (Heer, 1838)	*		s	*3
Coleoptera	Staphylinidae	Eusphalerum anale (Er., 1840)	G		ss	*3
Coleoptera	Staphylinidae	Eusphalerum atrum (Heer, 1839)	*		mh	*3
Coleoptera	Staphylinidae	Eusphalerum brandmayri Zanetti, 1981	R		es	*3
Coleoptera	Staphylinidae	Eusphalerum limbatum (Er., 1840)	*		h	*3
Coleoptera	Staphylinidae	Eusphalerum longipenne (Er., 1839)	*		mh	*3
Coleoptera	Staphylinidae	Eusphalerum luteum (Marsh., 1802)	*		h	*3
Coleoptera	Staphylinidae	Eusphalerum marshami (Fauv., 1869)	*		mh	*3
Coleoptera	Staphylinidae	Eusphalerum minutum (F., 1792)	*		h	*3
Coleoptera	Staphylinidae	Eusphalerum montivagum (Heer, 1839)	*		s	*3
Coleoptera	Staphylinidae	Eusphalerum pallens (Heer, 1841)	*		ss	*3
Coleoptera	Staphylinidae	Eusphalerum palligerum (Kiesw., 1847)	R		es	*3
Coleoptera	Staphylinidae	Eusphalerum primulae (Steph., 1834)	*		s	*3
Coleoptera	Staphylinidae	Eusphalerum pseudaucupariae (Strand, 1917)	*		s	*3
Coleoptera	Staphylinidae	Eusphalerum rectangulum (Fauv., 1870)	*		h	*3
Coleoptera	Staphylinidae	Eusphalerum rhododendri (Baudi, 1848)	*		ss	*3
Coleoptera	Staphylinidae	Eusphalerum robustum (Heer, 1839)	*		s	*3
Coleoptera	Staphylinidae	Eusphalerum semicoleoptratum (Panz., 1795)	*		h	*3
Coleoptera	Staphylinidae	Eusphalerum signatum (Märk., 1857)	*		h	*3
Coleoptera	Staphylinidae	Eusphalerum sorbi (Gyll., 1810)	*		h	*3
Coleoptera	Staphylinidae	Eusphalerum sorbicola (Kangas, 1941)	R		es	*3
Coleoptera	Staphylinidae	Eusphalerum stramineum (Kr., 1857)	*		mh	*3
Coleoptera	Staphylinidae	Eusphalerum tenenbaumi (Bernh., 1923)	*		h	*3
Coleoptera	Staphylinidae	Eusphalerum torquatum (Marsh., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Eusphalerum umbellatarum celticum Coiff., 1959	D		?	*3
Coleoptera	Staphylinidae	Eutheia linearis (Muls., 1861)	*		s	*3
Coleoptera	Staphylinidae	Eutheia plicata (Gyll., 1813)	3		s	*3
Coleoptera	Staphylinidae	Eutheia schaumii (Kiesw., 1858)	*		ss	*3
Coleoptera	Staphylinidae	Eutheia scydmaenoides Steph., 1830	*		mh	*3
Coleoptera	Staphylinidae	Fagniezia impressa (Panz., 1805)	*		h	*3
Coleoptera	Staphylinidae	Falagria caesa Er., 1837	*		sh	*3
Coleoptera	Staphylinidae	Falagria sulcatula (Grav., 1806)	*		sh	*3
Coleoptera	Staphylinidae	Falagrioma thoracica (Curt., 1833)	*		mh	*3
Coleoptera	Staphylinidae	Gabrius appendiculatus Sharp, 1910	*		sh	*3
Coleoptera	Staphylinidae	Gabrius astutoides (Strand, 1946)	*		mh	*3
Coleoptera	Staphylinidae	Gabrius astutus (Er., 1840)	*		s	*3
Coleoptera	Staphylinidae	Gabrius austriacus Scheerp., 1947	D		s	*3
Coleoptera	Staphylinidae	Gabrius bishopi Shp., 1910	D		s	*3
Coleoptera	Staphylinidae	Gabrius breviventer (Sperk, 1835)	*		sh	*3
Coleoptera	Staphylinidae	Gabrius dieckmanni Smet., 1957	R		es	*3
Coleoptera	Staphylinidae	Gabrius exiguus (Nordm., 1837)	D		ss	*3
Coleoptera	Staphylinidae	Gabrius exspectatus Smet., 1952	D		ss	*3
Coleoptera	Staphylinidae	Gabrius femoralis (Hochh., 1851)	*		s	*3
Coleoptera	Staphylinidae	Gabrius keysianus Shp., 1910	2		ss	*3
Coleoptera	Staphylinidae	Gabrius lividipes (Baudi, 1848)	G		ss	*3
Coleoptera	Staphylinidae	Gabrius nigritulus (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Gabrius osseticus (Kol., 1846)	*		h	*3
Coleoptera	Staphylinidae	Gabrius piliger Muls. & Rey, 1876	*		s	*3
Coleoptera	Staphylinidae	Gabrius ravasinii Grid., 1920	D		ss	*3
Coleoptera	Staphylinidae	Gabrius sphagnicola (Sjöb., 1950)	D		?	*3
Coleoptera	Staphylinidae	Gabrius splendidulus (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Gabrius subnigritulus Joy, 1913	D		?	*3
Coleoptera	Staphylinidae	Gabrius tirolensis (Luze, 1903)	*		s	*3
Coleoptera	Staphylinidae	Gabrius toxotes Joy, 1913	D		s	*3
Coleoptera	Staphylinidae	Gabrius trossulus (Nordm., 1837)	*		mh	*3
Coleoptera	Staphylinidae	Gabronthus thermarum (Aubé, 1850)	*		mh	*3
Coleoptera	Staphylinidae	Gauropterus fulgidus (F., 1787)	*		mh	*3
Coleoptera	Staphylinidae	Geodromicus kunzei (Heer, 1839)	0	1939	ex	*3
Coleoptera	Staphylinidae	Geodromicus nigrita (Müll., 1821)	3		s	*3
Coleoptera	Staphylinidae	Geodromicus plagiatus (F., 1798)	G		ss	*3
Coleoptera	Staphylinidae	Geodromicus suturalis (Lac., 1835)	G		ss	*3
Coleoptera	Staphylinidae	Geostiba circellaris (Grav., 1806)	*		sh	*3
Coleoptera	Staphylinidae	Gnypeta carbonaria (Mannh., 1830)	*		h	*3
Coleoptera	Staphylinidae	Gnypeta ripicola (Kiesw., 1844)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Gnypeta rubrior Totth., 1939	*		mh	*3
Coleoptera	Staphylinidae	Gymnusa brevicollis (Payk., 1800)	3		s	*3
Coleoptera	Staphylinidae	Gymnusa variegata Kiesw., 1845	V		s	*3
Coleoptera	Staphylinidae	Gyrohypnus angustatus Steph., 1833	*		sh	*3
Coleoptera	Staphylinidae	Gyrohypnus atratus (Heer, 1839)	*		mh	*3
Coleoptera	Staphylinidae	Gyrohypnus fracticornis (Müll., 1776)	*		h	*3
Coleoptera	Staphylinidae	Gyrohypnus punctulatus (Payk., 1789)	*		h	*3
Coleoptera	Staphylinidae	Gyrohypnus wagneri (Scheerp., 1926)	D		ss	*3
Coleoptera	Staphylinidae	Gyrophaena affinis Mannh., 1830	*		sh	*3
Coleoptera	Staphylinidae	Gyrophaena bihamata Thoms., 1867	*		h	*3
Coleoptera	Staphylinidae	Gyrophaena boleti (L., 1758)	*		mh	*3
Coleoptera	Staphylinidae	Gyrophaena congrua Er., 1837	*		s	*3
Coleoptera	Staphylinidae	Gyrophaena fasciata (Marsh., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Gyrophaena gentilis Er., 1839	*		h	*3
Coleoptera	Staphylinidae	Gyrophaena hanseni Strand, 1946	D		?	*3
Coleoptera	Staphylinidae	Gyrophaena joyi Wendeler, 1924	*		s	*3
Coleoptera	Staphylinidae	Gyrophaena joyioides Wüsth., 1937	*		sh	*3
Coleoptera	Staphylinidae	Gyrophaena lucidula Er., 1837	*		s	*3
Coleoptera	Staphylinidae	Gyrophaena manca Er., 1839	*		h	*3
Coleoptera	Staphylinidae	Gyrophaena minima Er., 1837	*		h	*3
Coleoptera	Staphylinidae	Gyrophaena munsteri Strand, 1935	D		ss	*3
Coleoptera	Staphylinidae	Gyrophaena nana (Payk., 1800)	*		h	*3
Coleoptera	Staphylinidae	Gyrophaena obsoleta Ganglb., 1895	D		ss	*3
Coleoptera	Staphylinidae	Gyrophaena polita (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Gyrophaena poweri Crotch, 1867	D		s	*3
Coleoptera	Staphylinidae	Gyrophaena pseudonana Strand, 1939	D		ss	*3
Coleoptera	Staphylinidae	Gyrophaena pulchella Heer, 1839	*		s	*3
Coleoptera	Staphylinidae	Gyrophaena rosskotheni Wüsth., 1937	D		ss	*3
Coleoptera	Staphylinidae	Gyrophaena rousi Dvorak, 1966	D		s	*3
Coleoptera	Staphylinidae	Gyrophaena rugipennis Muls. & Rey, 1861	*		ss	*3
Coleoptera	Staphylinidae	Gyrophaena strictula Er., 1839	*		mh	*3
Coleoptera	Staphylinidae	Gyrophaena transversalis Strand, 1939	D		ss	*3
Coleoptera	Staphylinidae	Gyrophaena williamsi Strand, 1935	D		ss	*3
Coleoptera	Staphylinidae	Habrocerus capillaricornis (Grav., 1806)	*		sh	*3
Coleoptera	Staphylinidae	Halobrecta algae (Hardy, 1851)	V		s	*3
Coleoptera	Staphylinidae	Halobrecta flavipes Thoms., 1861	*		s	*3
Coleoptera	Staphylinidae	Hapalaraea pygmaea (Payk., 1800)	*		mh	*3
Coleoptera	Staphylinidae	Haploglossa gentilis (Märk., 1845)	V		s	*3
Coleoptera	Staphylinidae	Haploglossa marginalis (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Haploglossa nidicola (Fairm., 1853)	3		s	*3
Coleoptera	Staphylinidae	Haploglossa picipennis (Gyll., 1827)	*		s	*3
Coleoptera	Staphylinidae	Haploglossa villosula (Steph., 1832)	*		h	*3
Coleoptera	Staphylinidae	Hesperus rufipennis (Grav., 1802)	2		ss	*3
Coleoptera	Staphylinidae	Heterothops balthasari Smet., 1967	D		?	*3
Coleoptera	Staphylinidae	Heterothops binotatus (Grav., 1802)	3		ss	*3
Coleoptera	Staphylinidae	Heterothops dissimilis (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Heterothops minutus Woll., 1860	*		h	*3
Coleoptera	Staphylinidae	Heterothops praevius Er., 1839	*		mh	*3
Coleoptera	Staphylinidae	Heterothops quadripunctulus (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Heterothops stiglundbergi Israels., 1979	*		h	*3
Coleoptera	Staphylinidae	Holobus apicatus (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Holobus flavicornis (Lac., 1835)	*		sh	*3
Coleoptera	Staphylinidae	Homalota plana (Gyll., 1810)	*		mh	*3
Coleoptera	Staphylinidae	Homoeusa acuminata (Märk., 1842)	*		mh	*3
Coleoptera	Staphylinidae	Hydrosmecta carinthiaca Scheerp., 1944	R		es	*3
Coleoptera	Staphylinidae	Hydrosmecta delicatula (Shp., 1869)	G		ss	*3
Coleoptera	Staphylinidae	Hydrosmecta eximia (Shp., 1869)	G		s	*3
Coleoptera	Staphylinidae	Hydrosmecta fluviatilis (Kr., 1854)	G		ss	*3
Coleoptera	Staphylinidae	Hydrosmecta fragilicornis (Kr., 1854)	0	1934	ex	*3
Coleoptera	Staphylinidae	Hydrosmecta fragilis (Kr., 1854)	G		ss	*3
Coleoptera	Staphylinidae	Hydrosmecta gracilicornis (Er., 1839)	0	1952	ex	*3
Coleoptera	Staphylinidae	Hydrosmecta leptotyphloides (Bernh., 1907)	0	1950	ex	*3
Coleoptera	Staphylinidae	Hydrosmecta linkei (Benick, 1969)	D		ss	*3
Coleoptera	Staphylinidae	Hydrosmecta longula (Heer, 1839)	*		mh	*3
Coleoptera	Staphylinidae	Hydrosmecta paralongula Lohse, 1988	D		ss	*3
Coleoptera	Staphylinidae	Hydrosmecta subtilissima (Kr., 1854)	*		mh	*3
Coleoptera	Staphylinidae	Hygrogeus aemulus (Rosh., 1847)	R		es	*3
Coleoptera	Staphylinidae	Hygronoma dimidiata (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Hygropetrophila grandis (Fauv., 1900)	0	1936	ex	*3
Coleoptera	Staphylinidae	Hygropora cunctans (Er., 1837)	G		ss	*3
Coleoptera	Staphylinidae	Hypnogyra angularis (Ganglb., 1895)	*		mh	*3
Coleoptera	Staphylinidae	Hypomedon debilicornis (Woll., 1857)	*		mh	*3
Coleoptera	Staphylinidae	Hypopycna rufula (Er., 1840)	*		s	*3
Coleoptera	Staphylinidae	Ilyobates bennetti Donisth., 1914	*		h	*3
Coleoptera	Staphylinidae	Ilyobates nigricollis (Payk., 1800)	*		sh	*3
Coleoptera	Staphylinidae	Ilyobates propinquus (Aubé, 1850)	*		s	*3
Coleoptera	Staphylinidae	Ischnoglossa elegantula (Mannh., 1830)	D		ss	*3
Coleoptera	Staphylinidae	Ischnoglossa obscura Wunderle, 1990	*		s	*3
Coleoptera	Staphylinidae	Ischnoglossa prolixa (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Ischnopoda colorata (Fairm., 1859)	1		es	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Ischnopoda leucopus (Marsh., 1802)	*		h	*3
Coleoptera	Staphylinidae	Ischnopoda scitula Er., 1837	G		s	*3
Coleoptera	Staphylinidae	Ischnopoda umbratica (Er., 1837)	*		mh	*3
Coleoptera	Staphylinidae	Ischnosoma bergrothi (Hell., 1925)	1		es	*3
Coleoptera	Staphylinidae	Ischnosoma longicorne Mäkl., 1847	*		h	*3
Coleoptera	Staphylinidae	Ischnosoma splendidum (Grav., 1806)	*		sh	*3
Coleoptera	Staphylinidae	Lamprinodes haematopterus (Kr., 1857)	G		ss	*3
Coleoptera	Staphylinidae	Lamprinodes saginatus (Grav., 1806)	G		s	*3
Coleoptera	Staphylinidae	Lamprinus erythropterus (Panz., 1796)	G		ss	*3
Coleoptera	Staphylinidae	Lathrobium brunnipes (F., 1793)	*		sh	*3
Coleoptera	Staphylinidae	Lathrobium dilutum Er., 1839	D		s	*3
Coleoptera	Staphylinidae	Lathrobium elongatum (L., 1767)	*		h	*3
Coleoptera	Staphylinidae	Lathrobium fovulum Steph., 1833	*		mh	*3
Coleoptera	Staphylinidae	Lathrobium fulvipenne (Grav., 1806)	*		sh	*3
Coleoptera	Staphylinidae	Lathrobium geminum Kraatz, 1857	*		sh	*3
Coleoptera	Staphylinidae	Lathrobium impressum Heer, 1841	*		h	*3
Coleoptera	Staphylinidae	Lathrobium laevipenne Heer, 1839	*		mh	*3
Coleoptera	Staphylinidae	Lathrobium lineatocolle Scriba, 1859	D		ss	*3
Coleoptera	Staphylinidae	Lathrobium longulum Grav., 1802	*		sh	*3
Coleoptera	Staphylinidae	Lathrobium pallidipenne Hochh., 1851	*		s	*3
Coleoptera	Staphylinidae	Lathrobium pallidum Nordm., 1837	*		mh	*3
Coleoptera	Staphylinidae	Lathrobium rufipenne Gyll., 1813	G		s	*3
Coleoptera	Staphylinidae	Lathrobium spadiceum Er., 1840	D		s	*3
Coleoptera	Staphylinidae	Leptacinus batychrus (Gyll., 1827)	*		mh	*3
Coleoptera	Staphylinidae	Leptacinus formicetorum Märk., 1841	*		mh	*3
Coleoptera	Staphylinidae	Leptacinus intermedius Donisth., 1936	*		h	*3
Coleoptera	Staphylinidae	Leptacinus pusillus (Steph., 1833)	*		sh	*3
Coleoptera	Staphylinidae	Leptacinus sulcifrons (Steph., 1833)	*		mh	*3
Coleoptera	Staphylinidae	Leptobium gracile (Grav., 1802)	R		es	*3
Coleoptera	Staphylinidae	Leptusa flavicornis Brancs., 1874	*		ss	*3
Coleoptera	Staphylinidae	Leptusa fumida (Er., 1839)	*		sh	*3
Coleoptera	Staphylinidae	Leptusa gaisbergeri Kahlen & Pace 1993	R		es	*3
Coleoptera	Staphylinidae	Leptusa globulicollis Muls. & Rey, 1853	*		s	*3
Coleoptera	Staphylinidae	Leptusa hoelzeli lokayi Smet., 1973	R		es	*3
Coleoptera	Staphylinidae	Leptusa laevicauda Scheerp., 1958	R		es	*3
Coleoptera	Staphylinidae	Leptusa norvegica Strand, 1941	D		ss	*3
Coleoptera	Staphylinidae	Leptusa piceata Muls. & Rey, 1853	0	1955	ex	*3
Coleoptera	Staphylinidae	Leptusa pulchella (Mannh., 1830)	*		h	*3
Coleoptera	Staphylinidae	Leptusa ruficollis (Er., 1839)	*		sh	*3
Coleoptera	Staphylinidae	Leptusa simoni Epph., 1878	*		s	*3
Coleoptera	Staphylinidae	Leptusa sudetica Lokay, 1900	*		ss	*3
Coleoptera	Staphylinidae	Leptusa woerndlei Scheerp., 1935	R		es	*3
Coleoptera	Staphylinidae	Lesteva bavarica Lohse, 1956	0	1951	ex	*3
Coleoptera	Staphylinidae	Lesteva benicki Lohse, 1958	0	1958	ex	*3
Coleoptera	Staphylinidae	Lesteva breiti Lohse, 1956	0	1956	ex	*3
Coleoptera	Staphylinidae	Lesteva hanseni Lohse, 1953	V		s	*3
Coleoptera	Staphylinidae	Lesteva longoelytrata (Goeze, 1777)	*		sh	*3
Coleoptera	Staphylinidae	Lesteva luctuosa Fauv., 1871	R		es	*3
Coleoptera	Staphylinidae	Lesteva monticola Kiesw., 1847	*		mh	*3
Coleoptera	Staphylinidae	Lesteva omissa carinthiaca Lohse, 1955	R		es	*3
Coleoptera	Staphylinidae	Lesteva pubescens Mannh., 1830	*		h	*3
Coleoptera	Staphylinidae	Lesteva punctata Er., 1839	*		mh	*3
Coleoptera	Staphylinidae	Lesteva sicula heeri Fauv., 1871	*		mh	*3
Coleoptera	Staphylinidae	Lesteva villardi Muls. & Rey, 1880	0	1957	ex	*3
Coleoptera	Staphylinidae	Liogluta alpestris (Heer, 1839)	*		h	*3
Coleoptera	Staphylinidae	Liogluta granigera (Kiesw., 1850)	*		s	*3
Coleoptera	Staphylinidae	Liogluta longiuscula (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Liogluta micans (Muls. & Rey, 1852)	*		s	*3
Coleoptera	Staphylinidae	Liogluta microptera Thoms., 1867	*		h	*3
Coleoptera	Staphylinidae	Liogluta pagana (Er., 1839)	*		mh	*3
Coleoptera	Staphylinidae	Liogluta wuesthoffi (Benick, 1938)	*		s	*3
Coleoptera	Staphylinidae	Lithocharis nigriceps Kr., 1859	*		sh	*3
Coleoptera	Staphylinidae	Lithocharis ochracea (Grav., 1802)	V		mh	*3
Coleoptera	Staphylinidae	Lobrathium multipunctum (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Lomechusa emarginata (Payk., 1789)	*		h	*3
Coleoptera	Staphylinidae	Lomechusa paradoxa Grav., 1806	G		s	*3
Coleoptera	Staphylinidae	Lomechusa pubicollis Bris., 1860	*		s	*3
Coleoptera	Staphylinidae	Lomechusoides strumosus (F., 1775)	*		s	*3
Coleoptera	Staphylinidae	Lordithon bicolor (Grav., 1806)	0	1950	ex	*3
Coleoptera	Staphylinidae	Lordithon bimaculatus (Schrk., 1798)	D		s	*3
Coleoptera	Staphylinidae	Lordithon exoletus (Er., 1839)	*		sh	*3
Coleoptera	Staphylinidae	Lordithon lunulatus (L., 1760)	*		h	*3
Coleoptera	Staphylinidae	Lordithon pulchellus (Mannh., 1830)	2		ss	*3
Coleoptera	Staphylinidae	Lordithon speciosus (Er., 1839)	R		es	*3
Coleoptera	Staphylinidae	Lordithon thoracicus (F., 1777)	*		h	*3
Coleoptera	Staphylinidae	Lordithon trimaculatus (Payk., 1793)	R		es	*3
Coleoptera	Staphylinidae	Lordithon trinotatus (Er., 1839)	*		h	*3
Coleoptera	Staphylinidae	Lypoglossa lateralis (Mannh., 1830)	*		ss	*3
Coleoptera	Staphylinidae	Lyprocorrhe anceps (Er., 1837)	*		mh	*3
Coleoptera	Staphylinidae	Manda mandibularis (Gyll., 1827)	V		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Maurachelia pilosicollis (Bernh., 1902)	R		es	*3
Coleoptera	Staphylinidae	Medon apicalis (Kr., 1857)	*		mh	*3
Coleoptera	Staphylinidae	Medon brunneus (Er., 1839)	*		h	*3
Coleoptera	Staphylinidae	Medon castaneus (Grav., 1802)	*		s	*3
Coleoptera	Staphylinidae	Medon dilutus (Er., 1839)	G		ss	*3
Coleoptera	Staphylinidae	Medon fusculus (Mannh., 1830)	*		mh	*3
Coleoptera	Staphylinidae	Medon piceus (Kr., 1858)	*		mh	*3
Coleoptera	Staphylinidae	Medon ripicola (Kr., 1854)	V		s	*3
Coleoptera	Staphylinidae	Medon rufiventris (Nordm., 1837)	R		es	*3
Coleoptera	Staphylinidae	Megalinus flavocinctus (Hochh., 1849)	*		ss	*3
Coleoptera	Staphylinidae	Megalinus glabratus (Grav., 1802)	*		s	*3
Coleoptera	Staphylinidae	Megaloscapa punctipennis (Kr., 1856)	D		ss	*3
Coleoptera	Staphylinidae	Megarthrus bellevoyei Saulcy, 1862	*		s	*3
Coleoptera	Staphylinidae	Megarthrus denticollis (Beck, 1817)	*		h	*3
Coleoptera	Staphylinidae	Megarthrus depressus (Payk., 1789)	*		sh	*3
Coleoptera	Staphylinidae	Megarthrus hemipterus (Ill., 1794)	*		s	*3
Coleoptera	Staphylinidae	Megarthrus nitidulus Kr., 1857	*		mh	*3
Coleoptera	Staphylinidae	Megarthrus prosseni Schatzm., 1904	*		sh	*3
Coleoptera	Staphylinidae	Megarthrus stercorarius Muls. & Rey, 1878	R		es	*3
Coleoptera	Staphylinidae	Meotica exilis (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Meotica exillima Shp., 1915	*		s	*3
Coleoptera	Staphylinidae	Meotica filiformis (Motsch., 1860)	*		mh	*3
Coleoptera	Staphylinidae	Meotica kochi Benick, 1968	D		?	*3
Coleoptera	Staphylinidae	Meotica marchica Benick, 1954	D		ss	*3
Coleoptera	Staphylinidae	Meotica pallens (Redt., 1849)	*		s	*3
Coleoptera	Staphylinidae	Meotica winkleri Benick, 1953	R		es	*3
Coleoptera	Staphylinidae	Metopsia clypeata (Müll., 1821)	*		h	*3
Coleoptera	Staphylinidae	Metopsia similis Zerche, 1998	*		h	*3
Coleoptera	Staphylinidae	Micralymma marinum (Ström, 1783)	R		es	*3
Coleoptera	Staphylinidae	Micropeplus caelatus Er., 1839	G		ss	*3
Coleoptera	Staphylinidae	Micropeplus fulvus Er., 1840	*		h	*3
Coleoptera	Staphylinidae	Micropeplus longipennis Kr., 1859	1		es	*3
Coleoptera	Staphylinidae	Micropeplus marietti Duval, 1857	*		s	*3
Coleoptera	Staphylinidae	Micropeplus porcatus (Payk., 1789)	*		h	*3
Coleoptera	Staphylinidae	Micropeplus ripicola Kerstens, 1964	2		ss	*3
Coleoptera	Staphylinidae	Micropeplus staphylinoides (Marsh., 1802)	R		es	*3
Coleoptera	Staphylinidae	Mniusa incrassata (Muls. & Rey, 1852)	*		mh	*3
Coleoptera	Staphylinidae	Mycetoporus ambiguus Luze, 1901	V		s	*3
Coleoptera	Staphylinidae	Mycetoporus angularis Muls. & Rey, 1853	*		ss	*3
Coleoptera	Staphylinidae	Mycetoporus baudueri Muls. & Rey, 1875	*		mh	*3
Coleoptera	Staphylinidae	Mycetoporus bimaculatus Lac., 1835	*		s	*3
Coleoptera	Staphylinidae	Mycetoporus bosnicus Luze, 1901	R		es	*3
Coleoptera	Staphylinidae	Mycetoporus brucki (Pand., 1869)	1		es	*3
Coleoptera	Staphylinidae	Mycetoporus clavicornis (Steph., 1832)	*		h	*3
Coleoptera	Staphylinidae	Mycetoporus corpulentus Luze, 1901	*		s	*3
Coleoptera	Staphylinidae	Mycetoporus despectus Strand, 1969	D		?	*3
Coleoptera	Staphylinidae	Mycetoporus eppelsheimianus Fagel, 1968	*		s	*3
Coleoptera	Staphylinidae	Mycetoporus forticornis Fauv., 1875	*		mh	*3
Coleoptera	Staphylinidae	Mycetoporus glaber (Sperk, 1835)	*		h	*3
Coleoptera	Staphylinidae	Mycetoporus lepidus (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Mycetoporus longulus Mannh., 1830	*		h	*3
Coleoptera	Staphylinidae	Mycetoporus maerkelii Kr., 1857	D		ss	*3
Coleoptera	Staphylinidae	Mycetoporus montanus Luze, 1901	R		es	*3
Coleoptera	Staphylinidae	Mycetoporus monticola Fowl., 1888	D		?	*3
Coleoptera	Staphylinidae	Mycetoporus mulsanti Ganglb., 1895	*		s	*3
Coleoptera	Staphylinidae	Mycetoporus niger Fairm. & Lab., 1856	*		h	*3
Coleoptera	Staphylinidae	Mycetoporus nigricollis Steph., 1835	D		ss	*3
Coleoptera	Staphylinidae	Mycetoporus piceolus Rey, 1883	*		mh	*3
Coleoptera	Staphylinidae	Mycetoporus punctus (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Mycetoporus reichei (Pand., 1869)	D		s	*3
Coleoptera	Staphylinidae	Mycetoporus rufescens (Steph., 1832)	*		h	*3
Coleoptera	Staphylinidae	Mycetoporus silvaticus Iablokoff-Khnzorian, 1962	*		mh	*3
Coleoptera	Staphylinidae	Myllaena brevicornis (Matth., 1838)	*		mh	*3
Coleoptera	Staphylinidae	Myllaena dubia (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Myllaena elongata (Matth., 1838)	V		s	*3
Coleoptera	Staphylinidae	Myllaena gracilicornis Fairm. & Bris., 1859	D		?	*3
Coleoptera	Staphylinidae	Myllaena gracilis (Matth., 1838)	V		s	*3
Coleoptera	Staphylinidae	Myllaena infuscata Kr., 1853	*		mh	*3
Coleoptera	Staphylinidae	Myllaena intermedia Er., 1837	*		h	*3
Coleoptera	Staphylinidae	Myllaena kraatzi Shp., 1871	G		s	*3
Coleoptera	Staphylinidae	Myllaena masoni Matth., 1883	D		?	*3
Coleoptera	Staphylinidae	Myllaena minuta (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Myrmecocephalus concinnus (Er., 1839)	*		h	*3
Coleoptera	Staphylinidae	Myrmecopora sulcata (Kiesw., 1850)	1		es	*3
Coleoptera	Staphylinidae	Myrmecopora uvida (Er., 1840)	0	1938	ex	*3
Coleoptera	Staphylinidae	Myrmoecia confragosa (Hochh., 1849)	G		ss	*3
Coleoptera	Staphylinidae	Myrmoecia plicata (Er., 1837)	G		ss	*3
Coleoptera	Staphylinidae	Nehemitropia lividipennis (Mannh., 1830)	*		sh	*3
Coleoptera	Staphylinidae	Neobisnius lathrobioides (Baudi, 1848)	*		mh	*3
Coleoptera	Staphylinidae	Neobisnius procerulus (Grav., 1806)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Neobisnius prolixus (Er., 1840)	G		ss	*3
Coleoptera	Staphylinidae	Neobisnius villosulus (Steph., 1833)	*		h	*3
Coleoptera	Staphylinidae	Neohilara subterranea (Muls. & Rey, 1853)	*		s	*3
Coleoptera	Staphylinidae	Notothecta confusa (Märk., 1845)	V		s	*3
Coleoptera	Staphylinidae	Notothecta flavipes (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Nudobius lentus (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Ocalea badia Er., 1837	*		h	*3
Coleoptera	Staphylinidae	Ocalea concolor Kiesw., 1847	*		s	*3
Coleoptera	Staphylinidae	Ocalea latipennis Shp., 1870	R		es	*3
Coleoptera	Staphylinidae	Ocalea picata (Steph., 1832)	*		h	*3
Coleoptera	Staphylinidae	Ocalea rivularis Mill., 1852	*		mh	*3
Coleoptera	Staphylinidae	Ochthephilum collare (Rtt., 1884)	*		s	*3
Coleoptera	Staphylinidae	Ochthephilum fracticorne (Payk., 1800)	*		h	*3
Coleoptera	Staphylinidae	Ochthephilus andalusiacus (Fagel, 1957)	G		s	*3
Coleoptera	Staphylinidae	Ochthephilus angustatus (Er., 1840)	R		es	*3
Coleoptera	Staphylinidae	Ochthephilus angustior (Bernh., 1943)	D		ss	*3
Coleoptera	Staphylinidae	Ochthephilus aureus (Fauv., 1871)	G		s	*3
Coleoptera	Staphylinidae	Ochthephilus flexuosus Muls. & Rey, 1856	*		mh	*3
Coleoptera	Staphylinidae	Ochthephilus omalinus (Er., 1840)	*		mh	*3
Coleoptera	Staphylinidae	Ochthephilus praepositus (Muls. & Rey, 1878)	V		s	*3
Coleoptera	Staphylinidae	Ochthephilus rosenhaueri (Kiesw., 1850)	D		s	*3
Coleoptera	Staphylinidae	Ochthephilus scheerpeltzi Fagel, 1951	0	1924	ex	*3
Coleoptera	Staphylinidae	Ochthephilus tatricus (Smet., 1973)	R		es	*3
Coleoptera	Staphylinidae	Ocypus aeneocephalus (De Geer, 1774)	*		h	*3
Coleoptera	Staphylinidae	Ocypus brevipennis (Heer, 1839)	*		ss	*3
Coleoptera	Staphylinidae	Ocypus brunnipes (F., 1781)	*		sh	*3
Coleoptera	Staphylinidae	Ocypus chevrolatii Baudi, 1848	R		es	*3
Coleoptera	Staphylinidae	Ocypus fulvipennis Er., 1840	*		mh	*3
Coleoptera	Staphylinidae	Ocypus fuscatus (Grav., 1802)	V		s	*3
Coleoptera	Staphylinidae	Ocypus macrocephalus (Grav., 1802)	*		s	*3
Coleoptera	Staphylinidae	Ocypus nitens (Schrank, 1781)	*		sh	*3
Coleoptera	Staphylinidae	Ocypus olens (Müll., 1764)	*		h	*3
Coleoptera	Staphylinidae	Ocypus ophthalmicus (Scop., 1763)	*		h	*3
Coleoptera	Staphylinidae	Ocypus pedemontanus (J. Müller, 1924)	*		s	*3
Coleoptera	Staphylinidae	Ocypus picipennis (F., 1793)	V		s	*3
Coleoptera	Staphylinidae	Ocypus tenebricosus (Grav., 1846)	*		s	*3
Coleoptera	Staphylinidae	Ocyusa maura (Er., 1837)	*		mh	*3
Coleoptera	Staphylinidae	Ocyusa picina (Aubé, 1850)	*		mh	*3
Coleoptera	Staphylinidae	Oligota granaria Er., 1837	*		s	*3
Coleoptera	Staphylinidae	Oligota inexspectata Williams, 1994	R		es	*3
Coleoptera	Staphylinidae	Oligota inflata (Mannh., 1830)	*		s	*3
Coleoptera	Staphylinidae	Oligota parva Kr., 1862	*		mh	*3
Coleoptera	Staphylinidae	Oligota picipes (Steph., 1832)	R		es	*3
Coleoptera	Staphylinidae	Oligota pumilio Kiesw., 1858	*		h	*3
Coleoptera	Staphylinidae	Oligota punctulata Heer, 1839	R		es	*3
Coleoptera	Staphylinidae	Oligota pusillima (Grav., 1806)	*		sh	*3
Coleoptera	Staphylinidae	Olisthaerus substriatus (Payk., 1790)	R		es	*3
Coleoptera	Staphylinidae	Olophrum assimile (Payk., 1800)	*		mh	*3
Coleoptera	Staphylinidae	Olophrum consimile (Gyll., 1810)	G		s	*3
Coleoptera	Staphylinidae	Olophrum fuscum (Grav., 1806)	G		s	*3
Coleoptera	Staphylinidae	Olophrum piceum (Gyll., 1810)	*		mh	*3
Coleoptera	Staphylinidae	Olophrum rotundicolle (Sahlb., 1830)	0	1939	ex	*3
Coleoptera	Staphylinidae	Omalium allardii Fairm. & Bris., 1859	R		es	*3
Coleoptera	Staphylinidae	Omalium caesum Grav., 1806	*		sh	*3
Coleoptera	Staphylinidae	Omalium excavatum Steph., 1834	*		mh	*3
Coleoptera	Staphylinidae	Omalium exiguum Gyll., 1810	*		mh	*3
Coleoptera	Staphylinidae	Omalium ferrugineum Kr., 1857	*		ss	*3
Coleoptera	Staphylinidae	Omalium funebre Fauv., 1871	*		ss	*3
Coleoptera	Staphylinidae	Omalium italicum Bernh., 1902	*		s	*3
Coleoptera	Staphylinidae	Omalium laeviusculum Gyll., 1827	1		es	*3
Coleoptera	Staphylinidae	Omalium laticolle Kr., 1857	R		es	*3
Coleoptera	Staphylinidae	Omalium littorale Kr., 1857	3		s	*3
Coleoptera	Staphylinidae	Omalium nigriceps Kiesw., 1850	R		es	*3
Coleoptera	Staphylinidae	Omalium oxyacanthae Grav., 1806	*		mh	*3
Coleoptera	Staphylinidae	Omalium riparium Thoms., 1857	3		s	*3
Coleoptera	Staphylinidae	Omalium rivulare (Payk., 1789)	*		sh	*3
Coleoptera	Staphylinidae	Omalium rugatum Muls. & Rey, 1880	*		h	*3
Coleoptera	Staphylinidae	Omalium rugulipenne Rye, 1864	0	1938	ex	*3
Coleoptera	Staphylinidae	Omalium septentrionis Thoms., 1857	*		s	*3
Coleoptera	Staphylinidae	Omalium strigicolle Wankowicz, 1969	R		es	*3
Coleoptera	Staphylinidae	Omalium validum Kr., 1857	*		ss	*3
Coleoptera	Staphylinidae	Ontholestes haroldi (Epph., 1884)	*		s	*3
Coleoptera	Staphylinidae	Ontholestes murinus (L., 1758)	*		h	*3
Coleoptera	Staphylinidae	Ontholestes tessellatus (Fourcr., 1785)	*		sh	*3
Coleoptera	Staphylinidae	Orochares angustatus (Er., 1840)	*		s	*3
Coleoptera	Staphylinidae	Othius angustus angustus Steph., 1833	*		mh	*3
Coleoptera	Staphylinidae	Othius brevipennis Kr., 1857	0	1937	ex	*3
Coleoptera	Staphylinidae	Othius laeviusculus Steph., 1833	*		mh	*3
Coleoptera	Staphylinidae	Othius lapidicola Märk. & Kiesw., 1848	D		ss	*3
Coleoptera	Staphylinidae	Othius punctulatus (Goeze, 1777)	*		sh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Othius subuliformis Steph., 1833	*		sh	*3
Coleoptera	Staphylinidae	Othius volans J. Sahlb., 1876	*		ss	*3
Coleoptera	Staphylinidae	Ousipalia caesula (Er., 1839)	V		mh	*3
Coleoptera	Staphylinidae	Oxypoda abdominalis (Mannh., 1830)	*		h	*3
Coleoptera	Staphylinidae	Oxypoda acuminata (Steph., 1832)	*		sh	*3
Coleoptera	Staphylinidae	Oxypoda alni Bernh., 1940	*		ss	*3
Coleoptera	Staphylinidae	Oxypoda alternans (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Oxypoda annularis (Mannh., 1830)	*		sh	*3
Coleoptera	Staphylinidae	Oxypoda arborea Zerche, 1994	R		es	*3
Coleoptera	Staphylinidae	Oxypoda bicolor Muls. & Rey, 1853	D		s	*3
Coleoptera	Staphylinidae	Oxypoda brachyptera (Steph., 1832)	*		mh	*3
Coleoptera	Staphylinidae	Oxypoda brevicornis (Steph., 1832)	*		sh	*3
Coleoptera	Staphylinidae	Oxypoda carbonaria (Heer, 1841)	*		s	*3
Coleoptera	Staphylinidae	Oxypoda caucasica Bernh., 1902	0	1867	ex	*3
Coleoptera	Staphylinidae	Oxypoda doderoi Bernh., 1902	D		ss	*3
Coleoptera	Staphylinidae	Oxypoda elongatula Aubé, 1850	*		mh	*3
Coleoptera	Staphylinidae	Oxypoda exoleta Er., 1839	*		h	*3
Coleoptera	Staphylinidae	Oxypoda ferruginea Er., 1839	R		es	*3
Coleoptera	Staphylinidae	Oxypoda filiformis Redt., 1849	D		s	*3
Coleoptera	Staphylinidae	Oxypoda flavicornis Kr., 1856	*		mh	*3
Coleoptera	Staphylinidae	Oxypoda formiceticola Märk., 1841	*		mh	*3
Coleoptera	Staphylinidae	Oxypoda formosa Kr., 1856	*		s	*3
Coleoptera	Staphylinidae	Oxypoda funebris Kr., 1856	G		s	*3
Coleoptera	Staphylinidae	Oxypoda haemorrhoa (Mannh., 1830)	*		h	*3
Coleoptera	Staphylinidae	Oxypoda hoelzeli (Scheerp., 1947)	R		es	*3
Coleoptera	Staphylinidae	Oxypoda induta Muls. & Rey, 1861	*		mh	*3
Coleoptera	Staphylinidae	Oxypoda klausnitzeri Zerche, 2014	D		ss	*3
Coleoptera	Staphylinidae	Oxypoda lentula Er., 1837	3		s	*3
Coleoptera	Staphylinidae	Oxypoda longipes Muls. & Rey, 1861	*		mh	*3
Coleoptera	Staphylinidae	Oxypoda lugubris Kr., 1856	V		s	*3
Coleoptera	Staphylinidae	Oxypoda lurida Woll., 1857	*		s	*3
Coleoptera	Staphylinidae	Oxypoda miranda Roub., 1929	R		es	*3
Coleoptera	Staphylinidae	Oxypoda mutata Sharp, 1871	D		s	*3
Coleoptera	Staphylinidae	Oxypoda nigricornis Motsch., 1860	R		es	*3
Coleoptera	Staphylinidae	Oxypoda nigrocincta Muls. & Rey, 1875	R		es	*3
Coleoptera	Staphylinidae	Oxypoda opaca (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Oxypoda praecox Er., 1839	*		h	*3
Coleoptera	Staphylinidae	Oxypoda pratensicola Lohse, 1970	G		s	*3
Coleoptera	Staphylinidae	Oxypoda procerula Mannh., 1830	*		mh	*3
Coleoptera	Staphylinidae	Oxypoda recondita Kr., 1856	*		s	*3
Coleoptera	Staphylinidae	Oxypoda rufa Kr., 1856	3		s	*3
Coleoptera	Staphylinidae	Oxypoda rugulosa Kr., 1856	R		es	*3
Coleoptera	Staphylinidae	Oxypoda skalitzkyi Bernh., 1902	*		s	*3
Coleoptera	Staphylinidae	Oxypoda soror Thoms., 1855	*		s	*3
Coleoptera	Staphylinidae	Oxypoda spectabilis Märk., 1845	*		s	*3
Coleoptera	Staphylinidae	Oxypoda tarda Shp., 1871	*		mh	*3
Coleoptera	Staphylinidae	Oxypoda testacea Er., 1837	G		ss	*3
Coleoptera	Staphylinidae	Oxypoda tirolensis Gredl., 1863	D		?	*3
Coleoptera	Staphylinidae	Oxypoda togata Er., 1837	G		s	*3
Coleoptera	Staphylinidae	Oxypoda vicina Kr., 1856	V		mh	*3
Coleoptera	Staphylinidae	Oxypoda vittata Märk., 1842	*		h	*3
Coleoptera	Staphylinidae	Oxyporus maxillosus F., 1793	*		s	*3
Coleoptera	Staphylinidae	Oxyporus rufus (L., 1758)	*		h	*3
Coleoptera	Staphylinidae	Oxytelus fulvipes Er., 1839	V		s	*3
Coleoptera	Staphylinidae	Oxytelus laqueatus (Marsh., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Oxytelus migrator Fauv., 1904	nb		nb	*3
Coleoptera	Staphylinidae	Oxytelus piceus (L., 1767)	*		h	*3
Coleoptera	Staphylinidae	Oxytelus sculptus Grav., 1806	*		h	*3
Coleoptera	Staphylinidae	Pachnida nigella (Er., 1837)	*		mh	*3
Coleoptera	Staphylinidae	Paederidus rubrothoracicus (Goeze, 1777)	G		s	*3
Coleoptera	Staphylinidae	Paederidus ruficollis (F., 1777)	V		mh	*3
Coleoptera	Staphylinidae	Paederus balcanicus Koch, 1938	R		es	*3
Coleoptera	Staphylinidae	Paederus brevipennis Lac., 1835	*		mh	*3
Coleoptera	Staphylinidae	Paederus caligatus Er., 1840	G		s	*3
Coleoptera	Staphylinidae	Paederus fuscipes Curt., 1826	*		mh	*3
Coleoptera	Staphylinidae	Paederus limnophilus Er., 1840	V		s	*3
Coleoptera	Staphylinidae	Paederus littoralis Grav., 1802	*		h	*3
Coleoptera	Staphylinidae	Paederus riparius (L., 1758)	*		h	*3
Coleoptera	Staphylinidae	Paederus schoenherri Czwal., 1889	D		ss	*3
Coleoptera	Staphylinidae	Parabolitobius formosus (Grav., 1806)	*		s	*3
Coleoptera	Staphylinidae	Parabolitobius inclinans (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Paranopleta inhabilis (Kr., 1856)	G		ss	*3
Coleoptera	Staphylinidae	Paraphloeostiba gayndahensis (Macleay, 1873)	nb		nb	*3
Coleoptera	Staphylinidae	Pella cognata (Märk., 1842)	*		h	*3
Coleoptera	Staphylinidae	Pella erratica (Hagens, 1863)	R		es	*3
Coleoptera	Staphylinidae	Pella funesta (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Pella humeralis (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Pella laticollis (Märk., 1844)	*		mh	*3
Coleoptera	Staphylinidae	Pella limbata (Payk., 1789)	*		sh	*3
Coleoptera	Staphylinidae	Pella lugens (Grav., 1802)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Pella similis (Märk., 1842)	G		ss	*3
Coleoptera	Staphylinidae	Pentanota meuseli Bernh., 1905	R		es	*3
Coleoptera	Staphylinidae	Phacophallus pallidipennis (Motsch., 1858)	nb		nb	*3
Coleoptera	Staphylinidae	Phacophallus parumpunctatus (Gyll., 1827)	*		mh	*3
Coleoptera	Staphylinidae	Philonthus addendus Shp., 1867	*		mh	*3
Coleoptera	Staphylinidae	Philonthus aerosus Kiesw., 1851	*		ss	*3
Coleoptera	Staphylinidae	Philonthus albipes (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Philonthus alpinus Epph., 1875	*		s	*3
Coleoptera	Staphylinidae	Philonthus atratus (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Philonthus binotatus (Grav., 1806)	2		ss	*3
Coleoptera	Staphylinidae	Philonthus caerulescens (Lac., 1835)	1		es	*3
Coleoptera	Staphylinidae	Philonthus carbonarius (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Philonthus caucasicus Nordm., 1837	*		s	*3
Coleoptera	Staphylinidae	Philonthus cochleatus Scheerp., 1937	R		es	*3
Coleoptera	Staphylinidae	Philonthus cognatus Steph., 1832	*		sh	*3
Coleoptera	Staphylinidae	Philonthus concinnus (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Philonthus confinis Strand, 1941	R		es	*3
Coleoptera	Staphylinidae	Philonthus coprophilus Jarr., 1949	*		s	*3
Coleoptera	Staphylinidae	Philonthus corruscus (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Philonthus corvinus Er., 1839	G		s	*3
Coleoptera	Staphylinidae	Philonthus cruentatus (Gm., 1790)	*		mh	*3
Coleoptera	Staphylinidae	Philonthus cyanipennis (F., 1793)	0	1950	ex	*3
Coleoptera	Staphylinidae	Philonthus debilis (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Philonthus decorus (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Philonthus dimidiatipennis Er., 1840	D		?	*3
Coleoptera	Staphylinidae	Philonthus discoideus (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Philonthus ebeninus (Grav., 1802)	D		ss	*3
Coleoptera	Staphylinidae	Philonthus frigidus Märk. & Kiesw., 1848	*		ss	*3
Coleoptera	Staphylinidae	Philonthus fumarius (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Philonthus furcifer Renk., 1937	3		s	*3
Coleoptera	Staphylinidae	Philonthus intermedius (Lac., 1835)	*		h	*3
Coleoptera	Staphylinidae	Philonthus jurgans Totth., 1937	*		mh	*3
Coleoptera	Staphylinidae	Philonthus laevicollis (Lac., 1835)	*		s	*3
Coleoptera	Staphylinidae	Philonthus laminatus (Creutz., 1799)	*		h	*3
Coleoptera	Staphylinidae	Philonthus lepidus (Grav., 1802)	G		s	*3
Coleoptera	Staphylinidae	Philonthus longicornis Steph., 1832	*		h	*3
Coleoptera	Staphylinidae	Philonthus mannerheimi Fauv., 1869	*		s	*3
Coleoptera	Staphylinidae	Philonthus marginatus (Müll., 1764)	*		h	*3
Coleoptera	Staphylinidae	Philonthus micans (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Philonthus micantoides Benick & Lohse, 1956	V		s	*3
Coleoptera	Staphylinidae	Philonthus montivagus Heer, 1839	*		ss	*3
Coleoptera	Staphylinidae	Philonthus nigrita (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Philonthus nitidicollis (Lac., 1835)	*		mh	*3
Coleoptera	Staphylinidae	Philonthus nitidus (F., 1787)	*		s	*3
Coleoptera	Staphylinidae	Philonthus parvicornis (Grav., 1802)	*		s	*3
Coleoptera	Staphylinidae	Philonthus politus (L., 1758)	*		h	*3
Coleoptera	Staphylinidae	Philonthus pseudovarians Strand, 1941	D		ss	*3
Coleoptera	Staphylinidae	Philonthus punctus (Grav., 1802)	V		s	*3
Coleoptera	Staphylinidae	Philonthus quisquiliarius (Gyll., 1810)	*		h	*3
Coleoptera	Staphylinidae	Philonthus rectangulus Shp., 1874	nb		nb	*3
Coleoptera	Staphylinidae	Philonthus rotundicollis (Menetr., 1832)	*		h	*3
Coleoptera	Staphylinidae	Philonthus rubripennis Steph., 1832	*		mh	*3
Coleoptera	Staphylinidae	Philonthus rufimanus Er., 1840	1		es	*3
Coleoptera	Staphylinidae	Philonthus rufipes (Steph., 1832)	*		s	*3
Coleoptera	Staphylinidae	Philonthus salinus Kiesw., 1844	3		s	*3
Coleoptera	Staphylinidae	Philonthus sanguinolentus (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Philonthus spinipes Shp., 1874	nb		nb	*3
Coleoptera	Staphylinidae	Philonthus splendens (F., 1793)	*		h	*3
Coleoptera	Staphylinidae	Philonthus succicola Thoms., 1860	*		h	*3
Coleoptera	Staphylinidae	Philonthus temporalis Muls. & Rey, 1853	*		s	*3
Coleoptera	Staphylinidae	Philonthus tenuicornis Muls. & Rey, 1853	*		h	*3
Coleoptera	Staphylinidae	Philonthus umbratilis (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Philonthus varians (Payk., 1789)	*		sh	*3
Coleoptera	Staphylinidae	Philonthus ventralis (Grav., 1802)	*		s	*3
Coleoptera	Staphylinidae	Philorinum sordidum (Steph., 1834)	V		s	*3
Coleoptera	Staphylinidae	Phloeocharis subtilissima Mannh., 1830	*		sh	*3
Coleoptera	Staphylinidae	Phloeonomus minimus (Er., 1839)	*		h	*3
Coleoptera	Staphylinidae	Phloeonomus punctipennis Thoms., 1867	*		sh	*3
Coleoptera	Staphylinidae	Phloeonomus pusillus (Grav., 1806)	*		sh	*3
Coleoptera	Staphylinidae	Phloeopora concolor (Kr., 1856)	D		ss	*3
Coleoptera	Staphylinidae	Phloeopora corticalis (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Phloeopora nitidiventris Fauv., 1900	D		ss	*3
Coleoptera	Staphylinidae	Phloeopora opaca Bernh., 1902	D		ss	*3
Coleoptera	Staphylinidae	Phloeopora scribae (Epph., 1884)	*		s	*3
Coleoptera	Staphylinidae	Phloeopora teres (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Phloeopora testacea (Mannh., 1830)	*		sh	*3
Coleoptera	Staphylinidae	Phloeostiba lapponica (Zett., 1838)	*		h	*3
Coleoptera	Staphylinidae	Phloeostiba plana (Payk., 1792)	*		h	*3
Coleoptera	Staphylinidae	Phyllodrepa floralis (Payk., 1789)	*		h	*3
Coleoptera	Staphylinidae	Phyllodrepa melanocephala (F., 1787)	*		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Phyllodrepa melis Hansen, 1940	*		s	*3
Coleoptera	Staphylinidae	Phyllodrepa nigra (Grav., 1806)	*		s	*3
Coleoptera	Staphylinidae	Phyllodrepa puberula Bernh., 1903	*		s	*3
Coleoptera	Staphylinidae	Phyllodrepa salicis (Gyll., 1810)	*		s	*3
Coleoptera	Staphylinidae	Phyllodrepoidea crenata (Ganglb., 1895)	*		s	*3
Coleoptera	Staphylinidae	Phymatura brevicollis (Kr., 1856)	R		es	*3
Coleoptera	Staphylinidae	Phytosus balticus Kr., 1859	V		s	*3
Coleoptera	Staphylinidae	Phytosus spinifer Curt., 1838	G		ss	*3
Coleoptera	Staphylinidae	Placusa adscita Er., 1839	0	1911	ex	*3
Coleoptera	Staphylinidae	Placusa atrata (Mannh., 1830)	*		h	*3
Coleoptera	Staphylinidae	Placusa complanata Er., 1839	*		s	*3
Coleoptera	Staphylinidae	Placusa depressa Maekl., 1845	*		mh	*3
Coleoptera	Staphylinidae	Placusa incompleta Sjöb., 1934	D		s	*3
Coleoptera	Staphylinidae	Placusa pumilio (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Placusa tachyporoides (Waltl, 1838)	*		h	*3
Coleoptera	Staphylinidae	Planeustomus flavicollis Fauvel, 1871	R		es	*3
Coleoptera	Staphylinidae	Planeustomus palpalis (Er., 1839)	V		s	*3
Coleoptera	Staphylinidae	Plataraea brunnea (F., 1798)	*		h	*3
Coleoptera	Staphylinidae	Plataraea dubiosa (Benick, 1935)	D		s	*3
Coleoptera	Staphylinidae	Plataraea elegans (Benick, 1935)	D		ss	*3
Coleoptera	Staphylinidae	Plataraea interurbana (Bernh., 1899)	0	1950	ex	*3
Coleoptera	Staphylinidae	Plataraea nigrifrons (Er., 1839)	D		s	*3
Coleoptera	Staphylinidae	Platydomene angusticollis (Lac., 1835)	G		ss	*3
Coleoptera	Staphylinidae	Platydomene bicolor bicolor (Er., 1840)	G		s	*3
Coleoptera	Staphylinidae	Platydomene picipes picipes (Er., 1840)	1		ss	*3
Coleoptera	Staphylinidae	Platydomene sodalis (Kr., 1857)	G		s	*3
Coleoptera	Staphylinidae	Platydomene springeri (Koch, 1937)	G		ss	*3
Coleoptera	Staphylinidae	Platydracus chalcocephalus (F., 1801)	*		s	*3
Coleoptera	Staphylinidae	Platydracus flavopunctatus (Latr., 1804)	D		ss	*3
Coleoptera	Staphylinidae	Platydracus fulvipes (Scop., 1763)	*		mh	*3
Coleoptera	Staphylinidae	Platydracus latebricola (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Platydracus stercorarius (Ol., 1795)	*		h	*3
Coleoptera	Staphylinidae	Platystethus alutaceus Thoms., 1861	*		mh	*3
Coleoptera	Staphylinidae	Platystethus arenarius (Fourcr., 1785)	*		h	*3
Coleoptera	Staphylinidae	Platystethus capito Heer, 1839	V		s	*3
Coleoptera	Staphylinidae	Platystethus cornutus (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Platystethus degener Muls. & Rey, 1878	*		s	*3
Coleoptera	Staphylinidae	Platystethus laevis Märk. & Kiesw., 1848	*		ss	*3
Coleoptera	Staphylinidae	Platystethus nitens (Sahlb., 1832)	*		h	*3
Coleoptera	Staphylinidae	Platystethus nodifrons (Mannh., 1830)	G		s	*3
Coleoptera	Staphylinidae	Platystethus spinosus Er., 1840	R		es	*3
Coleoptera	Staphylinidae	Poromniusa crassa (Epph., 1883)	0	1880	ex	*3
Coleoptera	Staphylinidae	Poromniusa procidua (Er., 1837)	R		es	*3
Coleoptera	Staphylinidae	Porrhodites fenestralis (Zett., 1828)	0	1858	ex	*3
Coleoptera	Staphylinidae	Pronomaea picea Heer, 1841	D		ss	*3
Coleoptera	Staphylinidae	Pronomaea rostrata Er., 1837	D		?	*3
Coleoptera	Staphylinidae	Proteinus abditus Assing, 2007	R		es	*3
Coleoptera	Staphylinidae	Proteinus atomarius Er., 1840	*		h	*3
Coleoptera	Staphylinidae	Proteinus brachypterus (F., 1792)	*		sh	*3
Coleoptera	Staphylinidae	Proteinus crenulatus Pand., 1867	D		?	*3
Coleoptera	Staphylinidae	Proteinus laevigatus (Hochh., 1872)	*		h	*3
Coleoptera	Staphylinidae	Proteinus longicornis Dod., 1923	R		es	*3
Coleoptera	Staphylinidae	Proteinus ovalis Steph., 1834	*		h	*3
Coleoptera	Staphylinidae	Pseudobium gridellii Jarr., 1949	0	1862	ex	*3
Coleoptera	Staphylinidae	Pseudolathra manueli (Fauv., 1865)	nb		nb	*3
Coleoptera	Staphylinidae	Pseudomedon huetheri (Hbthl., 1927)	R		es	*3
Coleoptera	Staphylinidae	Pseudomedon obscurellus (Er., 1840)	*		mh	*3
Coleoptera	Staphylinidae	Pseudomedon obsoletus (Nordm., 1837)	*		mh	*3
Coleoptera	Staphylinidae	Pseudomicrodota paganettii (Bernh., 1909)	R		es	*3
Coleoptera	Staphylinidae	Pseudopsis sulcata Newm., 1834	R		es	*3
Coleoptera	Staphylinidae	Pycnota paradoxa (Muls. & Rey, 1861)	*		s	*3
Coleoptera	Staphylinidae	Quedionuchus plagiatus (Mannh., 1843)	*		s	*3
Coleoptera	Staphylinidae	Quedius alpestris (Heer, 1839)	*		ss	*3
Coleoptera	Staphylinidae	Quedius auricomus Kiesw., 1850	G		s	*3
Coleoptera	Staphylinidae	Quedius balticus Korge, 1960	3		s	*3
Coleoptera	Staphylinidae	Quedius boopoides Munst., 1923	V		mh	*3
Coleoptera	Staphylinidae	Quedius boops (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Quedius brevicornis Thoms., 1860	*		mh	*3
Coleoptera	Staphylinidae	Quedius brevis Er., 1840	*		mh	*3
Coleoptera	Staphylinidae	Quedius cinctus (Payk., 1790)	*		sh	*3
Coleoptera	Staphylinidae	Quedius cruentus (Ol., 1795)	*		sh	*3
Coleoptera	Staphylinidae	Quedius curtipennis Bernh., 1908	*		h	*3
Coleoptera	Staphylinidae	Quedius dilatatus (F., 1787)	*		mh	*3
Coleoptera	Staphylinidae	Quedius dubius (Heer, 1839)	*		ss	*3
Coleoptera	Staphylinidae	Quedius fulgidus (F., 1792)	*		s	*3
Coleoptera	Staphylinidae	Quedius fuliginosus (Grav., 1802)	*		sh	*3
Coleoptera	Staphylinidae	Quedius fulvicollis (Steph., 1833)	*		mh	*3
Coleoptera	Staphylinidae	Quedius fumatus (Steph., 1833)	*		h	*3
Coleoptera	Staphylinidae	Quedius haberfelneri Epph., 1891	R		es	*3
Coleoptera	Staphylinidae	Quedius infuscatus Er., 1840	2		ss	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Quedius invreae Grid., 1924	*		mh	*3
Coleoptera	Staphylinidae	Quedius lateralis (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Quedius levicollis Brullé, 1832	*		h	*3
Coleoptera	Staphylinidae	Quedius limbatus (Heer, 1839)	G		s	*3
Coleoptera	Staphylinidae	Quedius longicornis Kr., 1857	*		h	*3
Coleoptera	Staphylinidae	Quedius lucidulus Er., 1839	*		h	*3
Coleoptera	Staphylinidae	Quedius maurorufus (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Quedius maurus (Sahlb., 1830)	*		mh	*3
Coleoptera	Staphylinidae	Quedius mesomelinus (Marsh., 1802)	*		h	*3
Coleoptera	Staphylinidae	Quedius microps Grav., 1847	3		s	*3
Coleoptera	Staphylinidae	Quedius molochinus (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Quedius nemoralis Baudi, 1848	*		mh	*3
Coleoptera	Staphylinidae	Quedius nigriceps Kr., 1857	*		mh	*3
Coleoptera	Staphylinidae	Quedius nigrocaeruleus Fauv., 1876	*		h	*3
Coleoptera	Staphylinidae	Quedius nitipennis (Steph., 1833)	*		h	*3
Coleoptera	Staphylinidae	Quedius obscuripennis Bernh., 1901	*		ss	*3
Coleoptera	Staphylinidae	Quedius ochripennis (Menetr., 1832)	*		mh	*3
Coleoptera	Staphylinidae	Quedius ochropterus Er., 1840	*		ss	*3
Coleoptera	Staphylinidae	Quedius paradisianus (Heer, 1839)	*		mh	*3
Coleoptera	Staphylinidae	Quedius persimilis Muls. & Rey, 1876	*		mh	*3
Coleoptera	Staphylinidae	Quedius picipes (Mannh., 1830)	*		mh	*3
Coleoptera	Staphylinidae	Quedius plancus Er., 1840	R		es	*3
Coleoptera	Staphylinidae	Quedius punctatellus (Heer, 1839)	*		ss	*3
Coleoptera	Staphylinidae	Quedius puncticollis (Thoms., 1867)	*		h	*3
Coleoptera	Staphylinidae	Quedius reitteri Grid., 1925	D		s	*3
Coleoptera	Staphylinidae	Quedius riparius Kelln., 1843	G		ss	*3
Coleoptera	Staphylinidae	Quedius scintillans (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Quedius scitus (Grav., 1806)	*		mh	*3
Coleoptera	Staphylinidae	Quedius scribae Ganglb., 1895	0	1957	ex	*3
Coleoptera	Staphylinidae	Quedius semiaeneus (Steph., 1833)	*		h	*3
Coleoptera	Staphylinidae	Quedius semiobscurus (Marsh., 1802)	*		s	*3
Coleoptera	Staphylinidae	Quedius simplicifrons Fairm., 1862	*		ss	*3
Coleoptera	Staphylinidae	Quedius sturanyi Ganglb., 1895	R		es	*3
Coleoptera	Staphylinidae	Quedius suturalis Kiesw., 1845	*		mh	*3
Coleoptera	Staphylinidae	Quedius truncicola Fairm. & Lab., 1856	V		s	*3
Coleoptera	Staphylinidae	Quedius umbrinus Er., 1839	*		h	*3
Coleoptera	Staphylinidae	Quedius unicolor Kiesw., 1847	*		s	*3
Coleoptera	Staphylinidae	Quedius vexans Epph., 1881	*		s	*3
Coleoptera	Staphylinidae	Quedius xanthopus Er., 1839	*		mh	*3
Coleoptera	Staphylinidae	Rabigus pullus (Nordm., 1837)	G		ss	*3
Coleoptera	Staphylinidae	Rabigus tenuis (F., 1793)	*		mh	*3
Coleoptera	Staphylinidae	Remus sericeus Holme, 1837	1		es	*3
Coleoptera	Staphylinidae	Rhomphocallus bernhaueri (Dev., 1907)	nb		nb	*3
Coleoptera	Staphylinidae	Rhopalocerina clavigera (Scriba, 1859)	D		ss	*3
Coleoptera	Staphylinidae	Rhopalotella validiuscula (Kr., 1856)	R		es	*3
Coleoptera	Staphylinidae	Rugilus angustatus (Geoffr., 1785)	*		mh	*3
Coleoptera	Staphylinidae	Rugilus erichsonii (Fauv., 1867)	*		h	*3
Coleoptera	Staphylinidae	Rugilus geniculatus (Er., 1839)	*		mh	*3
Coleoptera	Staphylinidae	Rugilus mixtus (Lohse, 1956)	*		s	*3
Coleoptera	Staphylinidae	Rugilus orbiculatus (Payk., 1789)	*		sh	*3
Coleoptera	Staphylinidae	Rugilus rufipes (Germ., 1836)	*		sh	*3
Coleoptera	Staphylinidae	Rugilus similis (Er., 1839)	*		mh	*3
Coleoptera	Staphylinidae	Rugilus subtilis (Er., 1840)	*		s	*3
Coleoptera	Staphylinidae	Scaphidium quadrimaculatum Ol., 1790	*		h	*3
Coleoptera	Staphylinidae	Scaphisoma agaricinum (L., 1758)	*		sh	*3
Coleoptera	Staphylinidae	Scaphisoma assimile Er., 1845	*		h	*3
Coleoptera	Staphylinidae	Scaphisoma balcanicum Taman., 1954	D		s	*3
Coleoptera	Staphylinidae	Scaphisoma boleti (Panz., 1793)	*		h	*3
Coleoptera	Staphylinidae	Scaphisoma boreale Lundblad, 1952	R		es	*3
Coleoptera	Staphylinidae	Scaphisoma inopinatum Löbl, 1967	R		es	*3
Coleoptera	Staphylinidae	Scaphisoma obenbergeri Löbl, 1963	R		es	*3
Coleoptera	Staphylinidae	Scaphisoma subalpinum Rtt., 1880	D		ss	*3
Coleoptera	Staphylinidae	Scaphium immaculatum (Ol., 1790)	3		s	*3
Coleoptera	Staphylinidae	Schistoglossa aubei (Bris., 1860)	G		s	*3
Coleoptera	Staphylinidae	Schistoglossa bergvalli Palm, 1968	1		es	*3
Coleoptera	Staphylinidae	Schistoglossa curtipennis (Shp., 1869)	G		s	*3
Coleoptera	Staphylinidae	Schistoglossa drusilloides (J. Sahlb., 1876)	G		s	*3
Coleoptera	Staphylinidae	Schistoglossa gemina (Er., 1837)	D		s	*3
Coleoptera	Staphylinidae	Schistoglossa pseudogemina Benick, 1981	G		ss	*3
Coleoptera	Staphylinidae	Schistoglossa viduata (Er., 1837)	*		mh	*3
Coleoptera	Staphylinidae	Scopaeus gracilis (Sperk, 1835)	V		mh	*3
Coleoptera	Staphylinidae	Scopaeus laevigatus (Gyll., 1827)	*		h	*3
Coleoptera	Staphylinidae	Scopaeus longicollis Fauv., 1873	R		es	*3
Coleoptera	Staphylinidae	Scopaeus minimus (Er., 1839)	2		ss	*3
Coleoptera	Staphylinidae	Scopaeus minutus Er., 1840	*		mh	*3
Coleoptera	Staphylinidae	Scopaeus pusillus Kiesw., 1843	3		s	*3
Coleoptera	Staphylinidae	Scopaeus ryei Woll., 1872	1		ss	*3
Coleoptera	Staphylinidae	Scopaeus sericans Muls. & Rey, 1855	0	1954	ex	*3
Coleoptera	Staphylinidae	Scopaeus sulcicollis (Steph., 1833)	*		h	*3
Coleoptera	Staphylinidae	Sepedophilus binotatus (Grav., 1802)	1		es	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Sepedophilus bipunctatus (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Sepedophilus bipustulatus (Grav., 1802)	D		?	*3
Coleoptera	Staphylinidae	Sepedophilus constans (Fowler, 1888)	*		ss	*3
Coleoptera	Staphylinidae	Sepedophilus immaculatus (Steph., 1832)	*		h	*3
Coleoptera	Staphylinidae	Sepedophilus littoreus (L., 1758)	*		mh	*3
Coleoptera	Staphylinidae	Sepedophilus marshami (Steph., 1832)	*		sh	*3
Coleoptera	Staphylinidae	Sepedophilus nigripennis (Steph., 1832)	*		mh	*3
Coleoptera	Staphylinidae	Sepedophilus obtusus (Luze, 1902)	*		sh	*3
Coleoptera	Staphylinidae	Sepedophilus pedicularius (Grav., 1802)	*		s	*3
Coleoptera	Staphylinidae	Sepedophilus testaceus (F., 1793)	*		sh	*3
Coleoptera	Staphylinidae	Sepedophilus transcaspicus (Bernh., 1917)	*		ss	*3
Coleoptera	Staphylinidae	Siagonium humerale Germ., 1836	R		es	*3
Coleoptera	Staphylinidae	Siagonium quadricorne Kirby, 1815	*		s	*3
Coleoptera	Staphylinidae	Silusa rubiginosa Er., 1837	V		mh	*3
Coleoptera	Staphylinidae	Silusa rubra Er., 1839	G		ss	*3
Coleoptera	Staphylinidae	Staphylinus caesareus Ced., 1798	*		mh	*3
Coleoptera	Staphylinidae	Staphylinus dimidiaticornis Gemm., 1851	*		h	*3
Coleoptera	Staphylinidae	Staphylinus erythropterus L., 1758	*		h	*3
Coleoptera	Staphylinidae	Stenus ampliventris J. Sahlb., 1890	0	1950	ex	*3
Coleoptera	Staphylinidae	Stenus annulipes Heer, 1839	D		?	*3
Coleoptera	Staphylinidae	Stenus argus Grav., 1806	*		mh	*3
Coleoptera	Staphylinidae	Stenus asphaltinus Er., 1840	1		es	*3
Coleoptera	Staphylinidae	Stenus assequens Rey, 1884	V		s	*3
Coleoptera	Staphylinidae	Stenus ater Mannh., 1830	*		mh	*3
Coleoptera	Staphylinidae	Stenus aterrimus Er., 1839	*		s	*3
Coleoptera	Staphylinidae	Stenus atratulus Er., 1839	V		mh	*3
Coleoptera	Staphylinidae	Stenus bifoveolatus Gyll., 1827	*		h	*3
Coleoptera	Staphylinidae	Stenus biguttatus (L., 1758)	*		h	*3
Coleoptera	Staphylinidae	Stenus bimaculatus Gyll., 1810	*		sh	*3
Coleoptera	Staphylinidae	Stenus binotatus Ljungh, 1804	*		mh	*3
Coleoptera	Staphylinidae	Stenus bohemicus Mach., 1947	*		mh	*3
Coleoptera	Staphylinidae	Stenus boops Ljungh, 1810	*		h	*3
Coleoptera	Staphylinidae	Stenus brunnipes Steph., 1833	*		h	*3
Coleoptera	Staphylinidae	Stenus calcaratus Scriba, 1864	V		s	*3
Coleoptera	Staphylinidae	Stenus canaliculatus Gyll., 1827	*		h	*3
Coleoptera	Staphylinidae	Stenus carbonarius Gyll., 1827	*		mh	*3
Coleoptera	Staphylinidae	Stenus carpathicus Ganglb., 1896	R		es	*3
Coleoptera	Staphylinidae	Stenus cautus Er., 1839	*		s	*3
Coleoptera	Staphylinidae	Stenus cicindeloides (Schall., 1783)	*		h	*3
Coleoptera	Staphylinidae	Stenus circularis Grav., 1802	V		mh	*3
Coleoptera	Staphylinidae	Stenus clavicornis (Scop., 1763)	*		sh	*3
Coleoptera	Staphylinidae	Stenus comma Lec., 1863	*		h	*3
Coleoptera	Staphylinidae	Stenus contumax Assing, 1994	D		?	*3
Coleoptera	Staphylinidae	Stenus crassus Steph., 1933	*		mh	*3
Coleoptera	Staphylinidae	Stenus eumerus Kiesw., 1850	1		es	*3
Coleoptera	Staphylinidae	Stenus europaeus Puthz, 1966	V		mh	*3
Coleoptera	Staphylinidae	Stenus excubitor Er., 1839	G		ss	*3
Coleoptera	Staphylinidae	Stenus exspectatus Puthz, 1965	0	1950	ex	*3
Coleoptera	Staphylinidae	Stenus flavipalpis Thoms., 1860	*		s	*3
Coleoptera	Staphylinidae	Stenus flavipes Steph., 1833	*		h	*3
Coleoptera	Staphylinidae	Stenus formicetorum Mannh., 1843	*		mh	*3
Coleoptera	Staphylinidae	Stenus fornicatus Steph., 1833	G		s	*3
Coleoptera	Staphylinidae	Stenus fossulatus Er., 1840	*		h	*3
Coleoptera	Staphylinidae	Stenus fulvicornis Steph., 1833	*		h	*3
Coleoptera	Staphylinidae	Stenus fuscicornis Er., 1840	*		mh	*3
Coleoptera	Staphylinidae	Stenus fuscipes Grav., 1802	V		mh	*3
Coleoptera	Staphylinidae	Stenus gallicus Fauv., 1873	V		s	*3
Coleoptera	Staphylinidae	Stenus geniculatus Grav., 1806	V		mh	*3
Coleoptera	Staphylinidae	Stenus glabellus Thoms., 1870	2		ss	*3
Coleoptera	Staphylinidae	Stenus glacialis Heer, 1839	*		ss	*3
Coleoptera	Staphylinidae	Stenus gracilipes Kr., 1857	1		es	*3
Coleoptera	Staphylinidae	Stenus guttula Müll., 1821	*		mh	*3
Coleoptera	Staphylinidae	Stenus guynemeri Duval, 1850	3		ss	*3
Coleoptera	Staphylinidae	Stenus humilis Er., 1839	*		sh	*3
Coleoptera	Staphylinidae	Stenus impressus Germ., 1824	*		sh	*3
Coleoptera	Staphylinidae	Stenus incanus Er., 1839	1		ss	*3
Coleoptera	Staphylinidae	Stenus incrassatus Er., 1839	*		h	*3
Coleoptera	Staphylinidae	Stenus indifferens Puthz, 1967	R		es	*3
Coleoptera	Staphylinidae	Stenus intermedius Rey, 1884	3		ss	*3
Coleoptera	Staphylinidae	Stenus juno (Payk., 1789)	*		sh	*3
Coleoptera	Staphylinidae	Stenus kiesenwetteri Rosh., 1856	2		ss	*3
Coleoptera	Staphylinidae	Stenus latifrons Er., 1839	*		mh	*3
Coleoptera	Staphylinidae	Stenus leprieuri Cuss., 1851	0	1955	ex	*3
Coleoptera	Staphylinidae	Stenus lohsei Puthz, 1965	R		es	*3
Coleoptera	Staphylinidae	Stenus longipes Heer, 1839	G		ss	*3
Coleoptera	Staphylinidae	Stenus longitarsis Thoms., 1851	G		s	*3
Coleoptera	Staphylinidae	Stenus ludyi Fauv., 1886	*		mh	*3
Coleoptera	Staphylinidae	Stenus lustrator Er., 1839	*		mh	*3
Coleoptera	Staphylinidae	Stenus melanarius Steph., 1833	V		mh	*3
Coleoptera	Staphylinidae	Stenus melanopus (Marsh., 1802)	*		mh	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Stenus montivagus Heer, 1839	*		s	*3
Coleoptera	Staphylinidae	Stenus morio Grav., 1806	*		mh	*3
Coleoptera	Staphylinidae	Stenus nanus Steph., 1833	V		mh	*3
Coleoptera	Staphylinidae	Stenus nigritulus Gyll., 1827	*		s	*3
Coleoptera	Staphylinidae	Stenus nitens Steph., 1833	*		h	*3
Coleoptera	Staphylinidae	Stenus nitidiusculus Steph., 1833	V		mh	*3
Coleoptera	Staphylinidae	Stenus niveus Fauv., 1865	G		ss	*3
Coleoptera	Staphylinidae	Stenus ochropus Kiesw., 1858	*		mh	*3
Coleoptera	Staphylinidae	Stenus opticus Grav., 1806	V		mh	*3
Coleoptera	Staphylinidae	Stenus oscillator Rye, 1870	D		ss	*3
Coleoptera	Staphylinidae	Stenus ossium Steph., 1833	R		es	*3
Coleoptera	Staphylinidae	Stenus pallipes Grav., 1802	*		mh	*3
Coleoptera	Staphylinidae	Stenus pallitarsis Steph., 1833	G		s	*3
Coleoptera	Staphylinidae	Stenus palposus Zett., 1838	3		ss	*3
Coleoptera	Staphylinidae	Stenus palustris Er., 1839	*		mh	*3
Coleoptera	Staphylinidae	Stenus parcior Bernh., 1929	R		es	*3
Coleoptera	Staphylinidae	Stenus phyllobates Pen., 1901	R		es	*3
Coleoptera	Staphylinidae	Stenus picipennis Er., 1840	3		s	*3
Coleoptera	Staphylinidae	Stenus picipes brevipennis Thoms., 1851	nb		nb	*3
Coleoptera	Staphylinidae	Stenus picipes picipes Steph., 1833	*		mh	*3
Coleoptera	Staphylinidae	Stenus planifrons Rey, 1883	D		ss	*3
Coleoptera	Staphylinidae	Stenus proditor Er., 1839	G		s	*3
Coleoptera	Staphylinidae	Stenus providus Er., 1839	*		h	*3
Coleoptera	Staphylinidae	Stenus pseudoboops Puthz, 1966	0	1900	ex	*3
Coleoptera	Staphylinidae	Stenus pubescens Steph., 1833	*		mh	*3
Coleoptera	Staphylinidae	Stenus pumilio Er., 1839	G		s	*3
Coleoptera	Staphylinidae	Stenus pusillus Steph., 1833	*		h	*3
Coleoptera	Staphylinidae	Stenus ruralis Er., 1840	G		ss	*3
Coleoptera	Staphylinidae	Stenus scrutator Er., 1840	G		s	*3
Coleoptera	Staphylinidae	Stenus similis (Hbst., 1784)	*		h	*3
Coleoptera	Staphylinidae	Stenus solutus Er., 1840	V		s	*3
Coleoptera	Staphylinidae	Stenus stigmula Er., 1840	G		ss	*3
Coleoptera	Staphylinidae	Stenus subaeneus Er., 1840	R		es	*3
Coleoptera	Staphylinidae	Stenus subdepressus Muls. & Rey, 1861	G		ss	*3
Coleoptera	Staphylinidae	Stenus sylvester Er., 1839	D		s	*3
Coleoptera	Staphylinidae	Stenus tarsalis Ljungh, 1810	*		h	*3
Coleoptera	Staphylinidae	Stenus umbratilis (Casey, 1884)	2		s	*3
Coleoptera	Staphylinidae	Stichoglossa semirufa (Er., 1839)	*		s	*3
Coleoptera	Staphylinidae	Sunius bicolor (Ol., 1795)	*		mh	*3
Coleoptera	Staphylinidae	Sunius fallax (Lokay, 1919)	D		ss	*3
Coleoptera	Staphylinidae	Sunius melanocephalus (F., 1793)	*		h	*3
Coleoptera	Staphylinidae	Sunius propinquus (Bris., 1867)	0	1948	ex	*3
Coleoptera	Staphylinidae	Syntomium aeneum (Müll., 1821)	*		h	*3
Coleoptera	Staphylinidae	Tachinus bipustulatus (F., 1793)	D		s	*3
Coleoptera	Staphylinidae	Tachinus corticinus Grav., 1802	*		sh	*3
Coleoptera	Staphylinidae	Tachinus elongatus Gyll., 1810	*		s	*3
Coleoptera	Staphylinidae	Tachinus fimetarius Grav., 1802	*		sh	*3
Coleoptera	Staphylinidae	Tachinus humeralis Grav., 1802	*		h	*3
Coleoptera	Staphylinidae	Tachinus laticollis Grav., 1802	*		sh	*3
Coleoptera	Staphylinidae	Tachinus lignorum (L., 1758)	*		h	*3
Coleoptera	Staphylinidae	Tachinus marginellus (F., 1781)	*		h	*3
Coleoptera	Staphylinidae	Tachinus pallipes Grav., 1806	*		h	*3
Coleoptera	Staphylinidae	Tachinus proximus Kr., 1855	*		s	*3
Coleoptera	Staphylinidae	Tachinus rufipennis Gyll., 1810	*		ss	*3
Coleoptera	Staphylinidae	Tachinus rufipes (L. 1758)	*		sh	*3
Coleoptera	Staphylinidae	Tachinus scapularis Steph., 1832	*		ss	*3
Coleoptera	Staphylinidae	Tachinus subterraneus (L., 1758)	*		h	*3
Coleoptera	Staphylinidae	Tachyporus abdominalis (F., 1781)	G		s	*3
Coleoptera	Staphylinidae	Tachyporus atriceps Steph., 1832	*		h	*3
Coleoptera	Staphylinidae	Tachyporus austriacus Luze, 1901	*		ss	*3
Coleoptera	Staphylinidae	Tachyporus chrysomelinus (L., 1758)	*		sh	*3
Coleoptera	Staphylinidae	Tachyporus corpulentus J. Sahlb., 1876	*		s	*3
Coleoptera	Staphylinidae	Tachyporus dispar (Payk., 1789)	*		h	*3
Coleoptera	Staphylinidae	Tachyporus formosus Matth., 1838	*		s	*3
Coleoptera	Staphylinidae	Tachyporus hypnorum (F., 1775)	*		sh	*3
Coleoptera	Staphylinidae	Tachyporus nitidulus (F., 1781)	*		sh	*3
Coleoptera	Staphylinidae	Tachyporus obtusus (L., 1767)	*		sh	*3
Coleoptera	Staphylinidae	Tachyporus pallidus Shp., 1871	G		s	*3
Coleoptera	Staphylinidae	Tachyporus pulchellus Mannh., 1843	*		s	*3
Coleoptera	Staphylinidae	Tachyporus pusillus Grav., 1806	*		sh	*3
Coleoptera	Staphylinidae	Tachyporus quadriscopulatus Pand., 1869	V		s	*3
Coleoptera	Staphylinidae	Tachyporus ruficollis Grav., 1802	*		h	*3
Coleoptera	Staphylinidae	Tachyporus scitulus Er., 1839	*		h	*3
Coleoptera	Staphylinidae	Tachyporus solutus Er., 1839	*		sh	*3
Coleoptera	Staphylinidae	Tachyporus tersus Er., 1839	D		ss	*3
Coleoptera	Staphylinidae	Tachyporus transversalis Grav., 1806	V		s	*3
Coleoptera	Staphylinidae	Tachyusa balteata (Er., 1839)	G		s	*3
Coleoptera	Staphylinidae	Tachyusa coarctata (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Tachyusa coarctatoides Pasnik, 2006	D		?	*3
Coleoptera	Staphylinidae	Tachyusa concinna Heer, 1839	D		?	*3

Order	Family	Species	K	L	P	S
Coleoptera	Staphylinidae	Tachyusa constricta (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Tachyusa nitella (Fauv., 1895)	R		es	*3
Coleoptera	Staphylinidae	Tachyusa objecta (Muls. & Rey, 1870)	G		s	*3
Coleoptera	Staphylinidae	Tachyusida gracilis (Er., 1837)	2		ss	*3
Coleoptera	Staphylinidae	Tasgius ater (Grav., 1802)	*		s	*3
Coleoptera	Staphylinidae	Tasgius globulifer (Geoffr., 1785)	*		s	*3
Coleoptera	Staphylinidae	Tasgius melanarius melanarius (Heer, 1839)	*		sh	*3
Coleoptera	Staphylinidae	Tasgius morsitans (Rossi, 1790)	*		mh	*3
Coleoptera	Staphylinidae	Tasgius pedator (Grav., 1802)	*		s	*3
Coleoptera	Staphylinidae	Tasgius winkleri (Bernh., 1906)	*		mh	*3
Coleoptera	Staphylinidae	Taxicera deplanata (Grav., 1802)	V		s	*3
Coleoptera	Staphylinidae	Taxicera dolomitana Bernh., 1901	0	1950	ex	*3
Coleoptera	Staphylinidae	Taxicera sericophila (Baudi, 1870)	G		ss	*3
Coleoptera	Staphylinidae	Taxicera truncata (Epph., 1975)	0	1950	ex	*3
Coleoptera	Staphylinidae	Tectusa knabli (Bernh., 1915)	0	1958	ex	*3
Coleoptera	Staphylinidae	Tetartopeus angustatus angustatus (Lac., 1835)	R		es	*3
Coleoptera	Staphylinidae	Tetartopeus quadratus (Payk., 1789)	*		mh	*3
Coleoptera	Staphylinidae	Tetartopeus rufonitidus (Rtt., 1909)	V		mh	*3
Coleoptera	Staphylinidae	Tetartopeus sphagnetorum (Muona, 1977)	1		ss	*3
Coleoptera	Staphylinidae	Tetartopeus terminatus (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Tetralaucopora cingulata (Kr., 1856)	G		ss	*3
Coleoptera	Staphylinidae	Tetralaucopora crebrepunctata (Strand, 1962)	R		es	*3
Coleoptera	Staphylinidae	Tetralaucopora longitarsis (Er., 1837)	*		h	*3
Coleoptera	Staphylinidae	Tetralaucopora rubicunda (Er., 1837)	V		mh	*3
Coleoptera	Staphylinidae	Thamiaraea cinnamomea (Grav., 1802)	*		mh	*3
Coleoptera	Staphylinidae	Thamiaraea hospita (Märk., 1845)	*		mh	*3
Coleoptera	Staphylinidae	Thecturota marchii (Dodero, 1922)	*		s	*3
Coleoptera	Staphylinidae	Thiasophila angulata (Er., 1837)	*		mh	*3
Coleoptera	Staphylinidae	Thiasophila canaliculata Muls. & Rey, 1875	G		s	*3
Coleoptera	Staphylinidae	Thiasophila inquilina (Märk., 1845)	V		s	*3
Coleoptera	Staphylinidae	Thiasophila lohsei Zerche, 1987	G		s	*3
Coleoptera	Staphylinidae	Thiasophila wockii (Schneid., 1862)	R		es	*3
Coleoptera	Staphylinidae	Thinobius angusticeps Fauvel, 1889	D		?	*3
Coleoptera	Staphylinidae	Thinobius brevipennis Kiesw., 1850	3		s	*3
Coleoptera	Staphylinidae	Thinobius brunneipennis Kr., 1857	0	1960	ex	*3
Coleoptera	Staphylinidae	Thinobius ciliatus Kiesw., 1844	3		s	*3
Coleoptera	Staphylinidae	Thinobius comes Smet., 1959	G		ss	*3
Coleoptera	Staphylinidae	Thinobius crinifer Smet., 1959	G		ss	*3
Coleoptera	Staphylinidae	Thinobius flagellatus Lohse, 1984	3		s	*3
Coleoptera	Staphylinidae	Thinobius klimai Bernh., 1902	0	1954	ex	*3
Coleoptera	Staphylinidae	Thinobius ligeris Pyot, 1874	0	1944	ex	*3
Coleoptera	Staphylinidae	Thinobius linearis Kr., 1857	G		ss	*3
Coleoptera	Staphylinidae	Thinobius longipennis (Heer, 1841)	G		ss	*3
Coleoptera	Staphylinidae	Thinobius major Kr., 1857	0	1895	ex	*3
Coleoptera	Staphylinidae	Thinobius pusillimus (Heer, 1839)	G		ss	*3
Coleoptera	Staphylinidae	Thinodromus arcuatus (Steph., 1834)	*		h	*3
Coleoptera	Staphylinidae	Thinodromus dilatatus (Er., 1839)	G		ss	*3
Coleoptera	Staphylinidae	Thinodromus distinctus (Fairm. & Lab., 1856)	G		s	*3
Coleoptera	Staphylinidae	Thinodromus hirticollis (Muls. & Rey, 1878)	0	1922	ex	*3
Coleoptera	Staphylinidae	Thinodromus plagiatus (Kiesw., 1850)	R		es	*3
Coleoptera	Staphylinidae	Thinonoma atra (Grav., 1806)	*		h	*3
Coleoptera	Staphylinidae	Thoracophorus corticinus Motsch., 1837	2		ss	*3
Coleoptera	Staphylinidae	Tinotus morion (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Tomoglossa brakmani Scheerp., 1963	2		es	*3
Coleoptera	Staphylinidae	Tomoglossa heydemanni Lohse, 1977	1		es	*3
Coleoptera	Staphylinidae	Tomoglossa luteicornis (Er., 1837)	G		ss	*3
Coleoptera	Staphylinidae	Trichiusa immigrata Lohse, 1984	*		h	*3
Coleoptera	Staphylinidae	Trichophya pilicornis (Gyll., 1810)	*		h	*3
Coleoptera	Staphylinidae	Xantholinus coiffaiti Franz, 1966	D		?	*3
Coleoptera	Staphylinidae	Xantholinus distans Muls. & Rey, 1853	*		s	*3
Coleoptera	Staphylinidae	Xantholinus dvoraki Coiff., 1956	G		s	*3
Coleoptera	Staphylinidae	Xantholinus elegans (Ol., 1795)	*		mh	*3
Coleoptera	Staphylinidae	Xantholinus gallicus Coiff., 1956	*		s	*3
Coleoptera	Staphylinidae	Xantholinus laevigatus Jac., 1849	*		h	*3
Coleoptera	Staphylinidae	Xantholinus linearis (Ol., 1795)	*		sh	*3
Coleoptera	Staphylinidae	Xantholinus longiventris Heer, 1839	*		sh	*3
Coleoptera	Staphylinidae	Xantholinus tricolor (F., 1787)	*		h	*3
Coleoptera	Staphylinidae	Xylodromus affinis (Gerh., 1877)	*		mh	*3
Coleoptera	Staphylinidae	Xylodromus concinnus (Marsh., 1802)	*		h	*3
Coleoptera	Staphylinidae	Xylodromus depressus (Grav., 1802)	*		h	*3
Coleoptera	Staphylinidae	Xylodromus testaceus (Er., 1840)	*		mh	*3
Coleoptera	Staphylinidae	Xylostiba bosnica (Bernh., 1902)	*		mh	*3
Coleoptera	Staphylinidae	Xylostiba monilicornis (Gyll., 1810)	*		s	*3
Coleoptera	Staphylinidae	Zeteotomus brevicornis (Er., 1839)	R		es	*3
Coleoptera	Staphylinidae	Zoosetha incisa Assing, 1998	R		es	*3
Coleoptera	Staphylinidae	Zoosetha inconspicua (Er., 1839)	R		es	*3
Coleoptera	Staphylinidae	Zoosetha rufescens (Kr., 1856)	R		es	*3
Coleoptera	Staphylinidae	Zyras collaris (Payk., 1800)	V		s	*3
Coleoptera	Staphylinidae	Zyras fulgidus (Grav., 1806)	G		ss	*3
Coleoptera	Staphylinidae	Zyras haworthi (Steph., 1832)	*		s	*3

Order	Family	Species	K	L	P	S
Coleoptera	Tenebrionidae	Alphitobius diaperinus (Panz., 1797)	*		mh	*3
Coleoptera	Tenebrionidae	Alphitobius laevigatus (F., 1781)	*		ss	*3
Coleoptera	Tenebrionidae	Alphitophagus bifasciatus (Say, 1823)	*		s	*3
Coleoptera	Tenebrionidae	Asida sabulosa (Fuessl., 1775)	G		ss	*3
Coleoptera	Tenebrionidae	Bius thoracicus (F., 1792)	R		es	*3
Coleoptera	Tenebrionidae	Blaps lethifera Marsh., 1802	G		s	*3
Coleoptera	Tenebrionidae	Blaps mortisaga (L., 1758)	G		s	*3
Coleoptera	Tenebrionidae	Blaps mucronata Latr., 1804	G		s	*3
Coleoptera	Tenebrionidae	Bolitophagus interruptus Ill., 1800	0	1950	ex	*3
Coleoptera	Tenebrionidae	Bolitophagus reticulatus (L., 1767)	3		s	*3
Coleoptera	Tenebrionidae	Corticeus bicolor (Ol., 1790)	3		s	*3
Coleoptera	Tenebrionidae	Corticeus bicoloroides (Roub., 1933)	2		ss	*3
Coleoptera	Tenebrionidae	Corticeus fasciatus F., 1790	2		ss	*3
Coleoptera	Tenebrionidae	Corticeus fraxini Kug., 1794	D		?	*3
Coleoptera	Tenebrionidae	Corticeus linearis F., 1790	*		mh	*3
Coleoptera	Tenebrionidae	Corticeus longulus Gyll., 1827	*		ss	*3
Coleoptera	Tenebrionidae	Corticeus pini Panz., 1799	D		?	*3
Coleoptera	Tenebrionidae	Corticeus suberis (Lucas, 1846)	0	1955	ex	*3
Coleoptera	Tenebrionidae	Corticeus suturalis Payk., 1800	R		es	*3
Coleoptera	Tenebrionidae	Corticeus unicolor (Pill. & Mitt., 1783)	*		mh	*3
Coleoptera	Tenebrionidae	Corticeus versipellis Baudi, 1876	0	1910	ex	*3
Coleoptera	Tenebrionidae	Crypticus quisquilius (L., 1761)	*		h	*3
Coleoptera	Tenebrionidae	Cynaeus angustus (Lec., 1851)	nb		nb	*3
Coleoptera	Tenebrionidae	Diaclina fagi (Panz., 1799)	*		s	*3
Coleoptera	Tenebrionidae	Diaclina testudinea (Pill. & Mitt., 1783)	R		es	*3
Coleoptera	Tenebrionidae	Diaperis boleti (L., 1758)	*		h	*3
Coleoptera	Tenebrionidae	Eledona agricola (Hbst., 1783)	*		mh	*3
Coleoptera	Tenebrionidae	Eledonoprius armatus (Panz., 1799)	1		es	*3
Coleoptera	Tenebrionidae	Gnatocerus cornutus (F., 1798)	*		s	*3
Coleoptera	Tenebrionidae	Latheticus oryzae Wtrh., 1880	*		s	*3
Coleoptera	Tenebrionidae	Melanimon tibiale (F., 1781)	V		mh	*3
Coleoptera	Tenebrionidae	Menephilus cylindricus (Hbst., 1784)	R		es	*3
Coleoptera	Tenebrionidae	Myrmechixenus subterraneus (Chevr., 1835)	*		s	*3
Coleoptera	Tenebrionidae	Myrmechixenus vaporariorum (Guer., 1843)	*		s	*3
Coleoptera	Tenebrionidae	Nalassus convexus (Küst., 1850)	R		es	*3
Coleoptera	Tenebrionidae	Nalassus dermestoides (Ill., 1798)	*		h	*3
Coleoptera	Tenebrionidae	Nalassus laevioctostriatus (Goeze, 1777)	*		h	*3
Coleoptera	Tenebrionidae	Neatus picipes (Hbst., 1797)	2		ss	*3
Coleoptera	Tenebrionidae	Neomida haemorrhoidalis (F., 1787)	1		es	*3
Coleoptera	Tenebrionidae	Opatrum riparium Scriba, 1865	G		ss	*3
Coleoptera	Tenebrionidae	Opatrum sabulosum (L., 1761)	*		mh	*3
Coleoptera	Tenebrionidae	Palorus depressus (F., 1790)	V		s	*3
Coleoptera	Tenebrionidae	Palorus ratzeburgii (Wissm., 1848)	D		?	*3
Coleoptera	Tenebrionidae	Palorus subdepressus (Woll., 1864)	*		s	*3
Coleoptera	Tenebrionidae	Pedinus femoralis (L., 1767)	G		ss	*3
Coleoptera	Tenebrionidae	Pentaphyllus testaceus (Hellw., 1792)	3		s	*3
Coleoptera	Tenebrionidae	Phaleria cadaverina (F., 1792)	3		ss	*3
Coleoptera	Tenebrionidae	Phylan gibbus (F., 1775)	3		ss	*3
Coleoptera	Tenebrionidae	Platydema dejeanii Laporte & Brullé, 1831	R		es	*3
Coleoptera	Tenebrionidae	Platydema violaceum (F., 1790)	*		s	*3
Coleoptera	Tenebrionidae	Scaphidema metallicum (F., 1792)	*		h	*3
Coleoptera	Tenebrionidae	Stenomax aeneus (Scop., 1763)	V		s	*3
Coleoptera	Tenebrionidae	Tenebrio molitor L., 1758	*		h	*3
Coleoptera	Tenebrionidae	Tenebrio obscurus F., 1792	*		s	*3
Coleoptera	Tenebrionidae	Tenebrio opacus Duft., 1812	2		ss	*3
Coleoptera	Tenebrionidae	Tribolium castaneum (Hbst., 1797)	*		h	*3
Coleoptera	Tenebrionidae	Tribolium confusum Duval, 1863	*		h	*3
Coleoptera	Tenebrionidae	Tribolium destructor Uytt., 1934	*		h	*3
Coleoptera	Tenebrionidae	Tribolium madens (Charp., 1825)	D		ss	*3
Coleoptera	Tenebrionidae	Uloma culinaris (L., 1758)	3		s	*3
Coleoptera	Tenebrionidae	Uloma rufa (Pill. & Mitt., 1783)	V		s	*3
Coleoptera	Tenebrionidae	Xanthomus pallidus (Curt., 1830)	1		es	*3
Coleoptera	Tetratomidae	Tetratoma ancora F., 1790	*		mh	*3
Coleoptera	Tetratomidae	Tetratoma desmarestii Latr., 1807	2		es	*3
Coleoptera	Tetratomidae	Tetratoma fungorum F., 1790	*		mh	*3
Coleoptera	Throscidae	Aulonothroscus brevicollis Bonv., 1859	*		mh	*3
Coleoptera	Throscidae	Trixagus atticus Rtt., 1921	nb		nb	*3
Coleoptera	Throscidae	Trixagus carinifrons Bonv., 1859	*		s	*3
Coleoptera	Throscidae	Trixagus dermestoides (L., 1767)	*		h	*3
Coleoptera	Throscidae	Trixagus duvali Bonv., 1859	D		?	*3
Coleoptera	Throscidae	Trixagus elateroides Heer, 1841	D		?	*3
Coleoptera	Throscidae	Trixagus exul (Bonv., 1859)	D		?	*3
Coleoptera	Throscidae	Trixagus gracilis Woll., 1854	nb		nb	*3
Coleoptera	Throscidae	Trixagus leseigneuri Muona, 2002	*		h	*3
Coleoptera	Throscidae	Trixagus meybohmi Leseign., 2005	*		h	*3
Coleoptera	Throscidae	Trixagus obtusus Curt., 1827	*		mh	*3
Coleoptera	Trogidae	Trox cadaverinus (Illiger, 1802)	1		es	*3
Coleoptera	Trogidae	Trox eversmannii Krynicki, 1832	1		es	*3
Coleoptera	Trogidae	Trox hispidus (Pontoppidan, 1763)	3		s	*3
Coleoptera	Trogidae	Trox niger Rossi, 1792	R		es	*3

Order	Family	Species	K	L	P	S
Coleoptera	Trogidae	Trox perlatus (Goeze, 1777)	V		s	*3
Coleoptera	Trogidae	Trox perrisii Fairmaire, 1868	2		ss	*3
Coleoptera	Trogidae	Trox sabulosus (Linnaeus, 1758)	V		mh	*3
Coleoptera	Trogidae	Trox scaber (Linnaeus, 1767)	*		sh	*3
Coleoptera	Trogositidae	Nemosoma elongatum (L., 1761)	*		mh	*3
Coleoptera	Trogositidae	Temnochila caerulea (Ol., 1790)	0	1850	ex	*3
Coleoptera	Trogositidae	Tenebroides fuscus (Goeze, 1777)	3		s	*3
Coleoptera	Trogositidae	Tenebroides mauritanicus (L., 1758)	D		?	*3
Coleoptera	Urodonidae	Urodon conformis Suffr., 1845	G		ss	*3
Coleoptera	Urodonidae	Urodon rufipes (Ol., 1790)	*		h	*3
Coleoptera	Urodonidae	Urodon suturalis (F., 1792)	*		mh	*3
Dermaptera	Anisolabididae	Euborellia annulipes (Lucas, 1847)	nb		nb	*1
Dermaptera	Forficulidae	Anechura bipunctata (Fabricius, 1781)	1		ss	*1
Dermaptera	Forficulidae	Apterygida media (Hagenbach, 1822)	*		h	*1
Dermaptera	Forficulidae	Chelidurella guentheri (Galvagni, 1994)	*		h	*1
Dermaptera	Forficulidae	Chelidurella thaleri Harz, 1980	R		es	*1
Dermaptera	Forficulidae	Forficula auricularia (Linnaeus, 1758)	*		sh	*1
Dermaptera	Labiduridae	Labidura riparia (Pallas, 1773)	2		s	*1
Dermaptera	Spongiphoridae	Labia minor (Linnaeus, 1758)	V		mh	*1
Dictyoptera	Blattellidae	Blattella germanica (Linnaeus, 1767)	nb		nb	*1
Dictyoptera	Blattellidae	Ectobius lapponicus (Linnaeus, 1758)	*		h	*1
Dictyoptera	Blattellidae	Ectobius lucidus (Hagenbach, 1822)	V		s	*1
Dictyoptera	Blattellidae	Ectobius pallidus (Olivier, 1789)	*		s	*1
Dictyoptera	Blattellidae	Ectobius panzeri Stephens, 1835	1		es	*1
Dictyoptera	Blattellidae	Ectobius sylvestris (Poda, 1761)	*		h	*1
Dictyoptera	Blattellidae	Ectobius vittiventris (A. Costa, 1847)	nb		nb	*1
Dictyoptera	Blattellidae	Phyllodromica maculata (Schreber, 1781)	3		s	*1
Dictyoptera	Blattellidae	Supella longipalpa (Fabricius, 1798)	nb		nb	*1
Dictyoptera	Blattidae	Blatta orientalis Linnaeus, 1758	nb		nb	*1
Dictyoptera	Blattidae	Periplaneta americana (Linnaeus, 1758)	nb		nb	*1
Dictyoptera	Blattidae	Periplaneta australasiae (Fabricius, 1775)	nb		nb	*1
Diptera	Asilidae	Andrenosoma albibarbe (Meigen, 1820)	R		es	*1
Diptera	Asilidae	Andrenosoma atrum (Linnaeus, 1758)	2		s	*1
Diptera	Asilidae	Aneomochtherus flavicornis (Ruthe, 1831)	1		ss	*1
Diptera	Asilidae	Antipalus varipes (Meigen, 1820)	V		mh	*1
Diptera	Asilidae	Antiphrisson trifarius (Loew, 1849)	0	1954	ex	*1
Diptera	Asilidae	Asilus crabroniformis (Linnaeus, 1758)	2		mh	*1
Diptera	Asilidae	Choerades castellanii (Hradský, 1962)	D		?	*1
Diptera	Asilidae	Choerades femorata (Meigen, 1804)	*		mh	*1
Diptera	Asilidae	Choerades fimbriata (Meigen, 1820)	*		mh	*1
Diptera	Asilidae	Choerades fuliginosa (Panzer, 1798)	G		ss	*1
Diptera	Asilidae	Choerades gilva (Linnaeus, 1758)	G		s	*1
Diptera	Asilidae	Choerades ignea (Meigen, 1820)	V		mh	*1
Diptera	Asilidae	Choerades marginata (Linnaeus, 1758)	*		h	*1
Diptera	Asilidae	Choerades rufipes (Fallén, 1814)	R		es	*1
Diptera	Asilidae	Cyrtopogon flavimanus (Meigen, 1820)	R		es	*1
Diptera	Asilidae	Cyrtopogon fulvicornis (Macquart, 1834)	R		es	*1
Diptera	Asilidae	Cyrtopogon lateralis (Fallén, 1814)	*		mh	*1
Diptera	Asilidae	Cyrtopogon maculipennis (Macquart, 1834)	D		?	*1
Diptera	Asilidae	Cyrtopogon ruficornis (Fabricius, 1794)	D		ss	*1
Diptera	Asilidae	Dasypogon diadema (Fabricius, 1781)	2		s	*1
Diptera	Asilidae	Didysmachus picipes (Meigen, 1820)	V		mh	*1
Diptera	Asilidae	Dioctria atricapilla Meigen, 1804	*		sh	*1
Diptera	Asilidae	Dioctria bicincta Meigen, 1820	2		s	*1
Diptera	Asilidae	Dioctria cothurnata Meigen, 1820	*		h	*1
Diptera	Asilidae	Dioctria flavipennis Meigen, 1820	1		es	*1
Diptera	Asilidae	Dioctria harcyniae Loew, 1844	2		ss	*1
Diptera	Asilidae	Dioctria humeralis Zeller, 1840	D		ss	*1
Diptera	Asilidae	Dioctria hyalipennis (Fabricius, 1794)	*		sh	*1
Diptera	Asilidae	Dioctria lateralis Meigen, 1804	3		s	*1
Diptera	Asilidae	Dioctria linearis (Fabricius, 1787)	*		mh	*1
Diptera	Asilidae	Dioctria longicornis Meigen, 1820	G		s	*1
Diptera	Asilidae	Dioctria oelandica (Linnaeus, 1758)	*		mh	*1
Diptera	Asilidae	Dioctria rufipes (De Geer, 1776)	*		sh	*1
Diptera	Asilidae	Dioctria rufithorax Loew, 1853	0	1942	ex	*1
Diptera	Asilidae	Dioctria sudetica Duda, 1940	D		?	*1
Diptera	Asilidae	Dysmachus fuscipennis (Meigen, 1820)	2		s	*1
Diptera	Asilidae	Dysmachus praemorsus (Loew, 1854)	1		es	*1
Diptera	Asilidae	Dysmachus trigonus (Meigen, 1804)	*		sh	*1
Diptera	Asilidae	Echthistus rufinervis (Meigen, 1820)	3		ss	*1
Diptera	Asilidae	Erax barbatus Scopoli, 1763	2		ss	*1
Diptera	Asilidae	Eutolmus rufibarbis (Meigen, 1820)	V		mh	*1
Diptera	Asilidae	Holopogon dimidiatus (Meigen, 1820)	1		es	*1
Diptera	Asilidae	Holopogon fumipennis (Meigen, 1820)	3		mh	*1
Diptera	Asilidae	Holopogon nigripennis (Meigen, 1820)	V		mh	*1
Diptera	Asilidae	Holopogon priscus (Meigen, 1820)	R		es	*1
Diptera	Asilidae	Laphria ephippium (Fabricius, 1781)	G		s	*1
Diptera	Asilidae	Laphria flava (Linnaeus, 1761)	*		sh	*1
Diptera	Asilidae	Laphria gibbosa (Linnaeus, 1758)	2		s	*1
Diptera	Asilidae	Lasiopogon cinctus (Fabricius, 1781)	*		h	*1

Order	Family	Species	K	L	P	S
Diptera	Asilidae	Leptarthrus brevirostris (Meigen, 1804)	V		mh	*1
Diptera	Asilidae	Leptarthrus vitripennis (Meigen, 1820)	G		ss	*1
Diptera	Asilidae	Leptogaster cylindrica (De Geer, 1776)	*		sh	*1
Diptera	Asilidae	Leptogaster guttiventris Zetterstedt, 1842	*		mh	*1
Diptera	Asilidae	Leptogaster pubicornis Loew, 1847	*		s	*1
Diptera	Asilidae	Leptogaster subtilis Loew, 1847	*		s	*1
Diptera	Asilidae	Machimus arthriticus (Zeller, 1840)	*		mh	*1
Diptera	Asilidae	Machimus chrysitis (Meigen, 1820)	2		s	*1
Diptera	Asilidae	Machimus gonatistes (Zeller, 1840)	2		s	*1
Diptera	Asilidae	Machimus intermedius (Holmgren, 1852)	D		?	*1
Diptera	Asilidae	Machimus rusticus (Meigen, 1820)	V		mh	*1
Diptera	Asilidae	Molobratia teutonus (Linnaeus, 1767)	2		s	*1
Diptera	Asilidae	Neoepitriptus setosulus (Zeller, 1840)	3		mh	*1
Diptera	Asilidae	Neoitamus cothurnatus (Meigen, 1820)	G		s	*1
Diptera	Asilidae	Neoitamus cyanurus (Loew, 1849)	*		h	*1
Diptera	Asilidae	Neoitamus socius (Loew, 1871)	*		h	*1
Diptera	Asilidae	Neomochtherus geniculatus (Meigen, 1820)	*		h	*1
Diptera	Asilidae	Neomochtherus pallipes (Meigen, 1820)	*		mh	*1
Diptera	Asilidae	Pamponerus germanicus (Linnaeus, 1758)	3		mh	*1
Diptera	Asilidae	Philonicus albiceps (Meigen, 1820)	*		h	*1
Diptera	Asilidae	Rhadiurgus variabilis (Zetterstedt, 1838)	V		mh	*1
Diptera	Asilidae	Stichopogon albofasciatus (Meigen, 1820)	0	1935	ex	*1
Diptera	Asilidae	Stichopogon elegantulus (Wiedemann, 1820)	2		ss	*1
Diptera	Asilidae	Stichopogon schineri Koch, 1872	2		ss	*1
Diptera	Asilidae	Stilpnogaster aemula (Meigen, 1820)	D		?	*1
Diptera	Asilidae	Tolmerus atricapillus (Fallén, 1814)	*		sh	*1
Diptera	Asilidae	Tolmerus atripes Loew, 1854	G		s	*1
Diptera	Asilidae	Tolmerus cingulatus (Fabricius, 1781)	*		h	*1
Diptera	Asilidae	Tolmerus cowini (Hobby, 1946)	*		ss	*1
Diptera	Asilidae	Tolmerus micans (Meigen, 1820)	G		ss	*1
Diptera	Asilidae	Tolmerus pyragra (Zeller, 1840)	V		mh	*1
Diptera	Asilidae	Tolmerus strandi Duda, 1940	2		s	*1
Diptera	Atelestidae	Atelestus dissonans Collin, 1961	2		s	*1
Diptera	Atelestidae	Atelestus pulicarius (Fallén, 1816)	*		h	*1
Diptera	Atelestidae	Meghyperus sudeticus Loew, 1850	0	1919	ex	*1
Diptera	Ceratopogonidae	Allohelea tessellata (Zetterstedt, 1850)	*		ss	*1
Diptera	Ceratopogonidae	Alluaudomyia needhami Thomsen, 1935	*		s	*1
Diptera	Ceratopogonidae	Alluaudomyia riparia Clastrier, 1978	*		mh	*1
Diptera	Ceratopogonidae	Alluaudomyia splendida (Winnertz, 1852)	*		mh	*1
Diptera	Ceratopogonidae	Atrichopogon aethiops (Goetghebuer, 1920)	G		mh	*1
Diptera	Ceratopogonidae	Atrichopogon albiscapulus Kieffer, 1918	D		ss	*1
Diptera	Ceratopogonidae	Atrichopogon atribarbus Kieffer, 1922	D		ss	*1
Diptera	Ceratopogonidae	Atrichopogon brunnipes (Meigen, 1804)	*		h	*1
Diptera	Ceratopogonidae	Atrichopogon flavolineatus (Strobl, 1880)	*		mh	*1
Diptera	Ceratopogonidae	Atrichopogon forcipatus (Winnertz, 1852)	G		s	*1
Diptera	Ceratopogonidae	Atrichopogon fuscus (Meigen, 1804)	G		s	*1
Diptera	Ceratopogonidae	Atrichopogon hirtidorsum Remm, 1961	G		s	*1
Diptera	Ceratopogonidae	Atrichopogon longicalcar Remm, 1961	*		s	*1
Diptera	Ceratopogonidae	Atrichopogon longiserrus (Kieffer, 1921)	0	1934	ex	*1
Diptera	Ceratopogonidae	Atrichopogon lucorum (Meigen, 1818)	*		sh	*1
Diptera	Ceratopogonidae	Atrichopogon minutus (Meigen, 1830)	*		h	*1
Diptera	Ceratopogonidae	Atrichopogon muelleri (Müller, 1905)	0	1951	ex	*1
Diptera	Ceratopogonidae	Atrichopogon oedemerarum Storå, 1939	D		h	*1
Diptera	Ceratopogonidae	Atrichopogon pavidus (Winnertz, 1852)	*		mh	*1
Diptera	Ceratopogonidae	Atrichopogon rostratus (Winnertz, 1852)	*		s	*1
Diptera	Ceratopogonidae	Atrichopogon setosipennis (Kieffer, 1911)	*		mh	*1
Diptera	Ceratopogonidae	Atrichopogon thienemanni Kieffer, 1921	0	1939	ex	*1
Diptera	Ceratopogonidae	Atrichopogon winnertzi Goetghebuer, 1922	*		s	*1
Diptera	Ceratopogonidae	Bezzia albicornis (Meigen, 1818)	0	1934	ex	*1
Diptera	Ceratopogonidae	Bezzia annulipes (Meigen, 1830)	*		sh	*1
Diptera	Ceratopogonidae	Bezzia bicolor (Meigen, 1804)	*		h	*1
Diptera	Ceratopogonidae	Bezzia calceata (Walker, 1856)	D		s	*1
Diptera	Ceratopogonidae	Bezzia coracina (Zetterstedt, 1850)	*		mh	*1
Diptera	Ceratopogonidae	Bezzia flavicornis (Staeger, 1839)	D		h	*1
Diptera	Ceratopogonidae	Bezzia gracilipes (Winnertz, 1852)	G		s	*1
Diptera	Ceratopogonidae	Bezzia kazlauskasi Remm, 1966	G		s	*1
Diptera	Ceratopogonidae	Bezzia kiefferiana Goetghebuer, 1934	D		?	*1
Diptera	Ceratopogonidae	Bezzia leucogaster (Zetterstedt, 1850)	*		s	*1
Diptera	Ceratopogonidae	Bezzia nobilis (Winnertz, 1852)	*		mh	*1
Diptera	Ceratopogonidae	Bezzia ornata (Meigen, 1830)	G		mh	*1
Diptera	Ceratopogonidae	Bezzia rufifascies Goetghebuer, 1932	D		s	*1
Diptera	Ceratopogonidae	Bezzia signata (Meigen, 1804)	V		s	*1
Diptera	Ceratopogonidae	Bezzia solstitialis (Winnertz, 1852)	*		sh	*1
Diptera	Ceratopogonidae	Bezzia winnertziana Kieffer, 1919	*		s	*1
Diptera	Ceratopogonidae	Brachypogon nieves (Havelka, 1976)	V		s	*1
Diptera	Ceratopogonidae	Brachypogon vitiosus (Winnertz, 1852)	*		h	*1
Diptera	Ceratopogonidae	Ceratoculicoides moravicus Knoz, 1987	*		mh	*1
Diptera	Ceratopogonidae	Ceratoculicoides tontoeguri (Havelka, 1980)	3		ss	*1
Diptera	Ceratopogonidae	Ceratopogon communis Meigen, 1804	D		?	*1
Diptera	Ceratopogonidae	Ceratopogon grandiforceps (Kieffer, 1913)	*		mh	*1

Order	Family	Species	K	L	P	S
Diptera	Ceratopogonidae	Ceratopogon niveipennis Meigen, 1818	G		s	*1
Diptera	Ceratopogonidae	Clinohelea unimaculata (Macquart, 1826)	*		ss	*1
Diptera	Ceratopogonidae	Culicoides achrayi Kettle & Lawson, 1955	nb		nb	*1
Diptera	Ceratopogonidae	Culicoides albicans (Winnertz, 1852)	*		h	*1
Diptera	Ceratopogonidae	Culicoides cameroni Campbell & Pelham-Clinton, 1960	*		mh	*1
Diptera	Ceratopogonidae	Culicoides chiopterus (Meigen, 1830)	nb		nb	*1
Diptera	Ceratopogonidae	Culicoides circumscriptus Kieffer, 1918	*		sh	*1
Diptera	Ceratopogonidae	Culicoides clastrieri Callot, Kremer & Deduit, 1962	D		?	*1
Diptera	Ceratopogonidae	Culicoides comosioculatus Tokunaga, 1956	D		ss	*1
Diptera	Ceratopogonidae	Culicoides deltus Edwards in Edwards et al., 1939	*		h	*1
Diptera	Ceratopogonidae	Culicoides dewulfi Goetghebuer, 1936	nb		nb	*1
Diptera	Ceratopogonidae	Culicoides duddingstoni Kettle & Lawson, 1955	*		h	*1
Diptera	Ceratopogonidae	Culicoides fascipennis (Staeger, 1839)	*		s	*1
Diptera	Ceratopogonidae	Culicoides festivipennis Kieffer, 1914	*		sh	*1
Diptera	Ceratopogonidae	Culicoides furcillatus Callot, Kremer & Paradis, 1962	*		mh	*1
Diptera	Ceratopogonidae	Culicoides heliophilus Edwards, 1921	D		mh	*1
Diptera	Ceratopogonidae	Culicoides impunctatus Goetghebuer, 1920	*		h	*1
Diptera	Ceratopogonidae	Culicoides jurensis Callot, Kremer & Deduit, 1962	*		h	*1
Diptera	Ceratopogonidae	Culicoides kibunensis Tokunaga, 1937	*		sh	*1
Diptera	Ceratopogonidae	Culicoides manchuriensis Tokunaga, 1941	*		ss	*1
Diptera	Ceratopogonidae	Culicoides maritimus Kieffer, 1924	D		?	*1
Diptera	Ceratopogonidae	Culicoides newsteadi Austen, 1921	nb		nb	*1
Diptera	Ceratopogonidae	Culicoides nubeculosus (Meigen, 1830)	*		mh	*1
Diptera	Ceratopogonidae	Culicoides obsoletus (Meigen, 1818)	nb		nb	*1
Diptera	Ceratopogonidae	Culicoides pallidicornis Kieffer, 1919	*		h	*1
Diptera	Ceratopogonidae	Culicoides pictipennis (Staeger, 1839)	*		sh	*1
Diptera	Ceratopogonidae	Culicoides poperinghensis Goetghebuer, 1953	*		mh	*1
Diptera	Ceratopogonidae	Culicoides pseudoheliophilus Callot & Kremer, 1961	*		mh	*1
Diptera	Ceratopogonidae	Culicoides pulicaris (Linnaeus, 1758)	nb		nb	*1
Diptera	Ceratopogonidae	Culicoides pumilus (Winnertz, 1852)	*		h	*1
Diptera	Ceratopogonidae	Culicoides punctatus (Meigen, 1804)	nb		nb	*1
Diptera	Ceratopogonidae	Culicoides reconditus Campbell & Pelham-Clinton, 1960	*		h	*1
Diptera	Ceratopogonidae	Culicoides riethi Kieffer, 1914	*		h	*1
Diptera	Ceratopogonidae	Culicoides salinarius Kieffer, 1914	*		h	*1
Diptera	Ceratopogonidae	Culicoides scoticus Downes & Kettle, 1952	nb		nb	*1
Diptera	Ceratopogonidae	Culicoides segnis Campbell & Pelham-Clinton, 1960	*		h	*1
Diptera	Ceratopogonidae	Culicoides semimaculatus Clastrier, 1958	D		s	*1
Diptera	Ceratopogonidae	Culicoides stigma (Meigen, 1818)	*		h	*1
Diptera	Ceratopogonidae	Culicoides subfasciipennis Kieffer, 1919	*		h	*1
Diptera	Ceratopogonidae	Culicoides tauricus Gutsevich, 1959	*		mh	*1
Diptera	Ceratopogonidae	Culicoides truncorum Edwards in Edwards et al., 1939	*		s	*1
Diptera	Ceratopogonidae	Culicoides vexans (Staeger, 1839)	*		mh	*1
Diptera	Ceratopogonidae	Dasyhelea aithalodes Remm, 1971	D		ss	*1
Diptera	Ceratopogonidae	Dasyhelea bilineata Goetghebuer, 1920	*		h	*1
Diptera	Ceratopogonidae	Dasyhelea bilobata Kieffer, 1915	*		mh	*1
Diptera	Ceratopogonidae	Dasyhelea dampfi Kieffer, 1925	*		s	*1
Diptera	Ceratopogonidae	Dasyhelea dieuzeidei (Vaillant, 1957)	*		h	*1
Diptera	Ceratopogonidae	Dasyhelea diplosis Kieffer, 1914	3		s	*1
Diptera	Ceratopogonidae	Dasyhelea flavifrons (Guérin-Méneville, 1833)	*		mh	*1
Diptera	Ceratopogonidae	Dasyhelea flaviventris (Goetghebuer, 1910)	*		h	*1
Diptera	Ceratopogonidae	Dasyhelea flavoscutellata (Zetterstedt, 1850)	*		sh	*1
Diptera	Ceratopogonidae	Dasyhelea franzella Goetghebuer, 1950	*		s	*1
Diptera	Ceratopogonidae	Dasyhelea holosericea (Meigen, 1804)	G		s	*1
Diptera	Ceratopogonidae	Dasyhelea inclusa Kieffer, 1918	0	1928	ex	*1
Diptera	Ceratopogonidae	Dasyhelea malleola Remm, 1962	*		s	*1
Diptera	Ceratopogonidae	Dasyhelea modesta (Winnertz, 1852)	*		sh	*1
Diptera	Ceratopogonidae	Dasyhelea notata Goetghebuer, 1920	V		h	*1
Diptera	Ceratopogonidae	Dasyhelea pallidiventris (Goetghebuer, 1931)	*		mh	*1
Diptera	Ceratopogonidae	Dasyhelea paludicola Kieffer, 1925	D		mh	*1
Diptera	Ceratopogonidae	Dasyhelea punctiventris Goetghebuer, 1940	*		mh	*1
Diptera	Ceratopogonidae	Dasyhelea sericata (Winnertz, 1852)	G		s	*1
Diptera	Ceratopogonidae	Dasyhelea similaris Remm, 1972	*		s	*1
Diptera	Ceratopogonidae	Dasyhelea tessicola Remm, 1972	*		s	*1
Diptera	Ceratopogonidae	Dasyhelea turanicola Remm & Nazarmukhamedov, 1969	*		ss	*1
Diptera	Ceratopogonidae	Dasyhelea turficola Kieffer, 1925	*		mh	*1
Diptera	Ceratopogonidae	Forcipomyia acidicola (Tokunaga, 1937)	D		s	*1
Diptera	Ceratopogonidae	Forcipomyia alacris (Winnertz, 1852)	V		mh	*1
Diptera	Ceratopogonidae	Forcipomyia allocera Rieth, 1915	0	1934	ex	*1
Diptera	Ceratopogonidae	Forcipomyia altaica Remm, 1972	D		mh	*1
Diptera	Ceratopogonidae	Forcipomyia apricans (Kieffer, 1919)	*		h	*1
Diptera	Ceratopogonidae	Forcipomyia aquatica Kieffer, 1922	*		ss	*1
Diptera	Ceratopogonidae	Forcipomyia bipunctata (Linnaeus, 1767)	*		sh	*1
Diptera	Ceratopogonidae	Forcipomyia brevipedicillata (Kieffer, 1901)	*		h	*1
Diptera	Ceratopogonidae	Forcipomyia brevipennis (Macquart, 1826)	*		h	*1
Diptera	Ceratopogonidae	Forcipomyia ciliata (Winnertz, 1852)	*		sh	*1
Diptera	Ceratopogonidae	Forcipomyia corticis Kieffer, 1911	G		s	*1
Diptera	Ceratopogonidae	Forcipomyia costata (Zetterstedt, 1838)	D		s	*1
Diptera	Ceratopogonidae	Forcipomyia crassipes (Winnertz, 1852)	D		mh	*1
Diptera	Ceratopogonidae	Forcipomyia eques (Johannsen, 1908)	*		s	*1
Diptera	Ceratopogonidae	Forcipomyia frutetorum (Winnertz, 1852)	G		s	*1

Order	Family	Species	K	L	P	S
Diptera	Ceratopogonidae	Forcipomyia fuliginosa (Meigen, 1818)	*		mh	*1
Diptera	Ceratopogonidae	Forcipomyia glauca Macfie, 1934	G		mh	*1
Diptera	Ceratopogonidae	Forcipomyia hygrophila Kieffer, 1925	D		s	*1
Diptera	Ceratopogonidae	Forcipomyia kaltenbachi (Winnertz, 1852)	G		mh	*1
Diptera	Ceratopogonidae	Forcipomyia knockensis Goetghebuer, 1938	G		s	*1
Diptera	Ceratopogonidae	Forcipomyia lepida (Winnertz, 1852)	D		?	*1
Diptera	Ceratopogonidae	Forcipomyia litoraurea (Ingram & Macfie, 1924)	*		mh	*1
Diptera	Ceratopogonidae	Forcipomyia manchuriensis Tokunaga, 1941	D		s	*1
Diptera	Ceratopogonidae	Forcipomyia monilicornis (Coquillett, 1905)	*		h	*1
Diptera	Ceratopogonidae	Forcipomyia murina (Winnertz, 1852)	*		h	*1
Diptera	Ceratopogonidae	Forcipomyia nigra (Winnertz, 1852)	*		sh	*1
Diptera	Ceratopogonidae	Forcipomyia nigrans Remm, 1962	*		s	*1
Diptera	Ceratopogonidae	Forcipomyia pallida (Winnertz, 1852)	*		h	*1
Diptera	Ceratopogonidae	Forcipomyia paludis (Macfie, 1936)	*		mh	*1
Diptera	Ceratopogonidae	Forcipomyia palustris (Meigen, 1804)	V		mh	*1
Diptera	Ceratopogonidae	Forcipomyia phlebotomoides Bangerter, 1933	D		s	*1
Diptera	Ceratopogonidae	Forcipomyia pulchrithorax Edwards in Saunders, 1924	D		h	*1
Diptera	Ceratopogonidae	Forcipomyia radicicola Edwards, 1924	*		s	*1
Diptera	Ceratopogonidae	Forcipomyia regula (Winnertz, 1852)	D		s	*1
Diptera	Ceratopogonidae	Forcipomyia sahariensis Kieffer, 1923	D		ss	*1
Diptera	Ceratopogonidae	Forcipomyia sanguinolenta Kieffer, 1925	D		ss	*1
Diptera	Ceratopogonidae	Forcipomyia sphagnophila Kieffer, 1925	V		h	*1
Diptera	Ceratopogonidae	Forcipomyia suberis Clastrier, 1956	D		ss	*1
Diptera	Ceratopogonidae	Forcipomyia tenuis (Winnertz, 1852)	*		mh	*1
Diptera	Ceratopogonidae	Forcipomyia tenuisquama Kieffer, 1924	*		s	*1
Diptera	Ceratopogonidae	Forcipomyia titillans (Winnertz, 1852)	*		h	*1
Diptera	Ceratopogonidae	Forcipomyia tonnoiri (Goetghebuer, 1920)	*		mh	*1
Diptera	Ceratopogonidae	Forcipomyia velox (Winnertz, 1852)	*		h	*1
Diptera	Ceratopogonidae	Isohelea alpinus (Clastrier, 1961)	*		ss	*1
Diptera	Ceratopogonidae	Isohelea perpusillus (Edwards, 1921)	*		mh	*1
Diptera	Ceratopogonidae	Isohelea sociabilis (Goetghebuer, 1920)	*		s	*1
Diptera	Ceratopogonidae	Kolenohelea calcarata (Goetghebuer, 1920)	G		s	*1
Diptera	Ceratopogonidae	Macropeza albitarsis Meigen, 1818	D		s	*1
Diptera	Ceratopogonidae	Mallochohelea inermis (Kieffer, 1909)	*		h	*1
Diptera	Ceratopogonidae	Mallochohelea munda (Loew, 1864)	G		mh	*1
Diptera	Ceratopogonidae	Mallochohelea nitida (Macquart, 1826)	*		h	*1
Diptera	Ceratopogonidae	Mallochohelea setigera (Loew, 1864)	G		mh	*1
Diptera	Ceratopogonidae	Neurohelea luteitarsis (Waltl, 1837)	0	1933	ex	*1
Diptera	Ceratopogonidae	Palpomyia armipes (Meigen, 1838)	3		mh	*1
Diptera	Ceratopogonidae	Palpomyia brachialis (Haliday, 1833)	*		mh	*1
Diptera	Ceratopogonidae	Palpomyia distincta (Haliday, 1833)	*		h	*1
Diptera	Ceratopogonidae	Palpomyia flavipes (Meigen, 1804)	*		sh	*1
Diptera	Ceratopogonidae	Palpomyia korni Havelka, 1980	D		?	*1
Diptera	Ceratopogonidae	Palpomyia lineata (Meigen, 1804)	*		h	*1
Diptera	Ceratopogonidae	Palpomyia nigripecta Kieffer, 1919	0	1926	ex	*1
Diptera	Ceratopogonidae	Palpomyia nigripes (Meigen, 1830)	*		s	*1
Diptera	Ceratopogonidae	Palpomyia praeusta (Loew, 1869)	*		mh	*1
Diptera	Ceratopogonidae	Palpomyia puberula Remm, 1976	*		s	*1
Diptera	Ceratopogonidae	Palpomyia remmi Havelka, 1974	*		mh	*1
Diptera	Ceratopogonidae	Palpomyia rufipes (Meigen, 1818)	D		ss	*1
Diptera	Ceratopogonidae	Palpomyia semiermis Goetghebuer, 1914	0	1928	ex	*1
Diptera	Ceratopogonidae	Palpomyia serripes (Meigen, 1818)	*		h	*1
Diptera	Ceratopogonidae	Palpomyia spinipes (Meigen in Panzer, 1806)	G		mh	*1
Diptera	Ceratopogonidae	Palpomyia succincta (Meigen, 1818)	D		ss	*1
Diptera	Ceratopogonidae	Palpomyia terrea (Meigen, 1818)	*		s	*1
Diptera	Ceratopogonidae	Palpomyia tibialis (Meigen, 1818)	*		mh	*1
Diptera	Ceratopogonidae	Palpomyia tinctipennis Kieffer, 1919	3		s	*1
Diptera	Ceratopogonidae	Phaenobezzia rubiginosa (Winnertz, 1852)	*		mh	*1
Diptera	Ceratopogonidae	Probezzia concinna (Meigen, 1818)	D		ss	*1
Diptera	Ceratopogonidae	Probezzia seminigra (Panzer, 1798)	*		mh	*1
Diptera	Ceratopogonidae	Schizohelea leucopeza (Meigen, 1804)	*		h	*1
Diptera	Ceratopogonidae	Serromyia atra (Meigen, 1818)	V		mh	*1
Diptera	Ceratopogonidae	Serromyia femorata (Meigen, 1804)	*		sh	*1
Diptera	Ceratopogonidae	Serromyia ledicola Kieffer, 1925	G		mh	*1
Diptera	Ceratopogonidae	Serromyia morio (Fabricius, 1775)	V		mh	*1
Diptera	Ceratopogonidae	Serromyia rufitarsis (Meigen, 1818)	*		s	*1
Diptera	Ceratopogonidae	Serromyia subinermis Kieffer, 1919	*		mh	*1
Diptera	Ceratopogonidae	Sphaeromias fasciatus (Meigen, 1804)	*		s	*1
Diptera	Ceratopogonidae	Sphaeromias pictus (Meigen, 1818)	V		mh	*1
Diptera	Ceratopogonidae	Stilobezzia flavirostris (Winnertz, 1852)	D		s	*1
Diptera	Ceratopogonidae	Stilobezzia fuscidorsum Kieffer, 1921	0	1926	ex	*1
Diptera	Ceratopogonidae	Stilobezzia gracilis (Haliday, 1833)	*		h	*1
Diptera	Ceratopogonidae	Stilobezzia ochracea (Winnertz, 1852)	G		mh	*1
Diptera	Chaoboridae	Chaoborus (Chaoborus) crystallinus (De Geer, 1776)	*		h	*1
Diptera	Chaoboridae	Chaoborus (Chaoborus) flavicans (Meigen, 1830)	*		h	*1
Diptera	Chaoboridae	Chaoborus (Chaoborus) obscuripes (Van der Wulp, 1859)	*		mh	*1
Diptera	Chaoboridae	Chaoborus (Peusomyia) pallidus (Fabricius, 1794)	G		mh	*1
Diptera	Chaoboridae	Mochlonyx fuliginosus (Felt, 1905)	G		s	*1
Diptera	Chaoboridae	Mochlonyx velutinus (Ruthé, 1831)	G		mh	*1
Diptera	Dixidae	Dixa dilatata Strobl, 1900	*		mh	*1

Order	Family	Species	K	L	P	S
Diptera	Dixidae	Dixa maculata Meigen, 1818	*		h	*1
Diptera	Dixidae	Dixa nebulosa Meigen, 1830	*		h	*1
Diptera	Dixidae	Dixa nubilipennis Curtis, 1832	*		mh	*1
Diptera	Dixidae	Dixa puberula Loew, 1849	*		h	*1
Diptera	Dixidae	Dixa submaculata Edwards, 1920	*		h	*1
Diptera	Dixidae	Dixella aestivalis (Meigen, 1818)	*		mh	*1
Diptera	Dixidae	Dixella amphibia (De Geer, 1776)	*		mh	*1
Diptera	Dixidae	Dixella autumnalis (Meigen, 1838)	*		mh	*1
Diptera	Dixidae	Dixella hyperborea (Bergroth, 1889)	3		s	*1
Diptera	Dixidae	Dixella martinii (Peus, 1934)	3		s	*1
Diptera	Dixidae	Dixella monticola (Nielsen, 1937)	3		s	*1
Diptera	Dixidae	Dixella naevia (Peus, 1934)	3		s	*1
Diptera	Dixidae	Dixella nigra (Staeger, 1840)	3		s	*1
Diptera	Dixidae	Dixella obscura (Loew, 1849)	V		mh	*1
Diptera	Dixidae	Dixella serotina (Meigen, 1818)	3		s	*1
Diptera	Dolichopodidae	Achalcus bimaculatus Pollet, 1996	3		s	*1
Diptera	Dolichopodidae	Achalcus britannicus Pollet, 1996	2		s	*1
Diptera	Dolichopodidae	Achalcus cinereus (Haliday, 1851)	*		h	*1
Diptera	Dolichopodidae	Achalcus flavicollis (Meigen, 1824)	*		sh	*1
Diptera	Dolichopodidae	Achalcus nigropunctatus Pollet & Brunhes, 1996	3		s	*1
Diptera	Dolichopodidae	Achalcus thalhammeri Lichtwardt, 1913	2		s	*1
Diptera	Dolichopodidae	Achalcus vaillanti Brunhes, 1987	2		s	*1
Diptera	Dolichopodidae	Acropsilus niger (Loew, 1869)	2		s	*1
Diptera	Dolichopodidae	Anepsiomyia flaviventris (Meigen, 1824)	*		sh	*1
Diptera	Dolichopodidae	Aphrosylus ferox Haliday, 1851	2		s	*1
Diptera	Dolichopodidae	Argyra argentata (Macquart, 1834)	1		ss	*1
Diptera	Dolichopodidae	Argyra argentella (Zetterstedt, 1843)	2		s	*1
Diptera	Dolichopodidae	Argyra argentina (Meigen, 1824)	*		sh	*1
Diptera	Dolichopodidae	Argyra argyria (Meigen, 1824)	*		mh	*1
Diptera	Dolichopodidae	Argyra atriceps Loew, 1857	3		s	*1
Diptera	Dolichopodidae	Argyra auricollis (Meigen, 1824)	*		h	*1
Diptera	Dolichopodidae	Argyra diaphana (Fabricius, 1775)	*		sh	*1
Diptera	Dolichopodidae	Argyra discedens Becker, 1907	3		s	*1
Diptera	Dolichopodidae	Argyra elongata (Zetterstedt, 1843)	*		h	*1
Diptera	Dolichopodidae	Argyra grata Loew, 1857	*		mh	*1
Diptera	Dolichopodidae	Argyra hoffmeisteri (Loew, 1850)	2		s	*1
Diptera	Dolichopodidae	Argyra ilonae Gosseries, 1988	*		mh	*1
Diptera	Dolichopodidae	Argyra leucocephala (Meigen, 1824)	*		mh	*1
Diptera	Dolichopodidae	Argyra loewi Kowarz, 1879	2		s	*1
Diptera	Dolichopodidae	Argyra magnicornis (Zetterstedt, 1838)	1		ss	*1
Diptera	Dolichopodidae	Argyra miki (Kowarz, 1882)	0	1938	ex	*1
Diptera	Dolichopodidae	Argyra perplexa Becker, 1918	2		s	*1
Diptera	Dolichopodidae	Argyra setimana Loew, 1859	3		s	*1
Diptera	Dolichopodidae	Argyra vestita (Wiedemann, 1817)	*		mh	*1
Diptera	Dolichopodidae	Asyndetus latifrons (Loew, 1857)	3		s	*1
Diptera	Dolichopodidae	Australachalcus melanotrichus (Mik, 1878)	3		mh	*1
Diptera	Dolichopodidae	Campsicnemus alpinus (Haliday, 1833)	3		mh	*1
Diptera	Dolichopodidae	Campsicnemus armatus (Zetterstedt, 1849)	3		mh	*1
Diptera	Dolichopodidae	Campsicnemus compeditus Loew, 1857	3		s	*1
Diptera	Dolichopodidae	Campsicnemus curvipes (Fallén, 1823)	*		sh	*1
Diptera	Dolichopodidae	Campsicnemus dasycnemus Loew, 1857	2		s	*1
Diptera	Dolichopodidae	Campsicnemus filipes Loew, 1859	0	1859	ex	*1
Diptera	Dolichopodidae	Campsicnemus loripes (Haliday, 1832)	*		h	*1
Diptera	Dolichopodidae	Campsicnemus lumbatus Loew, 1857	*		h	*1
Diptera	Dolichopodidae	Campsicnemus magius (Loew, 1845)	3		s	*1
Diptera	Dolichopodidae	Campsicnemus marginatus Loew, 1857	3		mh	*1
Diptera	Dolichopodidae	Campsicnemus picticornis (Zetterstedt, 1843)	*		h	*1
Diptera	Dolichopodidae	Campsicnemus pumilio (Zetterstedt, 1843)	3		mh	*1
Diptera	Dolichopodidae	Campsicnemus pusillus (Meigen, 1824)	3		s	*1
Diptera	Dolichopodidae	Campsicnemus scambus (Fallén, 1823)	*		sh	*1
Diptera	Dolichopodidae	Campsicnemus umbripennis Loew, 1856	2		s	*1
Diptera	Dolichopodidae	Campsicnemus varipes Loew, 1859	2		s	*1
Diptera	Dolichopodidae	Chrysotimus flaviventris (von Roser, 1840)	*		h	*1
Diptera	Dolichopodidae	Chrysotimus molliculus (Fallén, 1823)	*		sh	*1
Diptera	Dolichopodidae	Chrysotus angulicornis Kowarz, 1874	*		mh	*1
Diptera	Dolichopodidae	Chrysotus blepharosceles Kowarz, 1874	*		h	*1
Diptera	Dolichopodidae	Chrysotus cilipes Meigen, 1824	*		sh	*1
Diptera	Dolichopodidae	Chrysotus collini Parent, 1923	3		s	*1
Diptera	Dolichopodidae	Chrysotus cupreus (Macquart, 1827)	*		h	*1
Diptera	Dolichopodidae	Chrysotus femoratus Zetterstedt, 1843	*		mh	*1
Diptera	Dolichopodidae	Chrysotus gramineus (Fallén, 1823)	*		sh	*1
Diptera	Dolichopodidae	Chrysotus laesus (Wiedemann, 1817)	*		h	*1
Diptera	Dolichopodidae	Chrysotus melampodius Loew, 1857	2		s	*1
Diptera	Dolichopodidae	Chrysotus monochaetus Kowarz, 1874	*		mh	*1
Diptera	Dolichopodidae	Chrysotus neglectus (Wiedemann, 1817)	*		h	*1
Diptera	Dolichopodidae	Chrysotus obscuripes Zetterstedt, 1838	3		mh	*1
Diptera	Dolichopodidae	Chrysotus palustris Verrall, 1876	3		mh	*1
Diptera	Dolichopodidae	Chrysotus pennatus Lichtwardt, 1902	1		ss	*1
Diptera	Dolichopodidae	Chrysotus pulchellus Kowarz, 1874	*		h	*1
Diptera	Dolichopodidae	Chrysotus suavis Loew, 1857	*		sh	*1

Order	Family	Species	K	L	P	S
Diptera	Dolichopodidae	Cyrturella albosetosa (Strobl, 1909)	R		es	*1
Diptera	Dolichopodidae	Diaphorus disjunctus Loew, 1857	0	1947	ex	*1
Diptera	Dolichopodidae	Diaphorus halteralis Loew, 1869	0	1930	ex	*1
Diptera	Dolichopodidae	Diaphorus hoffmannseggi Meigen, 1830	3		s	*1
Diptera	Dolichopodidae	Diaphorus nigricans Meigen, 1824	3		s	*1
Diptera	Dolichopodidae	Diaphorus oculatus (Fallén, 1823)	*		h	*1
Diptera	Dolichopodidae	Diaphorus winthemi Meigen, 1824	2		s	*1
Diptera	Dolichopodidae	Dolichophorus kerteszi Lichtwardt, 1902	G		mh	*1
Diptera	Dolichopodidae	Dolichopus acuticornis Wiedemann, 1817	*		h	*1
Diptera	Dolichopodidae	Dolichopus agilis Meigen, 1824	*		h	*1
Diptera	Dolichopodidae	Dolichopus albifrons Loew, 1859	1		ss	*1
Diptera	Dolichopodidae	Dolichopus angustipennis Kertész, 1901	2		s	*1
Diptera	Dolichopodidae	Dolichopus apicalis Zetterstedt, 1849	3		s	*1
Diptera	Dolichopodidae	Dolichopus arbustorum Stannius, 1831	3		mh	*1
Diptera	Dolichopodidae	Dolichopus argyrotarsis Wahlberg, 1850	3		s	*1
Diptera	Dolichopodidae	Dolichopus armillatus Wahlberg, 1850	D		?	*1
Diptera	Dolichopodidae	Dolichopus atratus Meigen, 1824	3		s	*1
Diptera	Dolichopodidae	Dolichopus atripes Meigen, 1824	*		h	*1
Diptera	Dolichopodidae	Dolichopus austriacus Parent, 1927	1		ss	*1
Diptera	Dolichopodidae	Dolichopus brevipennis Meigen, 1824	*		sh	*1
Diptera	Dolichopodidae	Dolichopus caligatus Wahlberg, 1850	3		mh	*1
Diptera	Dolichopodidae	Dolichopus calinotus Loew, 1871	1		ss	*1
Diptera	Dolichopodidae	Dolichopus campestris Meigen, 1824	*		mh	*1
Diptera	Dolichopodidae	Dolichopus cilifemoratus Macquart, 1827	*		sh	*1
Diptera	Dolichopodidae	Dolichopus claviger Stannius, 1831	*		h	*1
Diptera	Dolichopodidae	Dolichopus clavipes Haliday, 1832	3		mh	*1
Diptera	Dolichopodidae	Dolichopus cruralis Wahlberg, 1850	3		s	*1
Diptera	Dolichopodidae	Dolichopus diadema Haliday, 1832	3		mh	*1
Diptera	Dolichopodidae	Dolichopus discimanus Wahlberg, 1851	2		s	*1
Diptera	Dolichopodidae	Dolichopus erroneus Parent, 1926	2		s	*1
Diptera	Dolichopodidae	Dolichopus eurypterus Gerstäcker, 1864	2		s	*1
Diptera	Dolichopodidae	Dolichopus excisus Loew, 1859	3		s	*1
Diptera	Dolichopodidae	Dolichopus festivus Haliday, 1832	*		h	*1
Diptera	Dolichopodidae	Dolichopus flavipes Stannius, 1831	*		mh	*1
Diptera	Dolichopodidae	Dolichopus friedrichi Meuffels & Grootaert 1999	0	1864	ex	*1
Diptera	Dolichopodidae	Dolichopus galeatus Loew, 1871	1		ss	*1
Diptera	Dolichopodidae	Dolichopus geniculatus Stannius, 1831	0	1862	ex	*1
Diptera	Dolichopodidae	Dolichopus genicupallidus Becker, 1889	2		s	*1
Diptera	Dolichopodidae	Dolichopus grandicornis Wahlberg, 1850	0	1949	ex	*1
Diptera	Dolichopodidae	Dolichopus griseipennis Stannius, 1831	G		mh	*1
Diptera	Dolichopodidae	Dolichopus hilaris Loew, 1862	3		s	*1
Diptera	Dolichopodidae	Dolichopus immaculatus Becker, 1909	2		s	*1
Diptera	Dolichopodidae	Dolichopus kowarzianus Stackelberg, 1928	1		ss	*1
Diptera	Dolichopodidae	Dolichopus latilimbatus Macquart, 1827	*		sh	*1
Diptera	Dolichopodidae	Dolichopus latipennis Fallén, 1823	3		mh	*1
Diptera	Dolichopodidae	Dolichopus lepidus Stæger, 1842	*		h	*1
Diptera	Dolichopodidae	Dolichopus linearis Meigen, 1824	*		h	*1
Diptera	Dolichopodidae	Dolichopus lineatocornis Zetterstedt, 1843	*		mh	*1
Diptera	Dolichopodidae	Dolichopus litorellus Zetterstedt, 1852	3		s	*1
Diptera	Dolichopodidae	Dolichopus longicornis Stannius, 1831	*		sh	*1
Diptera	Dolichopodidae	Dolichopus longitarsis Stannius, 1831	*		mh	*1
Diptera	Dolichopodidae	Dolichopus maculicornis Verrall, 1875	1		ss	*1
Diptera	Dolichopodidae	Dolichopus maculipennis Zetterstedt, 1843	2		s	*1
Diptera	Dolichopodidae	Dolichopus mediicornis Verrall, 1875	1		ss	*1
Diptera	Dolichopodidae	Dolichopus meigeni Loew, 1857	0	1907	ex	*1
Diptera	Dolichopodidae	Dolichopus melanopus Meigen, 1824	2		s	*1
Diptera	Dolichopodidae	Dolichopus migrans Zetterstedt, 1843	*		mh	*1
Diptera	Dolichopodidae	Dolichopus nigricornis Meigen, 1824	*		sh	*1
Diptera	Dolichopodidae	Dolichopus nigripes Fallén, 1823	2		s	*1
Diptera	Dolichopodidae	Dolichopus nimbatus Parent, 1927	0	1948	ex	*1
Diptera	Dolichopodidae	Dolichopus nitidus Fallén, 1823	*		sh	*1
Diptera	Dolichopodidae	Dolichopus notatus Stæger, 1842	*		mh	*1
Diptera	Dolichopodidae	Dolichopus nubilus Meigen, 1824	*		sh	*1
Diptera	Dolichopodidae	Dolichopus occultus Becker, 1917	1		ss	*1
Diptera	Dolichopodidae	Dolichopus parvicaudatus Zetterstedt, 1843	0	1947	ex	*1
Diptera	Dolichopodidae	Dolichopus pectinitarsis Stenhammar, 1852	2		s	*1
Diptera	Dolichopodidae	Dolichopus pennatus Meigen, 1824	*		sh	*1
Diptera	Dolichopodidae	Dolichopus phaeopus Haliday, 1851	3		s	*1
Diptera	Dolichopodidae	Dolichopus picipes Meigen, 1824	*		h	*1
Diptera	Dolichopodidae	Dolichopus planitarsis Fallén, 1823	3		mh	*1
Diptera	Dolichopodidae	Dolichopus plumipes (Scopoli, 1763)	*		sh	*1
Diptera	Dolichopodidae	Dolichopus plumitarsis Fallén, 1823	2		s	*1
Diptera	Dolichopodidae	Dolichopus popularis Wiedemann, 1817	*		sh	*1
Diptera	Dolichopodidae	Dolichopus propinquus Zetterstedt, 1852	0	1930	ex	*1
Diptera	Dolichopodidae	Dolichopus punctum Meigen, 1824	0	1901	ex	*1
Diptera	Dolichopodidae	Dolichopus remipes Wahlberg, 1839	0	1932	ex	*1
Diptera	Dolichopodidae	Dolichopus rupestris Haliday, 1833	3		mh	*1
Diptera	Dolichopodidae	Dolichopus ruthei Loew, 1847	0	1873	ex	*1
Diptera	Dolichopodidae	Dolichopus sabinus Haliday, 1838	3		mh	*1
Diptera	Dolichopodidae	Dolichopus signatus Meigen, 1824	*		h	*1

Order	Family	Species	K	L	P	S
Diptera	Dolichopodidae	Dolichopus signifer Haliday, 1838	3		s	*1
Diptera	Dolichopodidae	Dolichopus simplex Meigen, 1824	*		sh	*1
Diptera	Dolichopodidae	Dolichopus steini Becker, 1917	2		s	*1
Diptera	Dolichopodidae	Dolichopus stenhammari Zetterstedt, 1843	2		s	*1
Diptera	Dolichopodidae	Dolichopus subpennatus d'Assis-Fonseca, 1976	G		mh	*1
Diptera	Dolichopodidae	Dolichopus tanythrix Loew, 1869	3		mh	*1
Diptera	Dolichopodidae	Dolichopus trivialis Haliday, 1832	*		sh	*1
Diptera	Dolichopodidae	Dolichopus ungulatus (Linnaeus, 1758)	*		sh	*1
Diptera	Dolichopodidae	Dolichopus urbanus Meigen, 1824	*		h	*1
Diptera	Dolichopodidae	Dolichopus virgultorum Haliday, 1851	2		s	*1
Diptera	Dolichopodidae	Dolichopus vitripennis Meigen, 1824	*		h	*1
Diptera	Dolichopodidae	Dolichopus wahlbergi Zetterstedt, 1843	*		h	*1
Diptera	Dolichopodidae	Dolichopus zetterstedti Stenhammar, 1852	0	1947	ex	*1
Diptera	Dolichopodidae	Ethiromyia chalybeus (Wiedemann, 1817)	*		h	*1
Diptera	Dolichopodidae	Eucoryphus coeruleus Becker, 1889	0	1950	ex	*1
Diptera	Dolichopodidae	Gymnopternus aerosus (Fallén, 1823)	*		sh	*1
Diptera	Dolichopodidae	Gymnopternus angustifrons (Stæger, 1842)	3		mh	*1
Diptera	Dolichopodidae	Gymnopternus assimilis (Stæger, 1842)	*		mh	*1
Diptera	Dolichopodidae	Gymnopternus blankaartensis Pollet, 1990	3		s	*1
Diptera	Dolichopodidae	Gymnopternus brevicornis (Stæger, 1842)	*		sh	*1
Diptera	Dolichopodidae	Gymnopternus celer (Meigen, 1824)	*		sh	*1
Diptera	Dolichopodidae	Gymnopternus cupreus (Fallén, 1823)	*		sh	*1
Diptera	Dolichopodidae	Gymnopternus metallicus (Stannius, 1831)	*		sh	*1
Diptera	Dolichopodidae	Gymnopternus silvestris Pollet, 1990	3		s	*1
Diptera	Dolichopodidae	Hercostomus bicolor (Macquart, 1827)	3		s	*1
Diptera	Dolichopodidae	Hercostomus blepharopus Loew, 1871	1		ss	*1
Diptera	Dolichopodidae	Hercostomus caudatus (Loew, 1859)	2		s	*1
Diptera	Dolichopodidae	Hercostomus chaerophylli (Meigen, 1824)	2		s	*1
Diptera	Dolichopodidae	Hercostomus chetifer (Walker, 1849)	*		mh	*1
Diptera	Dolichopodidae	Hercostomus convergens Loew, 1857	0	1930	ex	*1
Diptera	Dolichopodidae	Hercostomus exarticulatus (Loew, 1857)	3		s	*1
Diptera	Dolichopodidae	Hercostomus fugax (Loew, 1857)	3		s	*1
Diptera	Dolichopodidae	Hercostomus fulvicaudis (Walker, 1851)	*		mh	*1
Diptera	Dolichopodidae	Hercostomus fuscipennis (Meigen, 1824)	2		s	*1
Diptera	Dolichopodidae	Hercostomus germanus (Wiedemann, 1817)	*		mh	*1
Diptera	Dolichopodidae	Hercostomus gracilis (Stannius, 1831)	2		s	*1
Diptera	Dolichopodidae	Hercostomus lichtwardti Villeneuve, 1899	0	1938	ex	*1
Diptera	Dolichopodidae	Hercostomus longiventris (Loew, 1857)	3		mh	*1
Diptera	Dolichopodidae	Hercostomus nanus (Macquart, 1827)	*		mh	*1
Diptera	Dolichopodidae	Hercostomus nigrilamellatus (Macquart, 1827)	3		s	*1
Diptera	Dolichopodidae	Hercostomus nigripennis (Fallén, 1823)	3		mh	*1
Diptera	Dolichopodidae	Hercostomus nigriplantis (Stannius, 1831)	*		mh	*1
Diptera	Dolichopodidae	Hercostomus parvilamellatus (Macquart, 1827)	0	1949	ex	*1
Diptera	Dolichopodidae	Hercostomus pilifer (Loew, 1859)	3		s	*1
Diptera	Dolichopodidae	Hercostomus plagiatus (Loew, 1857)	3		s	*1
Diptera	Dolichopodidae	Hercostomus praeceps Loew, 1869	G		mh	*1
Diptera	Dolichopodidae	Hercostomus rusticus (Meigen, 1824)	3		s	*1
Diptera	Dolichopodidae	Hercostomus sahlbergi (Zetterstedt, 1838)	2		s	*1
Diptera	Dolichopodidae	Hercostomus vivax (Loew, 1857)	*		sh	*1
Diptera	Dolichopodidae	Hydrophorus albiceps Frey, 1915	3		s	*1
Diptera	Dolichopodidae	Hydrophorus balticus (Meigen, 1824)	2		s	*1
Diptera	Dolichopodidae	Hydrophorus bipunctatus (Lehmann, 1822)	*		mh	*1
Diptera	Dolichopodidae	Hydrophorus borealis Loew, 1857	2		s	*1
Diptera	Dolichopodidae	Hydrophorus brunnicosus Loew, 1857	0	1907	ex	*1
Diptera	Dolichopodidae	Hydrophorus litoreus Fallén, 1823	*		mh	*1
Diptera	Dolichopodidae	Hydrophorus nebulosus Fallén, 1823	3		mh	*1
Diptera	Dolichopodidae	Hydrophorus oceanus (Macquart, 1838)	2		s	*1
Diptera	Dolichopodidae	Hydrophorus praecox (Lehmann, 1822)	*		sh	*1
Diptera	Dolichopodidae	Hydrophorus rufibarbis Gerstäcker, 1864	0	1864	ex	*1
Diptera	Dolichopodidae	Hydrophorus viridis (Meigen, 1824)	3		s	*1
Diptera	Dolichopodidae	Lamprochromus bifasciatus (Macquart, 1827)	*		mh	*1
Diptera	Dolichopodidae	Lamprochromus strobli Parent, 1925	3		mh	*1
Diptera	Dolichopodidae	Liancalus virens (Scopoli, 1763)	*		h	*1
Diptera	Dolichopodidae	Machaerium maritimae Haliday, 1832	3		s	*1
Diptera	Dolichopodidae	Medetera abstrusa Thuneberg, 1955	3		s	*1
Diptera	Dolichopodidae	Medetera acanthura Negrobov & Thuneberg, 1970	1		ss	*1
Diptera	Dolichopodidae	Medetera adjaniae Gosseries, 1988	1		ss	*1
Diptera	Dolichopodidae	Medetera ambigua (Zetterstedt, 1843)	3		mh	*1
Diptera	Dolichopodidae	Medetera annulitarsus von Roser, 1840	2		s	*1
Diptera	Dolichopodidae	Medetera apicalis (Zetterstedt, 1843)	*		h	*1
Diptera	Dolichopodidae	Medetera belgica Parent, 1936	3		s	*1
Diptera	Dolichopodidae	Medetera bilineata Frey, 1915	1		ss	*1
Diptera	Dolichopodidae	Medetera bispinosa Negrobov, 1967	2		s	*1
Diptera	Dolichopodidae	Medetera borealis Thuneberg, 1955	1		ss	*1
Diptera	Dolichopodidae	Medetera chrysotimiformis Kowarz, 1868	2		s	*1
Diptera	Dolichopodidae	Medetera cuspidata Collin, 1941	2		s	*1
Diptera	Dolichopodidae	Medetera dendrobaena Kowarz, 1877	3		mh	*1
Diptera	Dolichopodidae	Medetera diadema (Linnaeus, 1767)	3		s	*1
Diptera	Dolichopodidae	Medetera dichrocera Kowarz, 1877	1		ss	*1
Diptera	Dolichopodidae	Medetera excellens Frey, 1909	2		s	*1

Order	Family	Species	K	L	P	S
Diptera	Dolichopodidae	Medetera flavipes Meigen, 1824	3		s	*1
Diptera	Dolichopodidae	Medetera glauca Loew, 1869	G		mh	*1
Diptera	Dolichopodidae	Medetera gracilicauda Parent, 1927	1		ss	*1
Diptera	Dolichopodidae	Medetera impigra Collin, 1941	3		s	*1
Diptera	Dolichopodidae	Medetera incrassata Frey, 1909	1		ss	*1
Diptera	Dolichopodidae	Medetera infumata Loew, 1857	*		mh	*1
Diptera	Dolichopodidae	Medetera insignis Girschner, 1888	1		ss	*1
Diptera	Dolichopodidae	Medetera jacula (Fallén, 1823)	*		sh	*1
Diptera	Dolichopodidae	Medetera jugalis Collin, 1941	2		s	*1
Diptera	Dolichopodidae	Medetera longicauda Becker, 1917	1		ss	*1
Diptera	Dolichopodidae	Medetera lorea Negrobov, 1967	1		ss	*1
Diptera	Dolichopodidae	Medetera melancholica Lundbeck, 1912	2		s	*1
Diptera	Dolichopodidae	Medetera micacea Loew, 1857	*		sh	*1
Diptera	Dolichopodidae	Medetera mixta Negrobov, 1967	3		s	*1
Diptera	Dolichopodidae	Medetera muralis Meigen, 1824	3		mh	*1
Diptera	Dolichopodidae	Medetera nitida (Macquart, 1834)	2		s	*1
Diptera	Dolichopodidae	Medetera obscura (Zetterstedt, 1838)	3		s	*1
Diptera	Dolichopodidae	Medetera pallipes (Zetterstedt, 1843)	*		sh	*1
Diptera	Dolichopodidae	Medetera perfida Parent, 1932	1		ss	*1
Diptera	Dolichopodidae	Medetera petrophila Kowarz, 1877	G		mh	*1
Diptera	Dolichopodidae	Medetera petrophiloides Parent, 1925	3		s	*1
Diptera	Dolichopodidae	Medetera pinicola Kowarz, 1877	2		s	*1
Diptera	Dolichopodidae	Medetera plumbella Meigen, 1824	3		mh	*1
Diptera	Dolichopodidae	Medetera saxatilis Collin, 1941	2		s	*1
Diptera	Dolichopodidae	Medetera senicula Kowarz, 1877	2		s	*1
Diptera	Dolichopodidae	Medetera signaticornis Loew, 1857	3		s	*1
Diptera	Dolichopodidae	Medetera takagii Negrobov, 1970	2		ss	*1
Diptera	Dolichopodidae	Medetera tenuicauda Loew, 1857	3		s	*1
Diptera	Dolichopodidae	Medetera tertia Becker, 1917	0	1917	ex	*1
Diptera	Dolichopodidae	Medetera tristis (Zetterstedt, 1838)	3		mh	*1
Diptera	Dolichopodidae	Medetera truncorum Meigen, 1824	*		sh	*1
Diptera	Dolichopodidae	Medetera unisetosa Collin, 1941	1		ss	*1
Diptera	Dolichopodidae	Medetera vagans Becker, 1917	3		s	*1
Diptera	Dolichopodidae	Melanostolus nigricilius (Loew, 1871)	2		s	*1
Diptera	Dolichopodidae	Micromorphus albipes (Zetterstedt, 1843)	*		sh	*1
Diptera	Dolichopodidae	Micromorphus claripennis (Strobl, 1899)	1		ss	*1
Diptera	Dolichopodidae	Muscidideicus praetextatus (Haliday, 1855)	2		s	*1
Diptera	Dolichopodidae	Nematoproctus distendens (Meigen, 1824)	3		mh	*1
Diptera	Dolichopodidae	Nematoproctus longifilus Loew, 1857	2		s	*1
Diptera	Dolichopodidae	Nematoproctus praesectus Loew, 1869	2		s	*1
Diptera	Dolichopodidae	Neurigona abdominalis (Fallén, 1823)	3		mh	*1
Diptera	Dolichopodidae	Neurigona cilipes (Oldenberg, 1904)	2		s	*1
Diptera	Dolichopodidae	Neurigona erichsoni (Zetterstedt, 1843)	3		s	*1
Diptera	Dolichopodidae	Neurigona lineata (Oldenberg, 1904)	1		ss	*1
Diptera	Dolichopodidae	Neurigona pallida (Fallén, 1823)	*		mh	*1
Diptera	Dolichopodidae	Neurigona quadrifasciata (Fabricius, 1781)	*		sh	*1
Diptera	Dolichopodidae	Neurigona suturalis (Fallén, 1823)	3		mh	*1
Diptera	Dolichopodidae	Oncopygius distans (Loew, 1857)	2		s	*1
Diptera	Dolichopodidae	Orthoceratium lacustre (Scopoli, 1763)	0	1930	ex	*1
Diptera	Dolichopodidae	Peodes forcipatus Loew, 1857	2		s	*1
Diptera	Dolichopodidae	Poecilobothrus chrysozygos (Wiedemann, 1817)	*		mh	*1
Diptera	Dolichopodidae	Poecilobothrus comitialis (Kowarz, 1867)	3		s	*1
Diptera	Dolichopodidae	Poecilobothrus ducalis (Loew, 1857)	2		s	*1
Diptera	Dolichopodidae	Poecilobothrus fumipennis (Stannius, 1831)	3		s	*1
Diptera	Dolichopodidae	Poecilobothrus infuscatus (Stannius, 1831)	2		s	*1
Diptera	Dolichopodidae	Poecilobothrus nobilitatus (Linnaeus, 1767)	*		sh	*1
Diptera	Dolichopodidae	Poecilobothrus regalis (Meigen, 1824)	0	1887	ex	*1
Diptera	Dolichopodidae	Rhaphium albifrons Zetterstedt, 1843	2		s	*1
Diptera	Dolichopodidae	Rhaphium albomaculatum (Becker, 1891)	2		s	*1
Diptera	Dolichopodidae	Rhaphium antennatum (Carlier, 1835)	*		mh	*1
Diptera	Dolichopodidae	Rhaphium appendiculatum Zetterstedt, 1849	3		s	*1
Diptera	Dolichopodidae	Rhaphium auctum Loew, 1857	3		s	*1
Diptera	Dolichopodidae	Rhaphium bidilatatum (Parent, 1954)	0	1919	ex	*1
Diptera	Dolichopodidae	Rhaphium brevicorne Curtis, 1835	2		s	*1
Diptera	Dolichopodidae	Rhaphium caliginosum (Zetterstedt, 1843)	3		mh	*1
Diptera	Dolichopodidae	Rhaphium commune (Meigen, 1824)	*		sh	*1
Diptera	Dolichopodidae	Rhaphium consobrinum Zetterstedt, 1843	2		s	*1
Diptera	Dolichopodidae	Rhaphium crassipes (Meigen, 1824)	*		sh	*1
Diptera	Dolichopodidae	Rhaphium discigerum Stenhammar, 1851	3		s	*1
Diptera	Dolichopodidae	Rhaphium elegantulum (Meigen, 1824)	3		s	*1
Diptera	Dolichopodidae	Rhaphium ensicorne Meigen, 1824	3		mh	*1
Diptera	Dolichopodidae	Rhaphium fasciatum Meigen, 1824	*		sh	*1
Diptera	Dolichopodidae	Rhaphium fascipes (Meigen, 1824)	3		s	*1
Diptera	Dolichopodidae	Rhaphium fissum Loew, 1850	3		s	*1
Diptera	Dolichopodidae	Rhaphium fractum Loew, 1850	0	1919	ex	*1
Diptera	Dolichopodidae	Rhaphium gravipes Haliday, 1851	2		s	*1
Diptera	Dolichopodidae	Rhaphium holmgreni (Mik, 1878)	0	1930	ex	*1
Diptera	Dolichopodidae	Rhaphium lanceolatum Loew, 1850	0	1901	ex	*1
Diptera	Dolichopodidae	Rhaphium laticorne (Fallén, 1823)	*		mh	*1
Diptera	Dolichopodidae	Rhaphium longicorne (Fallén, 1823)	3		mh	*1

Order	Family	Species	K	L	P	S
Diptera	Dolichopodidae	Rhaphium macrocerum Meigen, 1824	*		h	*1
Diptera	Dolichopodidae	Rhaphium micans (Meigen, 1824)	*		mh	*1
Diptera	Dolichopodidae	Rhaphium monotrichum Loew, 1850	*		h	*1
Diptera	Dolichopodidae	Rhaphium nasutum (Fallén, 1823)	*		mh	*1
Diptera	Dolichopodidae	Rhaphium obscuripes Zetterstedt, 1849	2		s	*1
Diptera	Dolichopodidae	Rhaphium patulum (Raddatz, 1873)	3		s	*1
Diptera	Dolichopodidae	Rhaphium pectinatum (Loew, 1859)	2		s	*1
Diptera	Dolichopodidae	Rhaphium penicillatum Loew, 1850	3		s	*1
Diptera	Dolichopodidae	Rhaphium praerosum Loew, 1850	3		mh	*1
Diptera	Dolichopodidae	Rhaphium psilopoda (Becker, 1918)	0	1912	ex	*1
Diptera	Dolichopodidae	Rhaphium quadrispinosum (Strobl, 1898)	3		mh	*1
Diptera	Dolichopodidae	Rhaphium riparium (Meigen, 1824)	3		mh	*1
Diptera	Dolichopodidae	Rhaphium rivale (Loew, 1869)	3		s	*1
Diptera	Dolichopodidae	Rhaphium suave (Loew, 1859)	2		s	*1
Diptera	Dolichopodidae	Rhaphium trifidum (Becker, 1918)	0	1918	ex	*1
Diptera	Dolichopodidae	Rhaphium umbripenne (Frey, 1915)	0	1918	ex	*1
Diptera	Dolichopodidae	Rhaphium xiphias Meigen, 1824	2		s	*1
Diptera	Dolichopodidae	Rhaphium zetterstedti (Parent, 1925)	*		h	*1
Diptera	Dolichopodidae	Scellus notatus (Fabricius, 1781)	2		s	*1
Diptera	Dolichopodidae	Schistostoma truncatum (Loew, 1864)	0	1902	ex	*1
Diptera	Dolichopodidae	Schoenophilus versutus (Haliday, 1851)	3		mh	*1
Diptera	Dolichopodidae	Sciapus aberrans Becker, 1918	0	1938	ex	*1
Diptera	Dolichopodidae	Sciapus albifrons (Meigen, 1830)	3		mh	*1
Diptera	Dolichopodidae	Sciapus basilicus Meuffels & Grootaert, 1990	2		s	*1
Diptera	Dolichopodidae	Sciapus bellus (Loew, 1873)	2		s	*1
Diptera	Dolichopodidae	Sciapus contristans (Wiedemann, 1817)	*		mh	*1
Diptera	Dolichopodidae	Sciapus flavicinctus (Loew, 1857)	0	1930	ex	*1
Diptera	Dolichopodidae	Sciapus glaucescens (Loew, 1856)	0	1901	ex	*1
Diptera	Dolichopodidae	Sciapus gracilipes (Loew, 1871)	1		ss	*1
Diptera	Dolichopodidae	Sciapus heteropygus Parent, 1926	2		s	*1
Diptera	Dolichopodidae	Sciapus laetus (Meigen, 1838)	0	1913	ex	*1
Diptera	Dolichopodidae	Sciapus lobipes (Meigen, 1824)	3		s	*1
Diptera	Dolichopodidae	Sciapus longulus (Fallén, 1823)	*		h	*1
Diptera	Dolichopodidae	Sciapus maritimus Becker, 1918	2		s	*1
Diptera	Dolichopodidae	Sciapus nervosus (Lehmann, 1822)	2		s	*1
Diptera	Dolichopodidae	Sciapus platypterus (Fabricius, 1805)	*		sh	*1
Diptera	Dolichopodidae	Sciapus spiniger (Zetterstedt, 1859)	3		s	*1
Diptera	Dolichopodidae	Sciapus wiedemanni (Fallén, 1823)	*		sh	*1
Diptera	Dolichopodidae	Sciapus zonatulus (Zetterstedt, 1843)	2		s	*1
Diptera	Dolichopodidae	Sphyrotarsus hygrophilus Becker, 1891	0	1919	ex	*1
Diptera	Dolichopodidae	Sybistroma crinipes Stæger, 1842	*		h	*1
Diptera	Dolichopodidae	Sybistroma discipes (Germar, 1817)	3		mh	*1
Diptera	Dolichopodidae	Sybistroma inornatus (Loew, 1857)	0	1947	ex	*1
Diptera	Dolichopodidae	Sybistroma nodicornis Meigen, 1824	*		mh	*1
Diptera	Dolichopodidae	Sybistroma obscurellum (Fallén, 1823)	*		sh	*1
Diptera	Dolichopodidae	Sybistroma sciophilum (Loew, 1869)	2		s	*1
Diptera	Dolichopodidae	Sybistroma setosa Schiner, 1862	0	1886	ex	*1
Diptera	Dolichopodidae	Sybistroma sphenopterum (Loew, 1859)	3		s	*1
Diptera	Dolichopodidae	Sympycnus aeneicoxa (Meigen, 1824)	*		sh	*1
Diptera	Dolichopodidae	Sympycnus annulipes (Meigen, 1824)	*		sh	*1
Diptera	Dolichopodidae	Sympycnus brevimanus Loew, 1857	2		s	*1
Diptera	Dolichopodidae	Sympycnus cirripes (Haliday, 1851)	3		s	*1
Diptera	Dolichopodidae	Sympycnus desoutteri Parent, 1925	3		mh	*1
Diptera	Dolichopodidae	Sympycnus pulicarius (Fallén, 1823)	*		sh	*1
Diptera	Dolichopodidae	Sympycnus simplicipes Becker, 1908	2		s	*1
Diptera	Dolichopodidae	Sympycnus spiculatus Gerstäcker, 1864	3		s	*1
Diptera	Dolichopodidae	Sympycnus strobli Parent, 1927	1		ss	*1
Diptera	Dolichopodidae	Syntormon aulicum (Meigen, 1824)	3		mh	*1
Diptera	Dolichopodidae	Syntormon bicolorellum (Zetterstedt, 1843)	*		h	*1
Diptera	Dolichopodidae	Syntormon denticulatum (Zetterstedt, 1843)	3		s	*1
Diptera	Dolichopodidae	Syntormon filiger Verrall, 1912	3		mh	*1
Diptera	Dolichopodidae	Syntormon fuscipes (von Roser, 1840)	3		s	*1
Diptera	Dolichopodidae	Syntormon macula Oldenberg, 1927	2		s	*1
Diptera	Dolichopodidae	Syntormon metathesis (Loew, 1850)	2		s	*1
Diptera	Dolichopodidae	Syntormon monile (Haliday, 1851)	3		mh	*1
Diptera	Dolichopodidae	Syntormon pallipes (Fabricius, 1794)	*		sh	*1
Diptera	Dolichopodidae	Syntormon praeteritum (Parent, 1929)	0	1929	ex	*1
Diptera	Dolichopodidae	Syntormon pseudospicatum Strobl, 1899	0	1939	ex	*1
Diptera	Dolichopodidae	Syntormon pumilum (Meigen, 1824)	*		mh	*1
Diptera	Dolichopodidae	Syntormon punctatum (Zetterstedt, 1843)	2		s	*1
Diptera	Dolichopodidae	Syntormon rufipes (Meigen, 1824)	*		h	*1
Diptera	Dolichopodidae	Syntormon subinermis (Loew, 1869)	2		s	*1
Diptera	Dolichopodidae	Syntormon sulcipes (Meigen, 1824)	3		s	*1
Diptera	Dolichopodidae	Syntormon tarsatum (Fallén, 1823)	3		mh	*1
Diptera	Dolichopodidae	Syntormon zelleri (Loew, 1850)	2		s	*1
Diptera	Dolichopodidae	Systenus bipartitus (Loew, 1850)	3		mh	*1
Diptera	Dolichopodidae	Systenus leucurus Loew, 1859	2		s	*1
Diptera	Dolichopodidae	Systenus pallipes (von Roser, 1840)	*		mh	*1
Diptera	Dolichopodidae	Systenus scholtzii (Loew, 1850)	3		s	*1
Diptera	Dolichopodidae	Systenus tener Loew, 1859	3		s	*1

Order	Family	Species	K	L	P	S
Diptera	Dolichopodidae	Tachytrechus ammobates (Haliday, 1851)	2		s	*1
Diptera	Dolichopodidae	Tachytrechus consobrinus (Haliday, 1851)	2		s	*1
Diptera	Dolichopodidae	Tachytrechus eucerus Loew, 1869	0	1872	ex	*1
Diptera	Dolichopodidae	Tachytrechus genualis Loew, 1857	2		s	*1
Diptera	Dolichopodidae	Tachytrechus insignis (Stannius, 1831)	2		s	*1
Diptera	Dolichopodidae	Tachytrechus melaleucus Gerstäcker, 1864	1		ss	*1
Diptera	Dolichopodidae	Tachytrechus notatus notatus (Stannius, 1831)	3		mh	*1
Diptera	Dolichopodidae	Tachytrechus notatus obscuripes Gerstäcker, 1864	0	1864	ex	*1
Diptera	Dolichopodidae	Tachytrechus novus Parent, 1927	0	1937	ex	*1
Diptera	Dolichopodidae	Tachytrechus ocior Loew, 1869	0	1938	ex	*1
Diptera	Dolichopodidae	Telmaturgus tumidulus (Raddatz, 1873)	2		s	*1
Diptera	Dolichopodidae	Teuchophorus calcaratus (Macquart, 1827)	3		mh	*1
Diptera	Dolichopodidae	Teuchophorus monacanthus Loew, 1859	*		h	*1
Diptera	Dolichopodidae	Teuchophorus nigricosta (von Roser, 1840)	*		mh	*1
Diptera	Dolichopodidae	Teuchophorus simplex Mik, 1880	*		mh	*1
Diptera	Dolichopodidae	Teuchophorus spinigerellus (Zetterstedt, 1843)	3		mh	*1
Diptera	Dolichopodidae	Thinophilus flavipalpis (Zetterstedt, 1843)	3		s	*1
Diptera	Dolichopodidae	Thinophilus ruficornis (Haliday, 1838)	3		mh	*1
Diptera	Dolichopodidae	Thrypticus atomus Frey, 1915	2		s	*1
Diptera	Dolichopodidae	Thrypticus bellus Loew, 1869	3		s	*1
Diptera	Dolichopodidae	Thrypticus divisus (Strobl, 1880)	1		ss	*1
Diptera	Dolichopodidae	Thrypticus intercedens Negrobov, 1967	2		s	*1
Diptera	Dolichopodidae	Thrypticus laetus Verrall, 1912	3		s	*1
Diptera	Dolichopodidae	Thrypticus nigricauda Wood, 1913	2		s	*1
Diptera	Dolichopodidae	Thrypticus paludicola Negrobov in Negrobov & Stackelberg 1972	0	1863	ex	*1
Diptera	Dolichopodidae	Thrypticus pollinosus Verrall, 1912	2		s	*1
Diptera	Dolichopodidae	Thrypticus smaragdinus Gerstäcker, 1864	2		s	*1
Diptera	Dolichopodidae	Thrypticus virescens Negrobov, 1967	1		ss	*1
Diptera	Dolichopodidae	Thrypticus viridis Parent, 1932	0	1912	ex	*1
Diptera	Dolichopodidae	Xanthochlorus ornatus (Haliday, 1832)	*		sh	*1
Diptera	Dolichopodidae	Xanthochlorus tenellus (Wiedemann, 1817)	*		sh	*1
Diptera	Dolichopodidae	Xanthochlorus ultramontanus Becker, 1918	1		ss	*1
Diptera	Empididae	Anthepiscopus caelebs Becker, 1891	0	1914	ex	*1
Diptera	Empididae	Anthepiscopus ribesii Becker, 1891	2		s	*1
Diptera	Empididae	Bergenstammia nudipes (Loew, 1858)	G		mh	*1
Diptera	Empididae	Brachystoma vesiculosum (Fabricius, 1794)	0	1888	ex	*1
Diptera	Empididae	Chelifera alpina Vaillant, 1981	G		s	*1
Diptera	Empididae	Chelifera angusta Collin, 1927	D		mh	*1
Diptera	Empididae	Chelifera aperticauda Collin, 1927	D		s	*1
Diptera	Empididae	Chelifera astigma Collin, 1927	D		s	*1
Diptera	Empididae	Chelifera concinnicauda Collin, 1927	D		mh	*1
Diptera	Empididae	Chelifera diversicauda Collin, 1927	V		h	*1
Diptera	Empididae	Chelifera flavella (Zetterstedt, 1838)	V		h	*1
Diptera	Empididae	Chelifera monostigma (Meigen, 1822)	D		s	*1
Diptera	Empididae	Chelifera pectinicauda Collin, 1927	D		ss	*1
Diptera	Empididae	Chelifera precabunda Collin, 1961	*		h	*1
Diptera	Empididae	Chelifera precatoria (Fallén, 1816)	*		h	*1
Diptera	Empididae	Chelifera pyrenaica Vaillant, 1981	*		s	*1
Diptera	Empididae	Chelifera serraticauda Engel, 1939	D		ss	*1
Diptera	Empididae	Chelifera stigmatica (Schiner, 1862)	D		mh	*1
Diptera	Empididae	Chelifera subangusta Collin, 1961	D		ss	*1
Diptera	Empididae	Chelifera trapezina (Zetterstedt, 1838)	*		h	*1
Diptera	Empididae	Chelipoda albiseta (Zetterstedt, 1838)	D		s	*1
Diptera	Empididae	Chelipoda melanocephala (Fabricius, 1794)	*		mh	*1
Diptera	Empididae	Chelipoda vocatoria (Fallén, 1816)	D		s	*1
Diptera	Empididae	Clinocera appendiculata (Zetterstedt, 1838)	G		mh	*1
Diptera	Empididae	Clinocera fontinalis (Haliday, 1833)	*		h	*1
Diptera	Empididae	Clinocera nigra Meigen, 1804	*		mh	*1
Diptera	Empididae	Clinocera stagnalis (Haliday, 1833)	*		mh	*1
Diptera	Empididae	Clinocera storchii Mik, 1880	D		s	*1
Diptera	Empididae	Clinocera wesmaeli (Macquart, 1835)	*		mh	*1
Diptera	Empididae	Clinocerella oldenbergi Engel, 1918	D		s	*1
Diptera	Empididae	Clinocerella sorex Engel, 1918	D		ss	*1
Diptera	Empididae	Dolichocephala austriaca Vaillant, 1968	D		s	*1
Diptera	Empididae	Dolichocephala bartaki Wagner, 1998	G		s	*1
Diptera	Empididae	Dolichocephala bellstedti Joost, 1985	G		s	*1
Diptera	Empididae	Dolichocephala guttata (Haliday, 1833)	*		mh	*1
Diptera	Empididae	Dolichocephala irrorata (Fallén, 1816)	*		h	*1
Diptera	Empididae	Dolichocephala oblongoguttata (Dale, 1878)	*		mh	*1
Diptera	Empididae	Dolichocephala ocellata (Costa, 1854)	D		s	*1
Diptera	Empididae	Dolichocephala thomasi Wagner, 1983	G		s	*1
Diptera	Empididae	Dryodromia testacea Rondani, 1856	G		s	*1
Diptera	Empididae	Empis abbreviata Loew, 1869	2		s	*1
Diptera	Empididae	Empis acinerea Chvála, 1985	*		mh	*1
Diptera	Empididae	Empis aemula Loew, 1873	3		mh	*1
Diptera	Empididae	Empis aequalis Loew, 1873	3		s	*1
Diptera	Empididae	Empis aestiva Loew, 1867	*		sh	*1
Diptera	Empididae	Empis albicans Meigen, 1822	0	1901	ex	*1
Diptera	Empididae	Empis albinervis Meigen, 1822	*		mh	*1
Diptera	Empididae	Empis albopilosa de Meijere, 1935	3		s	*1

Order	Family	Species	K	L	P	S
Diptera	Empididae	Empis anfractuosa Mik, 1884	3		s	*1
Diptera	Empididae	Empis bazini Collin, 1926	0	1943	ex	*1
Diptera	Empididae	Empis beckeriana Engel, 1946	2		s	*1
Diptera	Empididae	Empis bicuspidata Collin, 1927	3		s	*1
Diptera	Empididae	Empis bistortae Meigen, 1822	3		mh	*1
Diptera	Empididae	Empis bohemica Chvála & Syrovátka, 1989	2		s	*1
Diptera	Empididae	Empis borealis Linnaeus, 1758	3		mh	*1
Diptera	Empididae	Empis brunnipennis Meigen, 1822	0	1914	ex	*1
Diptera	Empididae	Empis caudatula Loew, 1867	*		h	*1
Diptera	Empididae	Empis chioptera Meigen, 1804	*		sh	*1
Diptera	Empididae	Empis ciliata Fabricius, 1787	3		mh	*1
Diptera	Empididae	Empis ciliatopennata Strobl, 1893	2		s	*1
Diptera	Empididae	Empis cincinnatula Loew, 1867	0	1900	ex	*1
Diptera	Empididae	Empis cognata Egger, 1860	2		s	*1
Diptera	Empididae	Empis concolor Verrall, 1872	2		s	*1
Diptera	Empididae	Empis coracina Bezzi, 1909	1		ss	*1
Diptera	Empididae	Empis dalmatica Oldenberg, 1925	1		ss	*1
Diptera	Empididae	Empis dasychira Mik, 1878	1		ss	*1
Diptera	Empididae	Empis dasyprocta Loew, 1867	2		s	*1
Diptera	Empididae	Empis decora Meigen, 1822	3		s	*1
Diptera	Empididae	Empis digramma Meigen in Gistl, 1835	*		mh	*1
Diptera	Empididae	Empis dimidiata Meigen in Gistl, 1835	2		s	*1
Diptera	Empididae	Empis discolor Loew, 1856	0	1939	ex	*1
Diptera	Empididae	Empis fallax Egger, 1860	0	1943	ex	*1
Diptera	Empididae	Empis femorata Fabricius, 1798	*		mh	*1
Diptera	Empididae	Empis flavitarsis von Roser, 1840	2		s	*1
Diptera	Empididae	Empis florisomna Loew, 1856	0	1943	ex	*1
Diptera	Empididae	Empis gooti Chvála, 1994	2		s	*1
Diptera	Empididae	Empis grisea Fallén, 1816	*		h	*1
Diptera	Empididae	Empis gymnopoda Bezzi, 1908	2		s	*1
Diptera	Empididae	Empis helophila Loew, 1867	3		s	*1
Diptera	Empididae	Empis hoffmannseggi Loew, 1869	1		ss	*1
Diptera	Empididae	Empis hyalipennis Fallén, 1816	3		s	*1
Diptera	Empididae	Empis impennis Strobl, 1902	0	1946	ex	*1
Diptera	Empididae	Empis laeta Loew, 1869	1		ss	*1
Diptera	Empididae	Empis laminata Collin, 1927	3		s	*1
Diptera	Empididae	Empis lepidopus Meigen, 1822	3		mh	*1
Diptera	Empididae	Empis leptomorion Bezzi, 1909	0	1946	ex	*1
Diptera	Empididae	Empis levis Loew, 1873	2		s	*1
Diptera	Empididae	Empis limata Collin, 1927	1		ss	*1
Diptera	Empididae	Empis livida Linnaeus, 1758	*		sh	*1
Diptera	Empididae	Empis loewiana Bezzi, 1909	1		ss	*1
Diptera	Empididae	Empis lucida Zetterstedt, 1838	0	1937	ex	*1
Diptera	Empididae	Empis lugubris Loew, 1869	0	1907	ex	*1
Diptera	Empididae	Empis lutea Meigen, 1804	*		mh	*1
Diptera	Empididae	Empis maculata Fabricius, 1781	2		s	*1
Diptera	Empididae	Empis malleola Becker, 1887	1		ss	*1
Diptera	Empididae	Empis mariae Syrovátka, 1991	2		s	*1
Diptera	Empididae	Empis melanotricha Loew, 1873	2		s	*1
Diptera	Empididae	Empis meridionalis Meigen, 1822	0	1931	ex	*1
Diptera	Empididae	Empis mesogramma Loew, 1867	0	1925	ex	*1
Diptera	Empididae	Empis mikii Strobl, 1899	1		ss	*1
Diptera	Empididae	Empis modesta Meigen, 1838	0	1886	ex	*1
Diptera	Empididae	Empis monticola Loew, 1868	0	1920	ex	*1
Diptera	Empididae	Empis morenae Strobl, 1899	D		?	*1
Diptera	Empididae	Empis morio Fabricius, 1794	2		s	*1
Diptera	Empididae	Empis morosa Meigen, 1822	0	1907	ex	*1
Diptera	Empididae	Empis nigricans Meigen, 1804	3		s	*1
Diptera	Empididae	Empis nigripes Fabricius, 1794	*		h	*1
Diptera	Empididae	Empis nigritarsis Meigen, 1804	3		s	*1
Diptera	Empididae	Empis nigritibialis Strobl, 1898	D		?	*1
Diptera	Empididae	Empis nitida Meigen, 1804	3		mh	*1
Diptera	Empididae	Empis nitidissima Strobl, 1893	2		s	*1
Diptera	Empididae	Empis nitidiventris Loew, 1873	2		s	*1
Diptera	Empididae	Empis nuntia Meigen, 1838	*		sh	*1
Diptera	Empididae	Empis opaca Meigen, 1804	*		mh	*1
Diptera	Empididae	Empis pennipes Linnaeus, 1758	*		mh	*1
Diptera	Empididae	Empis picipes Meigen, 1804	3		mh	*1
Diptera	Empididae	Empis pilimana Loew, 1869	2		s	*1
Diptera	Empididae	Empis pilosa Loew, 1867	2		s	*1
Diptera	Empididae	Empis planetica Collin, 1927	3		mh	*1
Diptera	Empididae	Empis praevia Collin, 1927	3		s	*1
Diptera	Empididae	Empis prodromus Loew, 1867	*		h	*1
Diptera	Empididae	Empis pseudomalleola Strobl, 1893	0	1919	ex	*1
Diptera	Empididae	Empis pseudonuntia Syrovátka, 1991	1		ss	*1
Diptera	Empididae	Empis pseudoprodromus Collin, 1969	3		s	*1
Diptera	Empididae	Empis punctata Meigen, 1804	2		s	*1
Diptera	Empididae	Empis pusio Egger, 1860	2		s	*1
Diptera	Empididae	Empis rufiventris Meigen, 1838	3		s	*1
Diptera	Empididae	Empis rustica Fallén, 1816	3		s	*1

Order	Family	Species	K	L	P	S
Diptera	Empididae	Empis scaura Loew, 1867	1		ss	*1
Diptera	Empididae	Empis scotica Curtis, 1835	D		?	*1
Diptera	Empididae	Empis scutellata Curtis, 1835	3		mh	*1
Diptera	Empididae	Empis semicinerea Loew, 1867	D		?	*1
Diptera	Empididae	Empis sericans Brullé, 1832	3		s	*1
Diptera	Empididae	Empis serotina Loew, 1867	3		s	*1
Diptera	Empididae	Empis simulium (Nowicki, 1868)	3		mh	*1
Diptera	Empididae	Empis staegeri Collin, 1963	2		s	*1
Diptera	Empididae	Empis stercorea Linnaeus, 1761	*		h	*1
Diptera	Empididae	Empis styriaca Strobl, 1893	1		ss	*1
Diptera	Empididae	Empis subciliata Loew, 1871	0	1900	ex	*1
Diptera	Empididae	Empis syrovatkai Chvála, 1985	*		mh	*1
Diptera	Empididae	Empis tanysphyra Loew, 1873	3		s	*1
Diptera	Empididae	Empis tenuipes Loew, 1869	0	1930	ex	*1
Diptera	Empididae	Empis tessellata Fabricius, 1794	*		sh	*1
Diptera	Empididae	Empis testacea Fabricius, 1805	2		s	*1
Diptera	Empididae	Empis trigramma Wiedemann in Meigen, 1822	*		h	*1
Diptera	Empididae	Empis trunca Daugeron, 1999	0	1950	ex	*1
Diptera	Empididae	Empis tumida Meigen, 1822	1		ss	*1
Diptera	Empididae	Empis univittata Loew, 1867	2		s	*1
Diptera	Empididae	Empis variegata Meigen, 1804	3		s	*1
Diptera	Empididae	Empis vitripennis Meigen, 1822	3		mh	*1
Diptera	Empididae	Empis volucris Wiedemann in Meigen, 1822	3		s	*1
Diptera	Empididae	Empis woodi Collin, 1927	3		s	*1
Diptera	Empididae	Gloma fuscipennis Meigen, 1822	3		mh	*1
Diptera	Empididae	Heleodromia immaculata Haliday, 1833	V		s	*1
Diptera	Empididae	Hemerodromia adulatoria Collin, 1927	D		s	*1
Diptera	Empididae	Hemerodromia baetica Collin,1927	D		s	*1
Diptera	Empididae	Hemerodromia laudatoria Collin, 1927	D		ss	*1
Diptera	Empididae	Hemerodromia melangyna Collin, 1927	D		s	*1
Diptera	Empididae	Hemerodromia oratoria (Fallén, 1816)	*		mh	*1
Diptera	Empididae	Hemerodromia raptoria Meigen, 1830	*		mh	*1
Diptera	Empididae	Hemerodromia unilineata Zetterstedt, 1842	*		mh	*1
Diptera	Empididae	Hilara aartseni Chvála, 1997	2		s	*1
Diptera	Empididae	Hilara abdominalis Zetterstedt, 1838	2		s	*1
Diptera	Empididae	Hilara aeronetha Mik, 1892	3		s	*1
Diptera	Empididae	Hilara albipennis von Roser, 1840	3		mh	*1
Diptera	Empididae	Hilara albitarsis von Roser, 1840	3		s	*1
Diptera	Empididae	Hilara albiventris von Roser, 1840	2		s	*1
Diptera	Empididae	Hilara allogastra Chvála, 2001	0	1920	ex	*1
Diptera	Empididae	Hilara anglodanica Lundbeck, 1913	3		s	*1
Diptera	Empididae	Hilara angustifrons Strobl, 1892	3		s	*1
Diptera	Empididae	Hilara apta Collin, 1927	2		s	*1
Diptera	Empididae	Hilara barbipes Frey, 1908	2		s	*1
Diptera	Empididae	Hilara beckeri Strobl, 1892	*		sh	*1
Diptera	Empididae	Hilara biseta Collin, 1927	2		s	*1
Diptera	Empididae	Hilara bistriata Zetterstedt, 1842	2		s	*1
Diptera	Empididae	Hilara bohemica Straka, 1976	3		s	*1
Diptera	Empididae	Hilara borealis Oldenberg, 1916	2		s	*1
Diptera	Empididae	Hilara brevistyla Collin, 1927	G		mh	*1
Diptera	Empididae	Hilara brevivittata Macquart, 1827	3		s	*1
Diptera	Empididae	Hilara caerulescens Oldenberg, 1916	2		s	*1
Diptera	Empididae	Hilara calinota Collin, 1969	2		s	*1
Diptera	Empididae	Hilara campinosensis Niesiolowski, 1986	2		ss	*1
Diptera	Empididae	Hilara canescens Zetterstedt, 1849	*		sh	*1
Diptera	Empididae	Hilara cantabrica Strobl, 1899	2		s	*1
Diptera	Empididae	Hilara chorica (Fallén, 1816)	*		sh	*1
Diptera	Empididae	Hilara cilipes Meigen, 1822	0	1919	ex	*1
Diptera	Empididae	Hilara cinereomicans Strobl, 1892	D		?	*1
Diptera	Empididae	Hilara clavipes (Harris, 1776)	3		mh	*1
Diptera	Empididae	Hilara clypeata Meigen, 1822	*		mh	*1
Diptera	Empididae	Hilara coracina Oldenberg, 1916	2		s	*1
Diptera	Empididae	Hilara cornicula Loew, 1873	*		h	*1
Diptera	Empididae	Hilara cuneata Loew, 1873	2		s	*1
Diptera	Empididae	Hilara curtisi Collin, 1927	2		s	*1
Diptera	Empididae	Hilara dimidiata Strobl, 1892	0	1941	ex	*1
Diptera	Empididae	Hilara discoidalis Lundbeck, 1910	3		mh	*1
Diptera	Empididae	Hilara discolor Strobl, 1892	2		s	*1
Diptera	Empididae	Hilara diversipes Strobl, 1892	2		s	*1
Diptera	Empididae	Hilara femorata Loew, 1862	1		ss	*1
Diptera	Empididae	Hilara femorella Zetterstedt, 1842	3		s	*1
Diptera	Empididae	Hilara flavipes Meigen, 1822	*		h	*1
Diptera	Empididae	Hilara fulvibarba Strobl, 1899	1		ss	*1
Diptera	Empididae	Hilara fuscipes (Fabricius, 1794)	*		h	*1
Diptera	Empididae	Hilara galactoptera Strobl, 1910	3		s	*1
Diptera	Empididae	Hilara gallica (Meigen, 1804)	3		mh	*1
Diptera	Empididae	Hilara gooti Chvála, 1999	1		ss	*1
Diptera	Empididae	Hilara griseola Zetterstedt, 1838	2		s	*1
Diptera	Empididae	Hilara hirta Strobl, 1892	0	1908	ex	*1
Diptera	Empididae	Hilara hirtella Collin, 1927	1		ss	*1

Order	Family	Species	K	L	P	S
Diptera	Empididae	Hilara hirtipes Collin, 1927	2		s	*1
Diptera	Empididae	Hilara hybrida Collin, 1961	2		s	*1
Diptera	Empididae	Hilara hystrix Strobl, 1892	2		s	*1
Diptera	Empididae	Hilara implicata Collin, 1927	D		?	*1
Diptera	Empididae	Hilara intermedia (Fallén, 1816)	*		sh	*1
Diptera	Empididae	Hilara interstincta (Fallén, 1816)	*		sh	*1
Diptera	Empididae	Hilara lasiochira Strobl, 1892	3		s	*1
Diptera	Empididae	Hilara lasiopa Strobl, 1892	3		s	*1
Diptera	Empididae	Hilara litorea (Fallén, 1816)	*		sh	*1
Diptera	Empididae	Hilara longifurca Strobl, 1892	*		h	*1
Diptera	Empididae	Hilara longivittata Zetterstedt, 1842	*		h	*1
Diptera	Empididae	Hilara lugubris (Zetterstedt, 1819)	2		s	*1
Diptera	Empididae	Hilara lurida (Fallén, 1816)	*		h	*1
Diptera	Empididae	Hilara maior Strobl, 1910	0	1925	ex	*1
Diptera	Empididae	Hilara manicata Meigen, 1822	3		mh	*1
Diptera	Empididae	Hilara marginipennis Strobl, 1909	1		ss	*1
Diptera	Empididae	Hilara maura (Fabricius, 1776)	*		sh	*1
Diptera	Empididae	Hilara medeteriformis Collin, 1961	*		sh	*1
Diptera	Empididae	Hilara merula Collin, 1927	2		s	*1
Diptera	Empididae	Hilara morata Collin, 1927	0	1925	ex	*1
Diptera	Empididae	Hilara morenae Strobl, 1899	D		?	*1
Diptera	Empididae	Hilara nigrina (Fallén, 1816)	3		mh	*1
Diptera	Empididae	Hilara nigritarsis Zetterstedt, 1838	2		s	*1
Diptera	Empididae	Hilara nigrocincta de Meijere, 1935	2		s	*1
Diptera	Empididae	Hilara nigrohirta Collin, 1927	3		s	*1
Diptera	Empididae	Hilara nitidorella Chvála, 1997	3		s	*1
Diptera	Empididae	Hilara nitidula Zetterstedt, 1838	3		mh	*1
Diptera	Empididae	Hilara obscura Meigen, 1822	*		h	*1
Diptera	Empididae	Hilara pectinipes Strobl, 1892	0	1937	ex	*1
Diptera	Empididae	Hilara pilipes Zetterstedt, 1838	3		s	*1
Diptera	Empididae	Hilara pilosa Zetterstedt, 1842	3		s	*1
Diptera	Empididae	Hilara pilosopectinata Strobl, 1892	0	1949	ex	*1
Diptera	Empididae	Hilara platyura Loew, 1873	2		s	*1
Diptera	Empididae	Hilara primula Collin, 1927	3		s	*1
Diptera	Empididae	Hilara pruinosa Wiedemann in Meigen, 1822	0	1931	ex	*1
Diptera	Empididae	Hilara pseudochorica Strobl, 1892	2		s	*1
Diptera	Empididae	Hilara pseudocornicula Strobl, 1909	*		mh	*1
Diptera	Empididae	Hilara pseudosartrix Strobl, 1892	3		s	*1
Diptera	Empididae	Hilara quadrifaria Strobl, 1892	2		s	*1
Diptera	Empididae	Hilara quadrifasciata Chvála, 2002	*		sh	*1
Diptera	Empididae	Hilara quadriseta Collin, 1927	0	1921	ex	*1
Diptera	Empididae	Hilara quadrula Chvála, 2002	2		s	*1
Diptera	Empididae	Hilara recedens Walker, 1851	2		s	*1
Diptera	Empididae	Hilara rejecta Collin, 1927	3		s	*1
Diptera	Empididae	Hilara sartor Becker, 1888	2		s	*1
Diptera	Empididae	Hilara scrobiculata Loew, 1873	2		s	*1
Diptera	Empididae	Hilara setipes Straka, 1976	1		ss	*1
Diptera	Empididae	Hilara splendida Straka, 1976	0	1925	ex	*1
Diptera	Empididae	Hilara sturmii Wiedemann in Meigen, 1822	2		s	*1
Diptera	Empididae	Hilara submaura Collin, 1956	1		ss	*1
Diptera	Empididae	Hilara tenella (Fallén, 1816)	2		s	*1
Diptera	Empididae	Hilara ternovensis Strobl, 1898	3		mh	*1
Diptera	Empididae	Hilara tetragramma Loew, 1873	3		s	*1
Diptera	Empididae	Hilara thoracica Macquart, 1827	3		mh	*1
Diptera	Empididae	Hilara tiefii Strobl, 1892	2		s	*1
Diptera	Empididae	Hilara trigemina Strobl, 1909	1		ss	*1
Diptera	Empididae	Hilara tyrolensis Strobl, 1892	1		ss	*1
Diptera	Empididae	Hilara veletica Chvála, 1981	1		ss	*1
Diptera	Empididae	Hilara vltavensis Straka, 1976	1		ss	*1
Diptera	Empididae	Hormopeza obliterata Zetterstedt, 1838	D		?	*1
Diptera	Empididae	Iteaphila furcata (Zetterstedt, 1842)	1		ss	*1
Diptera	Empididae	Iteaphila macquarti Zetterstedt, 1838	0	1840	ex	*1
Diptera	Empididae	Iteaphila nitidula Zetterstedt, 1838	2		s	*1
Diptera	Empididae	Kowarzia barbatula (Mik, 1880)	*		mh	*1
Diptera	Empididae	Kowarzia bipunctata (Haliday, 1833)	*		mh	*1
Diptera	Empididae	Kowarzia madicola (Vaillant, 1964)	V		s	*1
Diptera	Empididae	Kowarzia plectrum (Mik, 1880)	V		s	*1
Diptera	Empididae	Kowarzia tenella (Wahlberg, 1844)	D		s	*1
Diptera	Empididae	Kowarzia tibiella (Mik, 1880)	*		s	*1
Diptera	Empididae	Metachela nigriventris (Loew, 1864)	D		ss	*1
Diptera	Empididae	Oreogeton basalis (Loew, 1856)	2		s	*1
Diptera	Empididae	Phaeobalia dimidiata (Loew, 1869)	G		s	*1
Diptera	Empididae	Phaeobalia inermis (Loew, 1861)	G		mh	*1
Diptera	Empididae	Phaeobalia trinotata (Mik, 1869)	G		s	*1
Diptera	Empididae	Ragas unica Walker, 1837	3		s	*1
Diptera	Empididae	Rhamphomyia aethiops Zetterstedt, 1838	0	1950	ex	*1
Diptera	Empididae	Rhamphomyia albidiventris Strobl, 1898	2		s	*1
Diptera	Empididae	Rhamphomyia albipennis (Fallén, 1816)	2		s	*1
Diptera	Empididae	Rhamphomyia albissima Frey, 1913	0	1912	ex	*1
Diptera	Empididae	Rhamphomyia albitarsis Collin, 1926	3		s	*1

Order	Family	Species	K	L	P	S
Diptera	Empididae	Rhamphomyia albohirta Collin, 1926	3		mh	*1
Diptera	Empididae	Rhamphomyia albosegmentata Zetterstedt, 1838	2		s	*1
Diptera	Empididae	Rhamphomyia alpina (Zetterstedt, 1838)	D		?	*1
Diptera	Empididae	Rhamphomyia amoena Loew, 1840	2		s	*1
Diptera	Empididae	Rhamphomyia anfractuosa Bezzi, 1904	3		s	*1
Diptera	Empididae	Rhamphomyia anomala Oldenberg, 1915	1		ss	*1
Diptera	Empididae	Rhamphomyia anomalipennis Meigen, 1822	3		mh	*1
Diptera	Empididae	Rhamphomyia anthracina Meigen, 1822	3		s	*1
Diptera	Empididae	Rhamphomyia argentata von Röder, 1887	3		mh	*1
Diptera	Empididae	Rhamphomyia armimana Oldenberg, 1910	0	1938	ex	*1
Diptera	Empididae	Rhamphomyia aterrima Frey, 1922	1		ss	*1
Diptera	Empididae	Rhamphomyia atra Meigen, 1822	*		h	*1
Diptera	Empididae	Rhamphomyia aucta Oldenberg, 1917	0	1938	ex	*1
Diptera	Empididae	Rhamphomyia australis Frey, 1922	0	1925	ex	*1
Diptera	Empididae	Rhamphomyia barbata (Macquart, 1823)	*		mh	*1
Diptera	Empididae	Rhamphomyia bistriata Strobl, 1910	0	1950	ex	*1
Diptera	Empididae	Rhamphomyia brevipila Oldenberg, 1922	0	1946	ex	*1
Diptera	Empididae	Rhamphomyia caesia Meigen, 1822	3		s	*1
Diptera	Empididae	Rhamphomyia caliginosa Collin, 1926	3		s	*1
Diptera	Empididae	Rhamphomyia caudata Zetterstedt, 1838	1		ss	*1
Diptera	Empididae	Rhamphomyia cinerascens (Meigen, 1804)	0	1943	ex	*1
Diptera	Empididae	Rhamphomyia claripennis Oldenberg, 1922	3		s	*1
Diptera	Empididae	Rhamphomyia coracina Zetterstedt, 1849	0	1950	ex	*1
Diptera	Empididae	Rhamphomyia crassicauda Strobl, 1893	2		s	*1
Diptera	Empididae	Rhamphomyia crassimana Strobl, 1898	0	1917	ex	*1
Diptera	Empididae	Rhamphomyia crassirostris (Fallén, 1816)	*		h	*1
Diptera	Empididae	Rhamphomyia crinita Becker, 1887	0	1916	ex	*1
Diptera	Empididae	Rhamphomyia culicina (Fallén, 1816)	3		mh	*1
Diptera	Empididae	Rhamphomyia curvula Frey, 1913	3		s	*1
Diptera	Empididae	Rhamphomyia dentata Oldenberg, 1910	0	1909	ex	*1
Diptera	Empididae	Rhamphomyia dudai Oldenberg, 1927	0	1925	ex	*1
Diptera	Empididae	Rhamphomyia erythrophthalma Meigen, 1830	*		sh	*1
Diptera	Empididae	Rhamphomyia eupterota Loew, 1873	3		s	*1
Diptera	Empididae	Rhamphomyia flava (Fallén, 1816)	*		h	*1
Diptera	Empididae	Rhamphomyia flaviventris Macquart, 1827	2		s	*1
Diptera	Empididae	Rhamphomyia fuscipennis Zetterstedt, 1838	1		ss	*1
Diptera	Empididae	Rhamphomyia galactoptera Strobl, 1893	3		s	*1
Diptera	Empididae	Rhamphomyia geniculata Meigen, 1830	3		mh	*1
Diptera	Empididae	Rhamphomyia gibba (Fallén, 1816)	*		h	*1
Diptera	Empididae	Rhamphomyia hercynica Oldenberg, 1927	2		s	*1
Diptera	Empididae	Rhamphomyia heterochroma Bezzi, 1898	0	1950	ex	*1
Diptera	Empididae	Rhamphomyia hirsutipes Collin, 1926	*		h	*1
Diptera	Empididae	Rhamphomyia hirtimana Oldenberg, 1922	1		ss	*1
Diptera	Empididae	Rhamphomyia hybotina Zetterstedt, 1838	3		s	*1
Diptera	Empididae	Rhamphomyia ignobilis Zetterstedt, 1859	0	1914	ex	*1
Diptera	Empididae	Rhamphomyia janovensis Barták, 1981	1		ss	*1
Diptera	Empididae	Rhamphomyia laevipes (Fallén, 1816)	*		mh	*1
Diptera	Empididae	Rhamphomyia lamellata Collin, 1926	2		s	*1
Diptera	Empididae	Rhamphomyia lindneri Barták, 1998	0	1950	ex	*1
Diptera	Empididae	Rhamphomyia lividiventris Zetterstedt, 1838	0	1862	ex	*1
Diptera	Empididae	Rhamphomyia loewi Nowicki, 1868	0	1946	ex	*1
Diptera	Empididae	Rhamphomyia longipes (Meigen, 1804)	*		sh	*1
Diptera	Empididae	Rhamphomyia longirostris (Lindner, 1972)	0	1949	ex	*1
Diptera	Empididae	Rhamphomyia lucidula Zetterstedt, 1842	0	1937	ex	*1
Diptera	Empididae	Rhamphomyia luridipennis Nowicki, 1868	0	1950	ex	*1
Diptera	Empididae	Rhamphomyia maculipennis Zetterstedt, 1842	2		s	*1
Diptera	Empididae	Rhamphomyia marginata (Fabricius, 1787)	*		mh	*1
Diptera	Empididae	Rhamphomyia micans Oldenberg, 1915	0	1915	ex	*1
Diptera	Empididae	Rhamphomyia micropyga Collin, 1926	3		s	*1
Diptera	Empididae	Rhamphomyia minor Oldenberg, 1922	0	1920	ex	*1
Diptera	Empididae	Rhamphomyia modesta Wahlberg, 1844	1		ss	*1
Diptera	Empididae	Rhamphomyia montana Oldenberg, 1915	*		mh	*1
Diptera	Empididae	Rhamphomyia morio Zetterstedt, 1838	0	1948	ex	*1
Diptera	Empididae	Rhamphomyia murina Collin, 1926	2		s	*1
Diptera	Empididae	Rhamphomyia nigripennis (Fabricius, 1794)	*		mh	*1
Diptera	Empididae	Rhamphomyia nigripes Strobl, 1898	1		ss	*1
Diptera	Empididae	Rhamphomyia nigromaculata von Roser, 1840	0	1920	ex	*1
Diptera	Empididae	Rhamphomyia nitidula Zetterstedt, 1842	2		s	*1
Diptera	Empididae	Rhamphomyia niveipennis (Zetterstedt, 1838)	1		ss	*1
Diptera	Empididae	Rhamphomyia nodipes (Fallén, 1816)	3		s	*1
Diptera	Empididae	Rhamphomyia nox Oldenberg, 1917	D		?	*1
Diptera	Empididae	Rhamphomyia obscura Zetterstedt, 1838	2		s	*1
Diptera	Empididae	Rhamphomyia obscuripennis Meigen, 1830	3		s	*1
Diptera	Empididae	Rhamphomyia physoprocta Frey, 1913	2		s	*1
Diptera	Empididae	Rhamphomyia pilifer Meigen, 1838	*		mh	*1
Diptera	Empididae	Rhamphomyia plumifera Zetterstedt, 1838	0	1940	ex	*1
Diptera	Empididae	Rhamphomyia plumipes (Meigen, 1804)	2		s	*1
Diptera	Empididae	Rhamphomyia poissoni (Trehen, 1966)	3		s	*1
Diptera	Empididae	Rhamphomyia pokornyi Bezzi, 1904	0	1923	ex	*1
Diptera	Empididae	Rhamphomyia pseudogibba Strobl, 1910	1		ss	*1

Order	Family	Species	K	L	P	S
Diptera	Empididae	Rhamphomyia sanctimauritii Becker, 1887	0	1938	ex	*1
Diptera	Empididae	Rhamphomyia sciarina (Fallén, 1816)	2		s	*1
Diptera	Empididae	Rhamphomyia simplex Zetterstedt, 1849	2		s	*1
Diptera	Empididae	Rhamphomyia spinipes (Fallén, 1816)	3		mh	*1
Diptera	Empididae	Rhamphomyia spinosipes Oldenberg, 1915	0	1912	ex	*1
Diptera	Empididae	Rhamphomyia stigmosa Macquart, 1827	3		mh	*1
Diptera	Empididae	Rhamphomyia subcinarescens Collin, 1926	2		s	*1
Diptera	Empididae	Rhamphomyia sulcata (Meigen, 1804)	*		h	*1
Diptera	Empididae	Rhamphomyia sulcatella Collin, 1926	3		s	*1
Diptera	Empididae	Rhamphomyia tarsata Meigen, 1822	3		s	*1
Diptera	Empididae	Rhamphomyia tibialis Meigen, 1822	3		mh	*1
Diptera	Empididae	Rhamphomyia tibiella Zetterstedt, 1842	3		mh	*1
Diptera	Empididae	Rhamphomyia tipularia (Fallén, 1816)	2		s	*1
Diptera	Empididae	Rhamphomyia trigemina Oldenberg, 1927	3		s	*1
Diptera	Empididae	Rhamphomyia trilineata Zetterstedt, 1859	3		mh	*1
Diptera	Empididae	Rhamphomyia umbripennis Meigen, 1822	*		sh	*1
Diptera	Empididae	Rhamphomyia umbripes Becker, 1887	2		s	*1
Diptera	Empididae	Rhamphomyia unguiculata Frey, 1913	3		s	*1
Diptera	Empididae	Rhamphomyia ursina Oldenberg, 1915	1		ss	*1
Diptera	Empididae	Rhamphomyia variabilis (Fallén, 1816)	3		s	*1
Diptera	Empididae	Rhamphomyia vesiculosa (Fallén, 1816)	0	1936	ex	*1
Diptera	Empididae	Trichopeza albocincta (Boheman, 1864)	D		ss	*1
Diptera	Empididae	Trichopeza longicornis (Meigen, 1822)	G		s	*1
Diptera	Empididae	Wiedemannia alpina (Engel, 1918)	G		mh	*1
Diptera	Empididae	Wiedemannia aquilex (Loew, 1869)	G		mh	*1
Diptera	Empididae	Wiedemannia armata (Engel, 1918)	G		s	*1
Diptera	Empididae	Wiedemannia beckeri (Mik, 1889)	G		mh	*1
Diptera	Empididae	Wiedemannia bilobata Oldenberg, 1910	G		mh	*1
Diptera	Empididae	Wiedemannia bistigma (Curtis, 1834)	G		mh	*1
Diptera	Empididae	Wiedemannia bohemani (Zetterstedt, 1838)	*		h	*1
Diptera	Empididae	Wiedemannia braueri (Mik, 1880)	G		s	*1
Diptera	Empididae	Wiedemannia brevilamellata Wagner, 1985	D		s	*1
Diptera	Empididae	Wiedemannia dolichocephala Vaillant, 1964	D		s	*1
Diptera	Empididae	Wiedemannia fallaciosa (Loew, 1873)	G		s	*1
Diptera	Empididae	Wiedemannia hastata (Mik, 1880)	D		ss	*1
Diptera	Empididae	Wiedemannia hygrobia (Loew, 1858)	*		mh	*1
Diptera	Empididae	Wiedemannia insularis Collin, 1927	V		s	*1
Diptera	Empididae	Wiedemannia lamellata (Loew, 1869)	*		mh	*1
Diptera	Empididae	Wiedemannia longicornis (Mik, 1887)	D		s	*1
Diptera	Empididae	Wiedemannia lota Walker, 1851	V		s	*1
Diptera	Empididae	Wiedemannia mikiana (Bezzi, 1899)	D		ss	*1
Diptera	Empididae	Wiedemannia oxystoma (Bezzi, 1905)	G		ss	*1
Diptera	Empididae	Wiedemannia phantasma (Mik, 1880)	G		s	*1
Diptera	Empididae	Wiedemannia pirata (Mik, 1880)	D		ss	*1
Diptera	Empididae	Wiedemannia rhynchops (Nowicki, 1868)	G		mh	*1
Diptera	Empididae	Wiedemannia stylifera Mik, 1889	D		s	*1
Diptera	Empididae	Wiedemannia thienemanni Wagner, 1982	D		ss	*1
Diptera	Empididae	Wiedemannia wachtli (Mik, 1880)	D		mh	*1
Diptera	Empididae	Wiedemannia zetterstedti (Fallén, 1826)	*		h	*1
Diptera	Hybotidae	Allanthalia pallida (Zetterstedt, 1838)	2		s	*1
Diptera	Hybotidae	Anthalia schoenherri Zetterstedt, 1838	1		ss	*1
Diptera	Hybotidae	Bicellaria albopilosa Chvála, 1991	1		ss	*1
Diptera	Hybotidae	Bicellaria austriaca Tuomikoski, 1955	*		h	*1
Diptera	Hybotidae	Bicellaria collini Tuomikoski, 1955	0	1933	ex	*1
Diptera	Hybotidae	Bicellaria intermedia Lundbeck, 1910	3		mh	*1
Diptera	Hybotidae	Bicellaria nigra (Meigen, 1824)	*		h	*1
Diptera	Hybotidae	Bicellaria nigrita Collin, 1926	2		s	*1
Diptera	Hybotidae	Bicellaria pilosa Lundbeck, 1910	*		mh	*1
Diptera	Hybotidae	Bicellaria simplicipes (Zetterstedt, 1842)	*		mh	*1
Diptera	Hybotidae	Bicellaria spuria (Fallén, 1816)	*		h	*1
Diptera	Hybotidae	Bicellaria subpilosa Collin, 1926	3		s	*1
Diptera	Hybotidae	Bicellaria sulcata (Zetterstedt, 1842)	*		mh	*1
Diptera	Hybotidae	Bicellaria vana Collin, 1926	*		mh	*1
Diptera	Hybotidae	Chersodromia alata (Walker, 1835)	2		s	*1
Diptera	Hybotidae	Chersodromia arenaria (Haliday, 1833)	2		s	*1
Diptera	Hybotidae	Chersodromia beckeri Melander, 1928	0	1899	ex	*1
Diptera	Hybotidae	Chersodromia cursitans (Zetterstedt, 1819)	3		s	*1
Diptera	Hybotidae	Chersodromia hirta (Walker, 1835)	0	1920	ex	*1
Diptera	Hybotidae	Chersodromia incana Walker, 1851	2		s	*1
Diptera	Hybotidae	Chersodromia speculifera Walker, 1851	2		s	*1
Diptera	Hybotidae	Crossopalpus abditus Kovalev, 1972	3		s	*1
Diptera	Hybotidae	Crossopalpus aeneus (Walker, 1871)	2		s	*1
Diptera	Hybotidae	Crossopalpus curvinervis (Zetterstedt, 1842)	0	1950	ex	*1
Diptera	Hybotidae	Crossopalpus curvipes (Meigen, 1822)	3		s	*1
Diptera	Hybotidae	Crossopalpus flexuosus (Loew, 1840)	0	1930	ex	*1
Diptera	Hybotidae	Crossopalpus humilis (Frey, 1913)	*		h	*1
Diptera	Hybotidae	Crossopalpus minimus (Meigen, 1838)	3		s	*1
Diptera	Hybotidae	Crossopalpus nigritellus (Zetterstedt, 1842)	*		sh	*1
Diptera	Hybotidae	Crossopalpus setiger (Loew, 1859)	3		s	*1
Diptera	Hybotidae	Drapetis arcuata Loew, 1859	3		s	*1

Order	Family	Species	K	L	P	S
Diptera	Hybotidae	Drapetis assimilis (Fallén, 1815)	*		h	*1
Diptera	Hybotidae	Drapetis completa Kovalev, 1972	3		s	*1
Diptera	Hybotidae	Drapetis convergens Collin, 1926	3		s	*1
Diptera	Hybotidae	Drapetis exilis Meigen, 1822	*		sh	*1
Diptera	Hybotidae	Drapetis flavipes Macquart, 1834	3		s	*1
Diptera	Hybotidae	Drapetis fumipennis Strobl, 1906	3		s	*1
Diptera	Hybotidae	Drapetis hirsuticeris Stark, 2003	2		s	*1
Diptera	Hybotidae	Drapetis incompleta Collin, 1926	*		h	*1
Diptera	Hybotidae	Drapetis infitialis Collin, 1961	*		mh	*1
Diptera	Hybotidae	Drapetis ingrica Kovalev, 1972	1		ss	*1
Diptera	Hybotidae	Drapetis parilis Collin, 1926	*		h	*1
Diptera	Hybotidae	Drapetis pusilla Loew, 1859	*		h	*1
Diptera	Hybotidae	Drapetis simulans Collin, 1961	3		mh	*1
Diptera	Hybotidae	Dysaletria atriceps (Boheman, 1852)	0	1935	ex	*1
Diptera	Hybotidae	Elaphropeza ephippiata (Fallén, 1815)	*		sh	*1
Diptera	Hybotidae	Euthyneura albipennis (Zetterstedt, 1842)	3		s	*1
Diptera	Hybotidae	Euthyneura gyllenhali (Zetterstedt, 1838)	*		h	*1
Diptera	Hybotidae	Euthyneura halidayi Collin, 1926	2		s	*1
Diptera	Hybotidae	Euthyneura myricae Haliday in Walker, 1851	0	1936	ex	*1
Diptera	Hybotidae	Euthyneura myrtilli Macquart, 1836	*		sh	*1
Diptera	Hybotidae	Hybos culiciformis (Fabricius, 1775)	*		sh	*1
Diptera	Hybotidae	Hybos femoratus (Müller, 1776)	*		h	*1
Diptera	Hybotidae	Hybos grossipes (Linnaeus, 1767)	*		mh	*1
Diptera	Hybotidae	Lamachella germanica Chvála & Stark, 1997	1		ss	*1
Diptera	Hybotidae	Leptopeza borealis Zetterstedt, 1842	3		mh	*1
Diptera	Hybotidae	Leptopeza flavipes (Meigen, 1820)	*		h	*1
Diptera	Hybotidae	Ocydromia glabricula (Fallén, 1816)	*		h	*1
Diptera	Hybotidae	Ocydromia melanopleura Loew, 1840	*		mh	*1
Diptera	Hybotidae	Oedalea apicalis Loew, 1859	2		s	*1
Diptera	Hybotidae	Oedalea austroholmgreni Chvála, 1981	3		s	*1
Diptera	Hybotidae	Oedalea flavipes Zetterstedt, 1842	3		mh	*1
Diptera	Hybotidae	Oedalea holmgreni Zetterstedt, 1852	3		mh	*1
Diptera	Hybotidae	Oedalea hybotina (Fallén, 1816)	3		s	*1
Diptera	Hybotidae	Oedalea kowarzi Chvála, 1981	1		ss	*1
Diptera	Hybotidae	Oedalea montana Chvála, 1981	3		mh	*1
Diptera	Hybotidae	Oedalea oriunda Collin, 1961	2		s	*1
Diptera	Hybotidae	Oedalea stigmatella Zetterstedt, 1842	*		sh	*1
Diptera	Hybotidae	Oedalea tibialis Macquart, 1827	*		h	*1
Diptera	Hybotidae	Oedalea tristis Scholtz, 1851	3		s	*1
Diptera	Hybotidae	Oedalea zetterstedti Collin, 1926	*		sh	*1
Diptera	Hybotidae	Oropezella sphenoptera (Loew, 1873)	*		h	*1
Diptera	Hybotidae	Platypalpus aeneus (Macquart, 1823)	2		s	*1
Diptera	Hybotidae	Platypalpus agilis (Meigen, 1822)	*		sh	*1
Diptera	Hybotidae	Platypalpus albicornis (Zetterstedt, 1842)	G		mh	*1
Diptera	Hybotidae	Platypalpus albidifacies Chvála, 1975	D		?	*1
Diptera	Hybotidae	Platypalpus albifacies (Collin, 1926)	*		h	*1
Diptera	Hybotidae	Platypalpus albiseta (Panzer, 1806)	*		mh	*1
Diptera	Hybotidae	Platypalpus albocapillatus (Fallén, 1815)	3		s	*1
Diptera	Hybotidae	Platypalpus alpinus Chvála, 1971	2		s	*1
Diptera	Hybotidae	Platypalpus alter (Collin, 1961)	2		s	*1
Diptera	Hybotidae	Platypalpus analis (Meigen, 1830)	*		mh	*1
Diptera	Hybotidae	Platypalpus annulatus (Fallén, 1815)	*		mh	*1
Diptera	Hybotidae	Platypalpus annulipes (Meigen, 1822)	*		sh	*1
Diptera	Hybotidae	Platypalpus annulitarsis Kovalev, 1978	2		s	*1
Diptera	Hybotidae	Platypalpus aristatus (Collin, 1926)	*		h	*1
Diptera	Hybotidae	Platypalpus articulatoides (Frey, 1918)	*		sh	*1
Diptera	Hybotidae	Platypalpus articulatus Macquart, 1827	*		sh	*1
Diptera	Hybotidae	Platypalpus ater (Wahlberg, 1844)	3		s	*1
Diptera	Hybotidae	Platypalpus aurantiacus (Collin, 1926)	3		s	*1
Diptera	Hybotidae	Platypalpus australominutus Grootaert, 1989	*		h	*1
Diptera	Hybotidae	Platypalpus balticus Kovalev, 1971	3		mh	*1
Diptera	Hybotidae	Platypalpus biapicalis Wéber, 1972	3		s	*1
Diptera	Hybotidae	Platypalpus bilobatus Wéber, 1972	3		mh	*1
Diptera	Hybotidae	Platypalpus boreoalpinus Frey, 1943	2		s	*1
Diptera	Hybotidae	Platypalpus brachystylus (Bezzi, 1892)	*		h	*1
Diptera	Hybotidae	Platypalpus brevicornis (Zetterstedt, 1842)	3		s	*1
Diptera	Hybotidae	Platypalpus calceatus (Meigen, 1822)	*		h	*1
Diptera	Hybotidae	Platypalpus candicans (Fallén, 1815)	*		sh	*1
Diptera	Hybotidae	Platypalpus caroli Grootaert, 1987	3		s	*1
Diptera	Hybotidae	Platypalpus celer (Meigen, 1822)	2		s	*1
Diptera	Hybotidae	Platypalpus ciliaris (Fallén, 1816)	*		sh	*1
Diptera	Hybotidae	Platypalpus cilitarsis Frey, 1943	2		s	*1
Diptera	Hybotidae	Platypalpus clarandus (Collin, 1926)	3		mh	*1
Diptera	Hybotidae	Platypalpus clypeatus Kovalev, 1973	2		s	*1
Diptera	Hybotidae	Platypalpus commutatus (Strobl, 1893)	2		s	*1
Diptera	Hybotidae	Platypalpus confinis (Zetterstedt, 1842)	2		s	*1
Diptera	Hybotidae	Platypalpus cothurnatus Macquart, 1827	*		mh	*1
Diptera	Hybotidae	Platypalpus coxatus (Zetterstedt, 1842)	3		s	*1
Diptera	Hybotidae	Platypalpus cruralis (Collin, 1961)	*		mh	*1
Diptera	Hybotidae	Platypalpus cryptospina (Frey, 1909)	3		mh	*1

Order	Family	Species	K	L	P	S
Diptera	Hybotidae	Platypalpus cursitans (Fabricius, 1775)	*		sh	*1
Diptera	Hybotidae	Platypalpus dessarti Grootaert, 1983	3		s	*1
Diptera	Hybotidae	Platypalpus divisus Walker, 1851	2		s	*1
Diptera	Hybotidae	Platypalpus ecalceatus (Zetterstedt, 1838)	*		mh	*1
Diptera	Hybotidae	Platypalpus excisus (Becker, 1907)	*		mh	*1
Diptera	Hybotidae	Platypalpus exilis (Meigen, 1822)	*		h	*1
Diptera	Hybotidae	Platypalpus eximius (Oldenberg, 1924)	1		ss	*1
Diptera	Hybotidae	Platypalpus fasciatus (Meigen, 1822)	3		mh	*1
Diptera	Hybotidae	Platypalpus flavicornis (Meigen, 1822)	*		sh	*1
Diptera	Hybotidae	Platypalpus flaviseta Chvála, 1973	0	1920	ex	*1
Diptera	Hybotidae	Platypalpus fuscicnemis Grootaert & Chvála, 1992	1		ss	*1
Diptera	Hybotidae	Platypalpus fuscicornis (Zetterstedt, 1842)	*		mh	*1
Diptera	Hybotidae	Platypalpus hallensis Grootaert & Stark, 1997	3		s	*1
Diptera	Hybotidae	Platypalpus incertus (Collin, 1926)	3		mh	*1
Diptera	Hybotidae	Platypalpus infectus (Collin, 1926)	*		sh	*1
Diptera	Hybotidae	Platypalpus ingenuus (Collin, 1926)	2		s	*1
Diptera	Hybotidae	Platypalpus insperatus Kovalev, 1971	3		s	*1
Diptera	Hybotidae	Platypalpus interstinctus (Collin, 1926)	*		h	*1
Diptera	Hybotidae	Platypalpus kirtlingensis Grootaert, 1986	*		sh	*1
Diptera	Hybotidae	Platypalpus latemi Grootaert, 1982	1		ss	*1
Diptera	Hybotidae	Platypalpus laticinctus Walker, 1851	*		mh	*1
Diptera	Hybotidae	Platypalpus leucocephalus (von Roser, 1840)	*		h	*1
Diptera	Hybotidae	Platypalpus leucothrix (Strobl, 1910)	2		s	*1
Diptera	Hybotidae	Platypalpus longicornioides Chvála, 1972	1		ss	*1
Diptera	Hybotidae	Platypalpus longicornis (Meigen, 1822)	*		sh	*1
Diptera	Hybotidae	Platypalpus longimanus (Corti, 1907)	2		s	*1
Diptera	Hybotidae	Platypalpus longiseta (Zetterstedt, 1842)	*		sh	*1
Diptera	Hybotidae	Platypalpus luteicornis (Meigen, 1838)	*		mh	*1
Diptera	Hybotidae	Platypalpus luteipes Zusková, 1966	3		mh	*1
Diptera	Hybotidae	Platypalpus luteoloides Grootaert, 1983	3		mh	*1
Diptera	Hybotidae	Platypalpus luteolus (Collin, 1926)	3		mh	*1
Diptera	Hybotidae	Platypalpus luteus (Meigen, 1804)	*		h	*1
Diptera	Hybotidae	Platypalpus macula (Zetterstedt, 1842)	2		s	*1
Diptera	Hybotidae	Platypalpus maculimanus (Zetterstedt, 1842)	*		sh	*1
Diptera	Hybotidae	Platypalpus maculipes (Meigen, 1822)	*		sh	*1
Diptera	Hybotidae	Platypalpus major (Zetterstedt, 1842)	*		h	*1
Diptera	Hybotidae	Platypalpus melancholicus (Collin, 1961)	2		s	*1
Diptera	Hybotidae	Platypalpus mikii (Becker, 1890)	3		mh	*1
Diptera	Hybotidae	Platypalpus minutissimus (Strobl, 1899)	1		ss	*1
Diptera	Hybotidae	Platypalpus minutus (Meigen, 1804)	*		sh	*1
Diptera	Hybotidae	Platypalpus nanus (Oldenberg, 1924)	3		mh	*1
Diptera	Hybotidae	Platypalpus niger (Meigen, 1804)	*		h	*1
Diptera	Hybotidae	Platypalpus nigricoxa (Mik, 1884)	2		s	*1
Diptera	Hybotidae	Platypalpus nigrimanus Strobl, 1880	D		?	*1
Diptera	Hybotidae	Platypalpus nigrinus (Meigen, 1822)	2		s	*1
Diptera	Hybotidae	Platypalpus nigritarsis (Fallén, 1816)	*		sh	*1
Diptera	Hybotidae	Platypalpus nigrosetosus (Strobl, 1893)	3		s	*1
Diptera	Hybotidae	Platypalpus niveiseta (Zetterstedt, 1842)	*		sh	*1
Diptera	Hybotidae	Platypalpus niveisetoides Chvála, 1973	2		s	*1
Diptera	Hybotidae	Platypalpus niveocapillatus Chvála, 1973	1		ss	*1
Diptera	Hybotidae	Platypalpus notatus (Meigen, 1822)	*		h	*1
Diptera	Hybotidae	Platypalpus nudithorax Chvála, 1975	2		s	*1
Diptera	Hybotidae	Platypalpus obscurus (von Roser, 1840)	3		s	*1
Diptera	Hybotidae	Platypalpus ochrocerus (Collin, 1961)	3		mh	*1
Diptera	Hybotidae	Platypalpus optivus (Collin, 1926)	3		mh	*1
Diptera	Hybotidae	Platypalpus pallidicornis (Collin, 1926)	*		sh	*1
Diptera	Hybotidae	Platypalpus pallidicoxa (Frey, 1913)	2		s	*1
Diptera	Hybotidae	Platypalpus pallidiseta Kovalev, 1978	2		s	*1
Diptera	Hybotidae	Platypalpus pallidiventris (Meigen, 1822)	*		sh	*1
Diptera	Hybotidae	Platypalpus pallipes (Fallén, 1815)	*		mh	*1
Diptera	Hybotidae	Platypalpus parvicauda (Collin, 1926)	3		s	*1
Diptera	Hybotidae	Platypalpus pectoralis (Fallén, 1815)	*		sh	*1
Diptera	Hybotidae	Platypalpus pictitarsis (Becker, 1902)	3		mh	*1
Diptera	Hybotidae	Platypalpus politus (Collin, 1926)	3		s	*1
Diptera	Hybotidae	Platypalpus praecinctus (Collin, 1926)	2		s	*1
Diptera	Hybotidae	Platypalpus pragensis Chvála, 1989	1		ss	*1
Diptera	Hybotidae	Platypalpus pseudociliaris (Strobl, 1910)	3		s	*1
Diptera	Hybotidae	Platypalpus pseudofulvipes (Frey, 1909)	*		h	*1
Diptera	Hybotidae	Platypalpus pseudorapidus Kovalev, 1971	2		s	*1
Diptera	Hybotidae	Platypalpus pulicarius (Meigen, 1830)	*		h	*1
Diptera	Hybotidae	Platypalpus pygialis Chvála, 1973	3		mh	*1
Diptera	Hybotidae	Platypalpus rapidoides Chvála, 1975	3		mh	*1
Diptera	Hybotidae	Platypalpus rapidus (Meigen, 1822)	G		mh	*1
Diptera	Hybotidae	Platypalpus ruficornis (von Roser, 1840)	*		mh	*1
Diptera	Hybotidae	Platypalpus stabilis (Collin, 1961)	*		sh	*1
Diptera	Hybotidae	Platypalpus stackelbergi Kovalev, 1971	*		mh	*1
Diptera	Hybotidae	Platypalpus stigma (Collin, 1926)	3		mh	*1
Diptera	Hybotidae	Platypalpus stigmatelloides Grootaert & Chvála, 1988	1		ss	*1
Diptera	Hybotidae	Platypalpus stigmatellus (Zetterstedt, 1842)	3		s	*1
Diptera	Hybotidae	Platypalpus strigifrons (Zetterstedt, 1849)	3		mh	*1

Order	Family	Species	K	L	P	S
Diptera	Hybotidae	Platypalpus stroblii (Mik, 1900)	3		mh	*1
Diptera	Hybotidae	Platypalpus subbrevis (Frey, 1913)	2		s	*1
Diptera	Hybotidae	Platypalpus subnigrinus Chvála, 1975	1		ss	*1
Diptera	Hybotidae	Platypalpus subtilis (Collin, 1926)	3		mh	*1
Diptera	Hybotidae	Platypalpus tonsus (Collin, 1961)	2		s	*1
Diptera	Hybotidae	Platypalpus tuomikoskii Chvála, 1972	3		s	*1
Diptera	Hybotidae	Platypalpus unguiculatus (Zetterstedt, 1838)	2		s	*1
Diptera	Hybotidae	Platypalpus unicus (Collin, 1961)	3		s	*1
Diptera	Hybotidae	Platypalpus vegetus Frey, 1943	3		s	*1
Diptera	Hybotidae	Platypalpus vegrandis Frey, 1943	3		s	*1
Diptera	Hybotidae	Platypalpus verralli (Collin, 1926)	*		mh	*1
Diptera	Hybotidae	Platypalpus vividus (Meigen, 1838)	*		mh	*1
Diptera	Hybotidae	Stilpon graminum (Fallén, 1815)	*		h	*1
Diptera	Hybotidae	Stilpon lunatus (Walker, 1851)	3		s	*1
Diptera	Hybotidae	Stilpon nubilus Collin, 1926	*		sh	*1
Diptera	Hybotidae	Stilpon sublunatus Collin, 1961	2		s	*1
Diptera	Hybotidae	Symballophthalmus dissimilis (Fallén, 1815)	3		s	*1
Diptera	Hybotidae	Symballophthalmus fuscitarsis (Zetterstedt, 1859)	*		mh	*1
Diptera	Hybotidae	Symballophthalmus pictipes (Becker, 1889)	3		s	*1
Diptera	Hybotidae	Syndyas nigripes (Zetterstedt, 1842)	2		s	*1
Diptera	Hybotidae	Syneches muscarius (Fabricius, 1794)	2		s	*1
Diptera	Hybotidae	Tachydromia aemula (Loew, 1864)	*		sh	*1
Diptera	Hybotidae	Tachydromia annulimana Meigen, 1822	*		sh	*1
Diptera	Hybotidae	Tachydromia arrogans (Linnaeus, 1761)	*		sh	*1
Diptera	Hybotidae	Tachydromia calcanea (Meigen, 1838)	2		s	*1
Diptera	Hybotidae	Tachydromia caucasica Chvála, 1970	1		ss	*1
Diptera	Hybotidae	Tachydromia connexa Meigen, 1822	3		mh	*1
Diptera	Hybotidae	Tachydromia costalis (von Roser, 1840)	2		s	*1
Diptera	Hybotidae	Tachydromia edenensis Hewitt & Chvála, 2002	1		ss	*1
Diptera	Hybotidae	Tachydromia excisa (Loew, 1864)	0	1949	ex	*1
Diptera	Hybotidae	Tachydromia interrupta (Loew, 1864)	0	1949	ex	*1
Diptera	Hybotidae	Tachydromia lundstroemi (Frey, 1913)	1		ss	*1
Diptera	Hybotidae	Tachydromia microptera (Loew, 1864)	2		s	*1
Diptera	Hybotidae	Tachydromia morio (Zetterstedt, 1838)	3		s	*1
Diptera	Hybotidae	Tachydromia ornatipes (Becker, 1890)	1		ss	*1
Diptera	Hybotidae	Tachydromia productipes (Strobl, 1910)	0	1950	ex	*1
Diptera	Hybotidae	Tachydromia sabulosa Meigen, 1830	2		s	*1
Diptera	Hybotidae	Tachydromia schnitteri Stark, 1994	2		ss	*1
Diptera	Hybotidae	Tachydromia smithi Chvála, 1966	3		mh	*1
Diptera	Hybotidae	Tachydromia styriaca (Strobl, 1893)	0	1950	ex	*1
Diptera	Hybotidae	Tachydromia terricola Zetterstedt, 1819	*		mh	*1
Diptera	Hybotidae	Tachydromia tuberculata (Loew, 1864)	0	1876	ex	*1
Diptera	Hybotidae	Tachydromia umbrarum Haliday, 1833	*		mh	*1
Diptera	Hybotidae	Tachydromia woodi (Collin, 1926)	3		s	*1
Diptera	Hybotidae	Tachypeza fennica Tuomikoski, 1932	3		s	*1
Diptera	Hybotidae	Tachypeza fuscipennis (Fallén, 1815)	3		mh	*1
Diptera	Hybotidae	Tachypeza heeri Zetterstedt, 1838	3		s	*1
Diptera	Hybotidae	Tachypeza nubila (Meigen, 1804)	*		sh	*1
Diptera	Hybotidae	Tachypeza truncorum (Fallén, 1815)	3		s	*1
Diptera	Hybotidae	Trichina bilobata Collin, 1926	*		h	*1
Diptera	Hybotidae	Trichina clavipes Meigen, 1830	*		h	*1
Diptera	Hybotidae	Trichina elongata Haliday, 1833	*		h	*1
Diptera	Hybotidae	Trichina opaca Loew, 1864	3		s	*1
Diptera	Hybotidae	Trichina pallipes (Zetterstedt, 1838)	2		s	*1
Diptera	Hybotidae	Trichinomyia flavipes (Meigen, 1830)	*		h	*1
Diptera	Hybotidae	Trichinomyia fuscipes (Zetterstedt, 1838)	2		s	*1
Diptera	Microphoridae	Microphor anomalus (Meigen, 1824)	*		h	*1
Diptera	Microphoridae	Microphor crassipes (Macquart, 1827)	3		mh	*1
Diptera	Microphoridae	Microphor holosericeus (Meigen, 1804)	*		h	*1
Diptera	Microphoridae	Microphor intermedius (Collin, 1961)	3		s	*1
Diptera	Microphoridae	Microphorella praecox (Loew, 1864)	D		?	*1
Diptera	Psychodidae	Atrichobrunettia angustipennis (Tonnoir, 1920)	R		es	*1
Diptera	Psychodidae	Bazarella neglecta (Eaton, 1893)	*		ss	*1
Diptera	Psychodidae	Bazarella subneglecta (Tonnoir, 1922)	*		mh	*1
Diptera	Psychodidae	Berdeniella alemannica Wagner, 1983	*		s	*1
Diptera	Psychodidae	Berdeniella alpina Wagner, 1975	*		s	*1
Diptera	Psychodidae	Berdeniella freyi (Berdén, 1954)	*		s	*1
Diptera	Psychodidae	Berdeniella glacialis (Vaillant, 1958)	*		s	*1
Diptera	Psychodidae	Berdeniella globulifera Vaillant, 1976	G		s	*1
Diptera	Psychodidae	Berdeniella helvetica (Sarà, 1957)	*		mh	*1
Diptera	Psychodidae	Berdeniella illiesi (Wagner, 1973)	*		mh	*1
Diptera	Psychodidae	Berdeniella manicata (Tonnoir, 1919)	*		s	*1
Diptera	Psychodidae	Berdeniella matthesi (Jung, 1954)	G		ss	*1
Diptera	Psychodidae	Berdeniella nivalis Vaillant, 1976	D		ss	*1
Diptera	Psychodidae	Berdeniella stavniensis (Krek, 1969)	*		mh	*1
Diptera	Psychodidae	Berdeniella unispinosa (Tonnoir, 1919)	*		mh	*1
Diptera	Psychodidae	Clogmia albipunctata (Williston, 1893)	nb		nb	*1
Diptera	Psychodidae	Clytocerus ocellaris (Meigen, 1804)	*		h	*1
Diptera	Psychodidae	Clytocerus rivosus Tonnoir, 1919	*		s	*1
Diptera	Psychodidae	Clytocerus tetracorniculatus Wagner, 1977	*		ss	*1

Order	Family	Species	K	L	P	S
Diptera	Psychodidae	Feuerborniella obscura (Tonnoir, 1919)	*		mh	*1
Diptera	Psychodidae	Jungiella acuminata (Szabó, 1960)	D		s	*1
Diptera	Psychodidae	Jungiella consors (Eaton, 1893)	D		s	*1
Diptera	Psychodidae	Jungiella danica (Nielsen, 1964)	*		s	*1
Diptera	Psychodidae	Jungiella hassiaca Wagner, 1993	*		mh	*1
Diptera	Psychodidae	Jungiella interna (Nielsen, 1964)	D		s	*1
Diptera	Psychodidae	Jungiella longicornis (Tonnoir, 1919)	*		mh	*1
Diptera	Psychodidae	Jungiella pseudolongicornis Wagner, 1975	G		s	*1
Diptera	Psychodidae	Jungiella revelica Vaillant, 1972	D		s	*1
Diptera	Psychodidae	Jungiella soleata (Haliday in Walker, 1856)	*		mh	*1
Diptera	Psychodidae	Jungiella valachica (Vaillant, 1963)	D		s	*1
Diptera	Psychodidae	Lepimormia hemiborealis Salmela & Piirainen, 2005	D		ss	*1
Diptera	Psychodidae	Lobulosa pollex (Berdén, 1954)	G		s	*1
Diptera	Psychodidae	Mormia (Limomormia) caliginosa (Eaton, 1893)	D		s	*1
Diptera	Psychodidae	Mormia (Limomormia) caspersi Wagner, 1977	D		ss	*1
Diptera	Psychodidae	Mormia (Limomormia) furva (Tonnoir, 1940)	D		s	*1
Diptera	Psychodidae	Mormia (Limomormia) helvetica Vaillant, 1974	D		ss	*1
Diptera	Psychodidae	Mormia (Limomormia) pulcherrima Wagner, 1979	D		s	*1
Diptera	Psychodidae	Mormia (Mormia) andrenipes (Strobl, 1910)	D		ss	*1
Diptera	Psychodidae	Mormia (Mormia) eatoni (Tonnoir, 1940)	D		s	*1
Diptera	Psychodidae	Mormia (Mormia) incerta (Eaton, 1893)	D		s	*1
Diptera	Psychodidae	Mormia (Mormia) nigripennis Krek, 1971	D		s	*1
Diptera	Psychodidae	Mormia (Mormia) revisenda (Eaton, 1893)	D		s	*1
Diptera	Psychodidae	Mormia (Mormia) satchelli (Jung, 1963)	D		ss	*1
Diptera	Psychodidae	Mormia (Mormia) vaillanti Wagner, 1977	D		ss	*1
Diptera	Psychodidae	Mormia apicealba (Tonnoir, 1922)	D		s	*1
Diptera	Psychodidae	Mormia cornuta (Tonnoir, 1919)	D		s	*1
Diptera	Psychodidae	Mormia palposa (Tonnoir, 1919)	D		ss	*1
Diptera	Psychodidae	Panimerus albifacies (Tonnoir, 1919)	*		mh	*1
Diptera	Psychodidae	Panimerus denticulatus Krek, 1972	D		s	*1
Diptera	Psychodidae	Panimerus intellegus (Jung, 1956)	V		s	*1
Diptera	Psychodidae	Panimerus maynei (Tonnoir, 1920)	V		s	*1
Diptera	Psychodidae	Panimerus notabilis (Eaton, 1893)	D		mh	*1
Diptera	Psychodidae	Paramormia fratercula (Eaton, 1893)	D		mh	*1
Diptera	Psychodidae	Paramormia polyascoidea (Krek, 1970)	*		h	*1
Diptera	Psychodidae	Paramormia ustulata (Haliday in Walker, 1856)	*		h	*1
Diptera	Psychodidae	Paramormia watermaelica (Vaillant, 1972)	D		s	*1
Diptera	Psychodidae	Pericoma (Pachypericoma) blandula Eaton, 1893	*		sh	*1
Diptera	Psychodidae	Pericoma (Pachypericoma) fallax Eaton, 1893	*		h	*1
Diptera	Psychodidae	Pericoma (Pachypericoma) rivularis Berdén, 1954	V		s	*1
Diptera	Psychodidae	Pericoma (Pericoma) alticola Vaillant, 1955	*		s	*1
Diptera	Psychodidae	Pericoma (Pericoma) calcilega Feuerborn, 1923	*		mh	*1
Diptera	Psychodidae	Pericoma (Pericoma) diversa Tonnoir, 1919	*		mh	*1
Diptera	Psychodidae	Pericoma (Pericoma) exquisita Eaton, 1893	*		h	*1
Diptera	Psychodidae	Pericoma (Pericoma) pseudoexquisita Tonnoir, 1940	*		h	*1
Diptera	Psychodidae	Pericoma (Pericoma) tonnoiri Vaillant, 1978	D		s	*1
Diptera	Psychodidae	Pericoma (Pericoma) trifasciata (Meigen, 1804)	*		mh	*1
Diptera	Psychodidae	Peripsychoda auriculata (Haliday in Curtis, 1839)	*		mh	*1
Diptera	Psychodidae	Peripsychoda fusca (Macquart, 1826)	V		s	*1
Diptera	Psychodidae	Philosepedon austriaca Vaillant, 1974	*		s	*1
Diptera	Psychodidae	Philosepedon balkanica Krek, 1970	D		s	*1
Diptera	Psychodidae	Philosepedon humeralis (Meigen, 1818)	*		sh	*1
Diptera	Psychodidae	Philosepedon soljani Krek, 1971	D		s	*1
Diptera	Psychodidae	Phyllotelmatoscopus calcifer Vaillant, 1982	D		s	*1
Diptera	Psychodidae	Phyllotelmatoscopus decipiens (Eaton, 1893)	G		s	*1
Diptera	Psychodidae	Phyllotelmatoscopus longipennis (Krek, 1972)	G		s	*1
Diptera	Psychodidae	Psychoda albipennis Zetterstedt, 1850	nb		nb	*1
Diptera	Psychodidae	Psychoda alticola Vaillant, 1973	nb		nb	*1
Diptera	Psychodidae	Psychoda armillariphila Vaillant, 1988	nb		nb	*1
Diptera	Psychodidae	Psychoda brevicornis Tonnoir, 1940	nb		nb	*1
Diptera	Psychodidae	Psychoda cinerea Banks, 1894	nb		nb	*1
Diptera	Psychodidae	Psychoda crassipenis Tonnoir, 1940	nb		nb	*1
Diptera	Psychodidae	Psychoda erminea Eaton, 1893	nb		nb	*1
Diptera	Psychodidae	Psychoda gemina (Eaton, 1904)	nb		nb	*1
Diptera	Psychodidae	Psychoda grisescens Tonnoir, 1922	nb		nb	*1
Diptera	Psychodidae	Psychoda lobata Tonnoir, 1940	nb		nb	*1
Diptera	Psychodidae	Psychoda minuta Banks, 1894	nb		nb	*1
Diptera	Psychodidae	Psychoda parthenogenetica Tonnoir, 1940	nb		nb	*1
Diptera	Psychodidae	Psychoda phalaenoides (Linnaeus, 1758)	nb		nb	*1
Diptera	Psychodidae	Psychoda pusilla Tonnoir, 1922	nb		nb	*1
Diptera	Psychodidae	Psychoda satchelli Quate, 1955	nb		nb	*1
Diptera	Psychodidae	Psychoda setigera Tonnoir, 1922	nb		nb	*1
Diptera	Psychodidae	Psychoda trinodulosa Tonnoir, 1922	nb		nb	*1
Diptera	Psychodidae	Psychoda zetterstedti Ježek, 1983	nb		nb	*1
Diptera	Psychodidae	Saraiella auberti (Sarà, 1954)	*		mh	*1
Diptera	Psychodidae	Saraiella clastrieri (Vaillant, 1963)	*		s	*1
Diptera	Psychodidae	Saraiella onerata (Vaillant, 1957)	D		s	*1
Diptera	Psychodidae	Saraiella parva (Vaillant, 1963)	*		s	*1
Diptera	Psychodidae	Saraiella squamigera (Tonnoir, 1922)	G		ss	*1
Diptera	Psychodidae	Satchelliella canescens (Meigen, 1804)	*		mh	*1

Order	Family	Species	K	L	P	S
Diptera	Psychodidae	Satchelliella compta (Eaton, 1893)	V		s	*1
Diptera	Psychodidae	Satchelliella crispi (Freeman, 1953)	D		ss	*1
Diptera	Psychodidae	Satchelliella cubitospinosa (Jung, 1954)	*		s	*1
Diptera	Psychodidae	Satchelliella delphiniensis (Georges, 1964)	*		s	*1
Diptera	Psychodidae	Satchelliella extricata (Eaton, 1893)	D		ss	*1
Diptera	Psychodidae	Satchelliella fonticola (Szabó, 1960)	D		ss	*1
Diptera	Psychodidae	Satchelliella gracilis (Eaton, 1893)	D		s	*1
Diptera	Psychodidae	Satchelliella hirticornis (Tonnoir, 1922)	D		s	*1
Diptera	Psychodidae	Satchelliella mutua (Eaton, 1893)	*		h	*1
Diptera	Psychodidae	Satchelliella nubila (Meigen, 1818)	*		sh	*1
Diptera	Psychodidae	Satchelliella palustris (Meigen, 1804)	*		h	*1
Diptera	Psychodidae	Satchelliella pilularia (Tonnoir, 1940)	V		s	*1
Diptera	Psychodidae	Satchelliella plumicornis (Tonnoir, 1922)	*		s	*1
Diptera	Psychodidae	Satchelliella stammeri (Jung, 1954)	*		mh	*1
Diptera	Psychodidae	Satchelliella trivialis (Eaton, 1893)	*		sh	*1
Diptera	Psychodidae	Sycorax bicornua Krek, 1970	G		ss	*1
Diptera	Psychodidae	Sycorax feuerborni Jung, 1954	G		ss	*1
Diptera	Psychodidae	Sycorax silacea Haliday in Curtis, 1839	V		s	*1
Diptera	Psychodidae	Sycorax similis (Müller, 1927)	D		s	*1
Diptera	Psychodidae	Sycorax tonnoiri Jung, 1954	V		s	*1
Diptera	Psychodidae	Szaboiella hibernica (Tonnoir, 1940)	D		s	*1
Diptera	Psychodidae	Telmatoscopus ambiguus (Eaton, 1893)	G		s	*1
Diptera	Psychodidae	Telmatoscopus britteni Tonnoir, 1940	*		s	*1
Diptera	Psychodidae	Telmatoscopus carthusianus (Vaillant, 1972)	D		s	*1
Diptera	Psychodidae	Telmatoscopus ellisi Withers, 1987	D		ss	*1
Diptera	Psychodidae	Telmatoscopus falcariformis (Wagner, 1977)	D		s	*1
Diptera	Psychodidae	Telmatoscopus gressicus (Vaillant, 1972)	D		ss	*1
Diptera	Psychodidae	Telmatoscopus havelkai (Wagner, 1975)	3		s	*1
Diptera	Psychodidae	Telmatoscopus incanus Nielsen, 1964	D		s	*1
Diptera	Psychodidae	Telmatoscopus morulus (Eaton, 1893)	G		mh	*1
Diptera	Psychodidae	Telmatoscopus mucronatus (Vaillant, 1972)	G		s	*1
Diptera	Psychodidae	Telmatoscopus rothschildii (Eaton, 1912)	G		ss	*1
Diptera	Psychodidae	Telmatoscopus schlitzensis (Wagner, 1975)	V		s	*1
Diptera	Psychodidae	Telmatoscopus similis Tonnoir, 1922	G		s	*1
Diptera	Psychodidae	Telmatoscopus thuringicus Beran et al., 2010	D		ss	*1
Diptera	Psychodidae	Telmatoscopus tristis (Meigen, 1830)	D		ss	*1
Diptera	Psychodidae	Threticus balkaneoalpinus Krek, 1971	D		ss	*1
Diptera	Psychodidae	Threticus incurvus Krek, 1972	D		ss	*1
Diptera	Psychodidae	Threticus lucifugus (Haliday in Walker, 1856)	*		mh	*1
Diptera	Psychodidae	Tinearia alternata (Say, 1824)	nb		nb	*1
Diptera	Psychodidae	Tinearia lativentris (Berdén, 1952)	nb		nb	*1
Diptera	Psychodidae	Tonnoiriella holmi Wagner, 1993	D		ss	*1
Diptera	Psychodidae	Tonnoiriella nigricauda (Tonnoir, 1919)	D		s	*1
Diptera	Psychodidae	Tonnoiriella pulchra (Eaton, 1893)	*		mh	*1
Diptera	Psychodidae	Trichomyia parvula Szabó, 1960	D		ss	*1
Diptera	Psychodidae	Trichomyia stephani Beran et al., 2010	D		ss	*1
Diptera	Psychodidae	Trichomyia urbica Haliday in Curtis, 1839	V		s	*1
Diptera	Psychodidae	Trichopsychoda hirtella (Tonnoir, 1919)	*		mh	*1
Diptera	Psychodidae	Ulomyia annulata (Tonnoir, 1919)	D		s	*1
Diptera	Psychodidae	Ulomyia cognata (Eaton, 1893)	*		mh	*1
Diptera	Psychodidae	Ulomyia fuliginosa (Meigen, 1804)	*		sh	*1
Diptera	Psychodidae	Ulomyia hirta (Szabó, 1960)	D		s	*1
Diptera	Psychodidae	Ulomyia montium Vaillant, 1983	D		s	*1
Diptera	Psychodidae	Ulomyia szaboi Vaillant, 1983	D		ss	*1
Diptera	Psychodidae	Ulomyia undulata (Tonnoir, 1919)	D		s	*1
Diptera	Syrphidae	Anasimyia contracta Claussen & Torp, 1980	3		s	*1
Diptera	Syrphidae	Anasimyia interpuncta (Harris, [1776])	V		mh	*1
Diptera	Syrphidae	Anasimyia lineata (Fabricius, 1787)	*		mh	*1
Diptera	Syrphidae	Anasimyia lunulata (Meigen, 1822)	1		es	*1
Diptera	Syrphidae	Anasimyia transfuga (Linnaeus, 1758)	2		s	*1
Diptera	Syrphidae	Arctophila bombiformis (Fallén, 1810)	V		s	*1
Diptera	Syrphidae	Arctophila superbiens (Müller, 1776)	3		mh	*1
Diptera	Syrphidae	Baccha elongata (Fabricius, 1775)	*		h	*1
Diptera	Syrphidae	Baccha obscuripennis Meigen, 1822	D		?	*1
Diptera	Syrphidae	Blera fallax (Linnaeus, 1758)	*		mh	*1
Diptera	Syrphidae	Brachymyia berberina (Fabricius, 1805)	*		h	*1
Diptera	Syrphidae	Brachymyia floccosa (Meigen, 1822)	G		s	*1
Diptera	Syrphidae	Brachyopa bicolor (Fallén, 1817)	3		s	*1
Diptera	Syrphidae	Brachyopa bimaculosa Doczkal & Dziock, 2004	D		?	*1
Diptera	Syrphidae	Brachyopa dorsata Zetterstedt, 1837	*		s	*1
Diptera	Syrphidae	Brachyopa grunewaldensis Kassebeer, 2000	2		ss	*1
Diptera	Syrphidae	Brachyopa insensilis Collin, 1939	*		s	*1
Diptera	Syrphidae	Brachyopa maculipennis Thompson, 1980	1		es	*1
Diptera	Syrphidae	Brachyopa obscura Thompson & Torp, 1982	R		es	*1
Diptera	Syrphidae	Brachyopa panzeri Goffe, 1945	*		s	*1
Diptera	Syrphidae	Brachyopa pilosa Collin, 1939	*		mh	*1
Diptera	Syrphidae	Brachyopa plena Collin, 1939	D		?	*1
Diptera	Syrphidae	Brachyopa scutellaris Robineau-Desvoidy, 1844	V		s	*1
Diptera	Syrphidae	Brachyopa silviae Doczkal & Dziock, 2004	D		?	*1
Diptera	Syrphidae	Brachyopa testacea (Fallén, 1817)	*		mh	*1

Order	Family	Species	K	L	P	S
Diptera	Syrphidae	Brachyopa vittata Zetterstedt, 1843	*		mh	*1
Diptera	Syrphidae	Brachypalpoides lentus (Meigen, 1822)	*		mh	*1
Diptera	Syrphidae	Brachypalpus chrysites Egger, 1859	3		s	*1
Diptera	Syrphidae	Brachypalpus laphriformis (Fallén, 1816)	*		mh	*1
Diptera	Syrphidae	Brachypalpus valgus (Panzer, [1798])	*		mh	*1
Diptera	Syrphidae	Caliprobola speciosa (Rossi, 1790)	*		mh	*1
Diptera	Syrphidae	Callicera aenea (Fabricius, 1777)	3		s	*1
Diptera	Syrphidae	Callicera aurata (Rossi, 1790)	1		es	*1
Diptera	Syrphidae	Callicera fagesii Guérin-Méneville, 1844	2		es	*1
Diptera	Syrphidae	Callicera macquartii Rondani, 1844	1		es	*1
Diptera	Syrphidae	Callicera rufa Schummel, 1842	2		ss	*1
Diptera	Syrphidae	Callicera spinolae Rondani, 1844	1		es	*1
Diptera	Syrphidae	Ceriana conopsoides (Linnaeus, 1758)	2		ss	*1
Diptera	Syrphidae	Chalcosyrphus eunotus (Loew, 1873)	2		ss	*1
Diptera	Syrphidae	Chalcosyrphus femoratus (Linnaeus, 1758)	3		s	*1
Diptera	Syrphidae	Chalcosyrphus nemorum (Fabricius, 1805)	*		mh	*1
Diptera	Syrphidae	Chalcosyrphus piger (Fabricius, 1794)	2		ss	*1
Diptera	Syrphidae	Chalcosyrphus valgus (Gmelin, 1790)	3		s	*1
Diptera	Syrphidae	Chamaesyrphus caledonicus Collin, 1940	1		es	*1
Diptera	Syrphidae	Chamaesyrphus lusitanicus Mik, 1898	1		ss	*1
Diptera	Syrphidae	Chamaesyrphus scaevoides (Fallén, 1817)	2		ss	*1
Diptera	Syrphidae	Cheilosia aerea Dufour, 1848	G		s	*1
Diptera	Syrphidae	Cheilosia ahenea (von Roser, 1840)	3		s	*1
Diptera	Syrphidae	Cheilosia alba Vujić & Claussen, 2000	D		?	*1
Diptera	Syrphidae	Cheilosia albipila Meigen, 1838	*		mh	*1
Diptera	Syrphidae	Cheilosia albitarsis (Meigen, 1822)	*		sh	*1
Diptera	Syrphidae	Cheilosia antiqua (Meigen, 1822)	V		mh	*1
Diptera	Syrphidae	Cheilosia barbata Loew, 1857	*		h	*1
Diptera	Syrphidae	Cheilosia bergenstammi Becker, 1894	*		mh	*1
Diptera	Syrphidae	Cheilosia brachysoma Egger, 1860	1		es	*1
Diptera	Syrphidae	Cheilosia bracusi Vujić & Claussen, 1994	D		?	*1
Diptera	Syrphidae	Cheilosia caerulescens (Meigen, 1822)	*		s	*1
Diptera	Syrphidae	Cheilosia canicularis (Panzer, [1801])	*		h	*1
Diptera	Syrphidae	Cheilosia carbonaria Egger, 1860	*		mh	*1
Diptera	Syrphidae	Cheilosia chlorus (Meigen, 1822)	*		mh	*1
Diptera	Syrphidae	Cheilosia chrysocoma (Meigen, 1822)	*		mh	*1
Diptera	Syrphidae	Cheilosia clama Claussen & Vujić, 1995	D		ss	*1
Diptera	Syrphidae	Cheilosia crassiseta Loew, 1859	*		ss	*1
Diptera	Syrphidae	Cheilosia cynocephala Loew, 1840	D		?	*1
Diptera	Syrphidae	Cheilosia derasa Loew, 1857	*		ss	*1
Diptera	Syrphidae	Cheilosia fasciata Schiner & Egger, 1853	*		mh	*1
Diptera	Syrphidae	Cheilosia faucis Becker, 1894	*		ss	*1
Diptera	Syrphidae	Cheilosia flavipes (Panzer, [1798])	*		mh	*1
Diptera	Syrphidae	Cheilosia fraterna (Meigen, 1830)	*		mh	*1
Diptera	Syrphidae	Cheilosia frontalis Loew, 1857	*		s	*1
Diptera	Syrphidae	Cheilosia gagatea Loew, 1857	R		es	*1
Diptera	Syrphidae	Cheilosia gigantea (Zetterstedt, 1838)	*		s	*1
Diptera	Syrphidae	Cheilosia griseifacies Vujić, 1994	1		es	*1
Diptera	Syrphidae	Cheilosia grisella Becker, 1894	3		s	*1
Diptera	Syrphidae	Cheilosia grossa (Fallén, 1817)	*		mh	*1
Diptera	Syrphidae	Cheilosia hercyniae Loew, 1857	R		es	*1
Diptera	Syrphidae	Cheilosia himantopus (Panzer, [1798])	*		mh	*1
Diptera	Syrphidae	Cheilosia illustrata (Harris, [1780])	*		h	*1
Diptera	Syrphidae	Cheilosia impressa Loew in Schiner, 1857	*		h	*1
Diptera	Syrphidae	Cheilosia impudens Becker, 1894	3		s	*1
Diptera	Syrphidae	Cheilosia insignis Loew, 1857	R		es	*1
Diptera	Syrphidae	Cheilosia laeviseta Claussen, 1987	R		es	*1
Diptera	Syrphidae	Cheilosia laeviventris Loew, 1857	R		es	*1
Diptera	Syrphidae	Cheilosia lasiopa Kowarz, 1885	*		s	*1
Diptera	Syrphidae	Cheilosia laticornis Rondani, 1857	2		ss	*1
Diptera	Syrphidae	Cheilosia latifrons (Zetterstedt, 1843)	*		mh	*1
Diptera	Syrphidae	Cheilosia lenis Becker, 1894	*		mh	*1
Diptera	Syrphidae	Cheilosia loewi Becker, 1894	1		es	*1
Diptera	Syrphidae	Cheilosia longula (Zetterstedt, 1838)	V		s	*1
Diptera	Syrphidae	Cheilosia melanopa (Zetterstedt, 1838)	*		ss	*1
Diptera	Syrphidae	Cheilosia melanura Becker, 1894	*		s	*1
Diptera	Syrphidae	Cheilosia montana Egger, 1860	*		ss	*1
Diptera	Syrphidae	Cheilosia morio (Zetterstedt, 1838)	*		s	*1
Diptera	Syrphidae	Cheilosia mutabilis (Fallén, 1817)	G		mh	*1
Diptera	Syrphidae	Cheilosia nebulosa Verrall, 1871	3		s	*1
Diptera	Syrphidae	Cheilosia nigripes (Meigen, 1822)	*		mh	*1
Diptera	Syrphidae	Cheilosia nivalis Becker, 1894	*		ss	*1
Diptera	Syrphidae	Cheilosia orthotricha Vujić & Claussen, 1994	V		s	*1
Diptera	Syrphidae	Cheilosia pagana (Meigen, 1822)	*		sh	*1
Diptera	Syrphidae	Cheilosia pascuorum Becker, 1894	2		ss	*1
Diptera	Syrphidae	Cheilosia pedemontana Rondani, 1857	*		ss	*1
Diptera	Syrphidae	Cheilosia personata Loew, 1857	3		s	*1
Diptera	Syrphidae	Cheilosia pictipennis Egger, 1860	R		es	*1
Diptera	Syrphidae	Cheilosia pilifer Becker, 1894	R		es	*1
Diptera	Syrphidae	Cheilosia pini Becker, 1894	1		es	*1

Order	Family	Species	K	L	P	S
Diptera	Syrphidae	Cheilosia proxima (Zetterstedt, 1843)	*		h	*1
Diptera	Syrphidae	Cheilosia psilophthalma Becker, 1894	V		s	*1
Diptera	Syrphidae	Cheilosia pubera (Zetterstedt, 1838)	3		s	*1
Diptera	Syrphidae	Cheilosia ranunculi Doczkal, 2000	V		s	*1
Diptera	Syrphidae	Cheilosia rhynchops Egger, 1860	*		s	*1
Diptera	Syrphidae	Cheilosia rufimana Becker, 1894	3		s	*1
Diptera	Syrphidae	Cheilosia sahlbergi Becker, 1894	*		ss	*1
Diptera	Syrphidae	Cheilosia scanica Ringdahl, 1937	*		s	*1
Diptera	Syrphidae	Cheilosia scutellata (Fallén, 1817)	*		mh	*1
Diptera	Syrphidae	Cheilosia semifasciata Becker, 1894	*		s	*1
Diptera	Syrphidae	Cheilosia soror (Zetterstedt, 1843)	*		mh	*1
Diptera	Syrphidae	Cheilosia subpictipennis Claussen, 1998	3		s	*1
Diptera	Syrphidae	Cheilosia urbana (Meigen, 1822)	*		mh	*1
Diptera	Syrphidae	Cheilosia uviformis Becker, 1894	D		s	*1
Diptera	Syrphidae	Cheilosia variabilis (Panzer, [1798])	*		h	*1
Diptera	Syrphidae	Cheilosia velutina Loew, 1840	*		mh	*1
Diptera	Syrphidae	Cheilosia venosa Loew, 1857	R		es	*1
Diptera	Syrphidae	Cheilosia vernalis (Fallén, 1817) agg.	*		h	*1
Diptera	Syrphidae	Cheilosia vicina (Zetterstedt, 1849)	*		mh	*1
Diptera	Syrphidae	Cheilosia vulpina (Meigen, 1822)	*		mh	*1
Diptera	Syrphidae	Chrysogaster basalis Loew, 1857	3		s	*1
Diptera	Syrphidae	Chrysogaster cemiteriorum (Linnaeus, 1758)	3		s	*1
Diptera	Syrphidae	Chrysogaster rondanii Maibach & G. de Tiefenau, 1995	G		ss	*1
Diptera	Syrphidae	Chrysogaster solstitialis (Fallén, 1817)	*		h	*1
Diptera	Syrphidae	Chrysogaster virescens Loew, 1854	G		s	*1
Diptera	Syrphidae	Chrysotoxum arcuatum (Linnaeus, 1758)	*		mh	*1
Diptera	Syrphidae	Chrysotoxum bicinctum (Linnaeus, 1758)	*		h	*1
Diptera	Syrphidae	Chrysotoxum cautum (Harris, [1776])	*		h	*1
Diptera	Syrphidae	Chrysotoxum elegans Loew, 1841	1		ss	*1
Diptera	Syrphidae	Chrysotoxum fasciolatum (De Geer, 1776)	V		s	*1
Diptera	Syrphidae	Chrysotoxum festivum (Linnaeus, 1758)	*		mh	*1
Diptera	Syrphidae	Chrysotoxum intermedium Meigen, 1822	*		s	*1
Diptera	Syrphidae	Chrysotoxum lineare (Zetterstedt, 1819)	1		es	*1
Diptera	Syrphidae	Chrysotoxum octomaculatum Curtis, 1837	1		es	*1
Diptera	Syrphidae	Chrysotoxum vernale Loew, 1841	*		mh	*1
Diptera	Syrphidae	Chrysotoxum verralli Collin, 1940	*		mh	*1
Diptera	Syrphidae	Criorhina asilica (Fallén, 1816)	*		s	*1
Diptera	Syrphidae	Criorhina pachymera Egger, 1858	1		ss	*1
Diptera	Syrphidae	Criorhina ranunculi (Panzer, 1804)	*		s	*1
Diptera	Syrphidae	Dasysyrphus albostriatus (Fallén, 1817)	*		h	*1
Diptera	Syrphidae	Dasysyrphus friuliensis (van der Goot, 1960)	*		s	*1
Diptera	Syrphidae	Dasysyrphus hilaris (Zetterstedt, 1843)	*		mh	*1
Diptera	Syrphidae	Dasysyrphus lenensis Bagatshanova, 1980	*		mh	*1
Diptera	Syrphidae	Dasysyrphus pauxillus (Williston, 1887)	*		s	*1
Diptera	Syrphidae	Dasysyrphus pinastri (De Geer, 1776)	*		h	*1
Diptera	Syrphidae	Dasysyrphus postclaviger (Stys & Moucha, 1962)	D		?	*1
Diptera	Syrphidae	Dasysyrphus tricinctus (Fallén, 1817)	*		h	*1
Diptera	Syrphidae	Dasysyrphus venustus (Meigen, 1822)	*		h	*1
Diptera	Syrphidae	Didea alneti (Fallén, 1817)	V		s	*1
Diptera	Syrphidae	Didea fasciata Macquart, 1834	*		mh	*1
Diptera	Syrphidae	Didea intermedia Loew, 1854	*		s	*1
Diptera	Syrphidae	Doros profuges (Harris, [1780])	2		ss	*1
Diptera	Syrphidae	Epistrophe cryptica Doczkal & Schmid, 1994	*		ss	*1
Diptera	Syrphidae	Epistrophe diaphana (Zetterstedt, 1843)	*		s	*1
Diptera	Syrphidae	Epistrophe eligans (Harris, [1780])	*		h	*1
Diptera	Syrphidae	Epistrophe flava Doczkal & Schmid, 1994	*		mh	*1
Diptera	Syrphidae	Epistrophe grossulariae (Meigen, 1822)	*		mh	*1
Diptera	Syrphidae	Epistrophe leiophthalma (Schiner & Egger, 1853)	R		es	*1
Diptera	Syrphidae	Epistrophe melanostoma (Zetterstedt, 1843)	*		mh	*1
Diptera	Syrphidae	Epistrophe nitidicollis (Meigen, 1822)	*		h	*1
Diptera	Syrphidae	Epistrophe obscuripes (Strobl, 1910)	D		ss	*1
Diptera	Syrphidae	Epistrophe ochrostoma (Zetterstedt, 1849)	D		ss	*1
Diptera	Syrphidae	Epistrophe olgae Mutin, 1993	D		?	*1
Diptera	Syrphidae	Epistrophella euchroma (Kowarz, 1885)	*		s	*1
Diptera	Syrphidae	Episyrphus balteatus (De Geer, 1776)	*		sh	*1
Diptera	Syrphidae	Eriozona syrphoides (Fallén, 1817)	*		s	*1
Diptera	Syrphidae	Eristalinus aeneus (Scopoli, 1763)	*		s	*1
Diptera	Syrphidae	Eristalinus sepulchralis (Linnaeus, 1758)	*		mh	*1
Diptera	Syrphidae	Eristalis abusiva Collin, 1931	G		mh	*1
Diptera	Syrphidae	Eristalis alpina (Panzer, [1798])	3		s	*1
Diptera	Syrphidae	Eristalis anthophorina (Fallén, 1817)	1		es	*1
Diptera	Syrphidae	Eristalis arbustorum (Linnaeus, 1758)	*		sh	*1
Diptera	Syrphidae	Eristalis cryptarum (Fabricius, 1794)	1		es	*1
Diptera	Syrphidae	Eristalis horticola (De Geer, 1776)	*		h	*1
Diptera	Syrphidae	Eristalis intricaria (Linnaeus, 1758)	*		mh	*1
Diptera	Syrphidae	Eristalis jugorum Egger, 1858	*		mh	*1
Diptera	Syrphidae	Eristalis nemorum (Linnaeus, 1758)	*		sh	*1
Diptera	Syrphidae	Eristalis oestracea (Linnaeus, 1758)	1		es	*1
Diptera	Syrphidae	Eristalis pertinax (Scopoli, 1763)	*		sh	*1
Diptera	Syrphidae	Eristalis picea (Fallén, 1817)	*		mh	*1

Order	Family	Species	K	L	P	S
Diptera	Syrphidae	Eristalis pseudorupium Kanervo, 1938	2		s	*1
Diptera	Syrphidae	Eristalis rupium Fabricius, 1805	*		mh	*1
Diptera	Syrphidae	Eristalis similis (Fallén, 1817)	*		mh	*1
Diptera	Syrphidae	Eristalis tenax (Linnaeus, 1758)	*		sh	*1
Diptera	Syrphidae	Eumerus amoenus Loew, 1848	1		es	*1
Diptera	Syrphidae	Eumerus clavatus Becker, 1921	1		es	*1
Diptera	Syrphidae	Eumerus flavitarsis Zetterstedt, 1843	*		s	*1
Diptera	Syrphidae	Eumerus grandis Meigen, 1822	0	1938	ex	*1
Diptera	Syrphidae	Eumerus longicornis Loew, 1855	1		ss	*1
Diptera	Syrphidae	Eumerus ornatus Meigen, 1822	*		s	*1
Diptera	Syrphidae	Eumerus ovatus Loew, 1848	1		ss	*1
Diptera	Syrphidae	Eumerus ruficornis Meigen, 1822	1		es	*1
Diptera	Syrphidae	Eumerus sabulonum (Fallén, 1817)	2		ss	*1
Diptera	Syrphidae	Eumerus sinuatus Loew, 1855	1		es	*1
Diptera	Syrphidae	Eumerus sogdianus Stackelberg, 1952	D		ss	*1
Diptera	Syrphidae	Eumerus strigatus (Fallén, 1817)	*		mh	*1
Diptera	Syrphidae	Eumerus tarsalis Loew, 1848	2		ss	*1
Diptera	Syrphidae	Eumerus tricolor (Fabricius, 1798)	3		s	*1
Diptera	Syrphidae	Eumerus tuberculatus Rondani, 1857	*		mh	*1
Diptera	Syrphidae	Eumerus uncipes Rondani, 1850	0	1925	ex	*1
Diptera	Syrphidae	Eupeodes bucculatus (Rondani, 1857)	*		s	*1
Diptera	Syrphidae	Eupeodes corollae (Fabricius, 1794)	*		sh	*1
Diptera	Syrphidae	Eupeodes goeldlini Mazánek, Láska & Bičík 1999	D		?	*1
Diptera	Syrphidae	Eupeodes latifasciatus (Macquart, 1829)	*		h	*1
Diptera	Syrphidae	Eupeodes lundbecki (Soot-Ryen, 1946)	G		ss	*1
Diptera	Syrphidae	Eupeodes luniger (Meigen, 1822)	*		h	*1
Diptera	Syrphidae	Eupeodes nielseni (Dušek & Láska, 1976)	*		s	*1
Diptera	Syrphidae	Eupeodes nitens (Zetterstedt, 1843)	*		mh	*1
Diptera	Syrphidae	Fagisyrphus cinctus (Fallén, 1817)	*		mh	*1
Diptera	Syrphidae	Ferdinandea cuprea (Scopoli, 1763)	*		mh	*1
Diptera	Syrphidae	Ferdinandea ruficornis (Fabricius, 1775)	3		s	*1
Diptera	Syrphidae	Hammerschmidtia ferruginea (Fallén, 1817)	1		es	*1
Diptera	Syrphidae	Helophilus affinis Wahlberg, 1844	*		s	*1
Diptera	Syrphidae	Helophilus hybridus Loew, 1846	*		mh	*1
Diptera	Syrphidae	Helophilus pendulus (Linnaeus, 1758)	*		sh	*1
Diptera	Syrphidae	Helophilus trivittatus (Fabricius, 1805)	*		sh	*1
Diptera	Syrphidae	Heringia brevidens (Egger, 1865)	G		s	*1
Diptera	Syrphidae	Heringia heringi (Zetterstedt, 1843)	*		s	*1
Diptera	Syrphidae	Heringia larusi Vujić, 1999	D		?	*1
Diptera	Syrphidae	Heringia latitarsis (Egger, 1865)	*		s	*1
Diptera	Syrphidae	Heringia pubescens (Delucchi & Pschorn-Walcher, 1955)	*		h	*1
Diptera	Syrphidae	Heringia senilis Sack, 1938	D		?	*1
Diptera	Syrphidae	Heringia verrucula (Collin, 1931)	R		es	*1
Diptera	Syrphidae	Heringia vitripennis (Meigen, 1822)	*		mh	*1
Diptera	Syrphidae	Ischyrosyrphus glaucius (Linnaeus, 1758)	V		mh	*1
Diptera	Syrphidae	Ischyrosyrphus laternarius (Müller, 1776)	V		mh	*1
Diptera	Syrphidae	Lapposyrphus lapponicus (Zetterstedt, 1838)	*		h	*1
Diptera	Syrphidae	Lejogaster metallina (Fabricius, 1777)	V		mh	*1
Diptera	Syrphidae	Lejogaster tarsata (Megerle in Meigen, 1822)	2		ss	*1
Diptera	Syrphidae	Lejops vittatus (Meigen, 1822)	1		es	*1
Diptera	Syrphidae	Lejota ruficornis (Zetterstedt, 1843)	2		es	*1
Diptera	Syrphidae	Leucozona inopinata Doczkal, 2000	*		mh	*1
Diptera	Syrphidae	Leucozona lucorum (Linnaeus, 1758)	*		h	*1
Diptera	Syrphidae	Mallota cimbiciformis (Fallén, 1817)	2		ss	*1
Diptera	Syrphidae	Mallota fuciformis (Fabricius, 1794)	3		s	*1
Diptera	Syrphidae	Mallota megilliformis (Fallén, 1817)	0	1890	ex	*1
Diptera	Syrphidae	Megasyrphus erraticus (Linnaeus, 1758)	*		mh	*1
Diptera	Syrphidae	Melangyna arctica (Zetterstedt, 1838)	R		es	*1
Diptera	Syrphidae	Melangyna barbifrons (Fallén, 1817)	*		s	*1
Diptera	Syrphidae	Melangyna compositarum (Verrall, 1873)	*		s	*1
Diptera	Syrphidae	Melangyna ericarum (Collin, 1946)	1		es	*1
Diptera	Syrphidae	Melangyna labiatarum (Verrall, 1901)	*		s	*1
Diptera	Syrphidae	Melangyna lasiophthalma (Zetterstedt, 1843)	*		mh	*1
Diptera	Syrphidae	Melangyna lucifera Nielsen, 1980	*		ss	*1
Diptera	Syrphidae	Melangyna quadrimaculata (Verrall, 1873)	*		mh	*1
Diptera	Syrphidae	Melangyna umbellatarum (Fabricius, 1794)	*		mh	*1
Diptera	Syrphidae	Melanogaster aerosa (Loew, 1843)	2		ss	*1
Diptera	Syrphidae	Melanogaster curvistylus Vujić & Stuke, 1999	1		es	*1
Diptera	Syrphidae	Melanogaster hirtella (Loew, 1843)	*		mh	*1
Diptera	Syrphidae	Melanogaster nuda (Macquart, 1829)	*		mh	*1
Diptera	Syrphidae	Melanogaster parumplicata (Loew, 1840)	2		ss	*1
Diptera	Syrphidae	Melanostoma dubium (Zetterstedt, 1837)	3		s	*1
Diptera	Syrphidae	Melanostoma mellinum (Linnaeus, 1758) agg.	*		sh	*1
Diptera	Syrphidae	Melanostoma scalare (Fabricius, 1794)	*		sh	*1
Diptera	Syrphidae	Meligramma cingulatum (Egger, 1860)	*		s	*1
Diptera	Syrphidae	Meligramma guttatum (Fallén, 1817)	G		s	*1
Diptera	Syrphidae	Meligramma trianguliferum (Zetterstedt, 1843)	*		s	*1
Diptera	Syrphidae	Meliscaeva auricollis (Meigen, 1822)	*		mh	*1
Diptera	Syrphidae	Meliscaeva cinctella (Zetterstedt, 1843)	*		sh	*1
Diptera	Syrphidae	Merodon aberrans Egger, 1860	1		es	*1

Order	Family	Species	K	L	P	S
Diptera	Syrphidae	Merodon aeneus Meigen, 1822	1		es	*1
Diptera	Syrphidae	Merodon armipes Rondani, 1843	2		ss	*1
Diptera	Syrphidae	Merodon avidus (Rossi, 1790)	V		s	*1
Diptera	Syrphidae	Merodon cinereus (Fabricius, 1794)	3		ss	*1
Diptera	Syrphidae	Merodon constans (Rossi, 1794)	1		es	*1
Diptera	Syrphidae	Merodon equestris (Fabricius, 1794)	*		mh	*1
Diptera	Syrphidae	Merodon nigritarsis Rondani, 1845	R		es	*1
Diptera	Syrphidae	Merodon ruficornis Meigen, 1822	2		ss	*1
Diptera	Syrphidae	Merodon rufus Meigen, 1838	V		s	*1
Diptera	Syrphidae	Mesembrius peregrinus (Loew, 1846)	1		ss	*1
Diptera	Syrphidae	Microdon analis (Macquart, 1842)	*		mh	*1
Diptera	Syrphidae	Microdon devius (Linnaeus, 1761)	V		s	*1
Diptera	Syrphidae	Microdon major Andries, 1912	D		?	*1
Diptera	Syrphidae	Microdon miki Doczkal & Schmid, 1999	1		es	*1
Diptera	Syrphidae	Microdon mutabilis (Linnaeus, 1758)	D		?	*1
Diptera	Syrphidae	Microdon myrmicae Schönrogge et al., 2002	D		?	*1
Diptera	Syrphidae	Myathropa florea (Linnaeus, 1758)	*		sh	*1
Diptera	Syrphidae	Myolepta dubia (Fabricius, 1805)	V		s	*1
Diptera	Syrphidae	Myolepta obscura Becher, 1882	1		es	*1
Diptera	Syrphidae	Myolepta potens (Harris, [1780])	2		ss	*1
Diptera	Syrphidae	Myolepta vara (Panzer, [1798])	3		s	*1
Diptera	Syrphidae	Neoascia annexa (Müller, 1776)	*		mh	*1
Diptera	Syrphidae	Neoascia geniculata (Meigen, 1822)	2		ss	*1
Diptera	Syrphidae	Neoascia interrupta (Meigen, 1822)	V		s	*1
Diptera	Syrphidae	Neoascia meticulosa (Scopoli, 1763)	*		mh	*1
Diptera	Syrphidae	Neoascia obliqua Coe, 1940	*		mh	*1
Diptera	Syrphidae	Neoascia podagrica (Fabricius, 1775)	*		h	*1
Diptera	Syrphidae	Neoascia tenur (Harris, [1780])	*		h	*1
Diptera	Syrphidae	Neoascia unifasciata (Strobl, 1898)	V		s	*1
Diptera	Syrphidae	Orthonevra brevicornis (Loew, 1843)	V		s	*1
Diptera	Syrphidae	Orthonevra elegans (Meigen, 1822)	1		es	*1
Diptera	Syrphidae	Orthonevra erythrogona (Malm, 1863)	1		es	*1
Diptera	Syrphidae	Orthonevra frontalis (Loew, 1843)	0	1919	ex	*1
Diptera	Syrphidae	Orthonevra geniculata (Meigen, 1830)	3		s	*1
Diptera	Syrphidae	Orthonevra incisa (Loew, 1843)	1		es	*1
Diptera	Syrphidae	Orthonevra intermedia (Lundbeck, 1916)	3		s	*1
Diptera	Syrphidae	Orthonevra montana Vujić, 1999	R		es	*1
Diptera	Syrphidae	Orthonevra nobilis (Fallén, 1817)	*		mh	*1
Diptera	Syrphidae	Orthonevra stackelbergi Thompson & Torp, 1982	1		es	*1
Diptera	Syrphidae	Orthonevra tristis (Loew, 1871)	G		ss	*1
Diptera	Syrphidae	Paragus albifrons (Fallén, 1817)	3		s	*1
Diptera	Syrphidae	Paragus bicolor (Fabricius, 1794)	V		s	*1
Diptera	Syrphidae	Paragus constrictus Simić, 1986	D		ss	*1
Diptera	Syrphidae	Paragus finitimus Goeldlin de Tiefenau, 1971	G		s	*1
Diptera	Syrphidae	Paragus flammeus Goeldlin de Tiefenau, 1971	2		ss	*1
Diptera	Syrphidae	Paragus haemorrhous Meigen, 1822	*		mh	*1
Diptera	Syrphidae	Paragus majoranae Rondani, 1857	1		es	*1
Diptera	Syrphidae	Paragus pecchiolii Rondani, 1857	*		mh	*1
Diptera	Syrphidae	Paragus punctulatus Zetterstedt, 1842	*		ss	*1
Diptera	Syrphidae	Paragus quadrifasciatus Meigen, 1822	*		s	*1
Diptera	Syrphidae	Paragus tibialis (Fallén, 1817)	2		ss	*1
Diptera	Syrphidae	Parasyrphus annulatus (Zetterstedt, 1838)	*		mh	*1
Diptera	Syrphidae	Parasyrphus lineola (Zetterstedt, 1843)	*		mh	*1
Diptera	Syrphidae	Parasyrphus macularis (Zetterstedt, 1843)	*		s	*1
Diptera	Syrphidae	Parasyrphus malinellus (Collin, 1952)	*		s	*1
Diptera	Syrphidae	Parasyrphus nigritarsis (Zetterstedt, 1843)	D		ss	*1
Diptera	Syrphidae	Parasyrphus punctulatus (Verrall, 1873)	*		sh	*1
Diptera	Syrphidae	Parasyrphus vittiger (Zetterstedt, 1843)	*		s	*1
Diptera	Syrphidae	Parhelophilus consimilis (Malm, 1863)	2		ss	*1
Diptera	Syrphidae	Parhelophilus frutetorum (Fabricius, 1775)	V		mh	*1
Diptera	Syrphidae	Parhelophilus versicolor (Fabricius, 1794)	V		mh	*1
Diptera	Syrphidae	Pelecocera tricincta Meigen, 1822	3		s	*1
Diptera	Syrphidae	Pipiza accola Violovitsh, 1985	1		es	*1
Diptera	Syrphidae	Pipiza austriaca Meigen, 1822	*		mh	*1
Diptera	Syrphidae	Pipiza bimaculata Meigen, 1822	*		mh	*1
Diptera	Syrphidae	Pipiza fenestrata Meigen, 1822	D		?	*1
Diptera	Syrphidae	Pipiza festiva Meigen, 1822	V		s	*1
Diptera	Syrphidae	Pipiza lugubris (Fabricius, 1775)	*		s	*1
Diptera	Syrphidae	Pipiza luteitarsis Zetterstedt, 1843	3		s	*1
Diptera	Syrphidae	Pipiza noctiluca (Linnaeus, 1758)	*		mh	*1
Diptera	Syrphidae	Pipiza quadrimaculata (Panzer, 1804)	*		mh	*1
Diptera	Syrphidae	Pipizella annulata (Macquart, 1829)	V		s	*1
Diptera	Syrphidae	Pipizella divicoi (Goeldlin de Tiefenau, 1974)	*		mh	*1
Diptera	Syrphidae	Pipizella maculipennis (Meigen, 1822)	0	1894	ex	*1
Diptera	Syrphidae	Pipizella mongolorum Stackelberg, 1952	1		es	*1
Diptera	Syrphidae	Pipizella nigriana (Séguy, 1961)	*		ss	*1
Diptera	Syrphidae	Pipizella pennina (Goeldlin de Tiefenau, 1974)	1		es	*1
Diptera	Syrphidae	Pipizella viduata (Linnaeus, 1758)	*		h	*1
Diptera	Syrphidae	Pipizella virens (Fabricius, 1805)	G		s	*1
Diptera	Syrphidae	Pipizella zeneggenensis (Goeldlin de Tiefenau, 1974)	V		s	*1

Order	Family	Species	K	L	P	S
Diptera	Syrphidae	Platycheirus abruzzensis (van der Goot, 1969)	R		es	*1
Diptera	Syrphidae	Platycheirus albimanus (Fabricius, 1781)	*		sh	*1
Diptera	Syrphidae	Platycheirus ambiguus (Fallén, 1817)	G		s	*1
Diptera	Syrphidae	Platycheirus amplus Curran, 1927	1		es	*1
Diptera	Syrphidae	Platycheirus angustatus (Zetterstedt, 1843)	*		mh	*1
Diptera	Syrphidae	Platycheirus angustipes Goeldlin de Tiefenau, 1974	G		ss	*1
Diptera	Syrphidae	Platycheirus aurolateralis Stubbs, 2002	D		ss	*1
Diptera	Syrphidae	Platycheirus clypeatus (Meigen, 1822)	*		sh	*1
Diptera	Syrphidae	Platycheirus complicatus Becker, 1889	*		s	*1
Diptera	Syrphidae	Platycheirus discimanus Loew, 1871	*		s	*1
Diptera	Syrphidae	Platycheirus europaeus Goeldlin de Tiefenau et al., 1990	*		mh	*1
Diptera	Syrphidae	Platycheirus fasciculatus Loew, 1856	R		es	*1
Diptera	Syrphidae	Platycheirus fulviventris (Macquart, 1829)	V		mh	*1
Diptera	Syrphidae	Platycheirus immaculatus Ohara, 1980	*		ss	*1
Diptera	Syrphidae	Platycheirus immarginatus (Zetterstedt, 1849)	1		ss	*1
Diptera	Syrphidae	Platycheirus jaerensis Nielsen, 1971	R		es	*1
Diptera	Syrphidae	Platycheirus laskai Nielsen, 1999	R		es	*1
Diptera	Syrphidae	Platycheirus manicatus (Meigen, 1822)	*		mh	*1
Diptera	Syrphidae	Platycheirus melanopsis Loew, 1856	*		s	*1
Diptera	Syrphidae	Platycheirus nielseni Vockeroth, 1990	*		s	*1
Diptera	Syrphidae	Platycheirus occultus Goeldlin de Tiefenau et al., 1990	V		mh	*1
Diptera	Syrphidae	Platycheirus parmatus Rondani, 1857	*		mh	*1
Diptera	Syrphidae	Platycheirus peltatus (Meigen, 1822)	*		h	*1
Diptera	Syrphidae	Platycheirus perpallidus Verrall, 1901	3		s	*1
Diptera	Syrphidae	Platycheirus podagratus (Zetterstedt, 1838)	2		ss	*1
Diptera	Syrphidae	Platycheirus scambus (Staeger, 1843)	V		mh	*1
Diptera	Syrphidae	Platycheirus scutatus (Meigen, 1822)	*		h	*1
Diptera	Syrphidae	Platycheirus splendidus Rotheray, 1998	D		ss	*1
Diptera	Syrphidae	Platycheirus sticticus (Meigen, 1822)	G		s	*1
Diptera	Syrphidae	Platycheirus tarsalis (Schummel, 1837)	*		s	*1
Diptera	Syrphidae	Platycheirus tatricus Dušek & Láska, 1982	*		ss	*1
Diptera	Syrphidae	Platycheirus transfugus (Zetterstedt, 1838)	1		es	*1
Diptera	Syrphidae	Pocota personata (Harris, [1780])	1		es	*1
Diptera	Syrphidae	Portevinia maculata (Fallén, 1817)	*		s	*1
Diptera	Syrphidae	Psarus abdominalis (Fabricius, 1794)	1		es	*1
Diptera	Syrphidae	Psilota anthracina Meigen, 1822	D		?	*1
Diptera	Syrphidae	Psilota atra (Fallén, 1817)	D		?	*1
Diptera	Syrphidae	Psilota innupta Rondani, 1857	R		es	*1
Diptera	Syrphidae	Pyrophaena granditarsa (Forster, 1771)	V		mh	*1
Diptera	Syrphidae	Pyrophaena rosarum (Fabricius, 1787)	*		mh	*1
Diptera	Syrphidae	Rhingia borealis Ringdahl, 1928	*		s	*1
Diptera	Syrphidae	Rhingia campestris Meigen, 1822	*		h	*1
Diptera	Syrphidae	Rhingia rostrata (Linnaeus, 1758)	2		s	*1
Diptera	Syrphidae	Riponnensia splendens (Meigen, 1822)	2		ss	*1
Diptera	Syrphidae	Scaeva dignota (Rondani, 1857)	*		ss	*1
Diptera	Syrphidae	Scaeva pyrastri (Linnaeus, 1758)	*		sh	*1
Diptera	Syrphidae	Scaeva selenitica (Meigen, 1822)	*		h	*1
Diptera	Syrphidae	Sericomyia lappona (Linnaeus, 1758)	3		s	*1
Diptera	Syrphidae	Sericomyia silentis (Harris, [1776])	*		mh	*1
Diptera	Syrphidae	Spazigaster ambulans (Fabricius, 1798)	G		ss	*1
Diptera	Syrphidae	Sphaerophoria bankowskae Goeldlin de Tiefenau, 1989	*		ss	*1
Diptera	Syrphidae	Sphaerophoria batava Goeldlin de Tiefenau, 1974	*		mh	*1
Diptera	Syrphidae	Sphaerophoria chongjini Bankowska, 1964	3		ss	*1
Diptera	Syrphidae	Sphaerophoria estebani Goeldlin de Tiefenau, 1991	R		es	*1
Diptera	Syrphidae	Sphaerophoria fatarum Goeldlin de Tiefenau, 1989	V		s	*1
Diptera	Syrphidae	Sphaerophoria infuscata Goeldlin de Tiefenau, 1974	3		s	*1
Diptera	Syrphidae	Sphaerophoria interrupta (Fabricius, 1805)	*		mh	*1
Diptera	Syrphidae	Sphaerophoria loewi Zetterstedt, 1843	1		es	*1
Diptera	Syrphidae	Sphaerophoria philanthus (Meigen, 1822)	3		s	*1
Diptera	Syrphidae	Sphaerophoria potentillae Claussen, 1984	1		es	*1
Diptera	Syrphidae	Sphaerophoria rueppellii (Wiedemann, 1830)	*		mh	*1
Diptera	Syrphidae	Sphaerophoria scripta (Linnaeus, 1758)	*		sh	*1
Diptera	Syrphidae	Sphaerophoria shirchan Violovitsh, 1957	D		ss	*1
Diptera	Syrphidae	Sphaerophoria taeniata (Meigen, 1822)	*		h	*1
Diptera	Syrphidae	Sphaerophoria virgata Goeldlin de Tiefenau, 1974	*		mh	*1
Diptera	Syrphidae	Sphegina clavata (Scopoli, 1763)	*		s	*1
Diptera	Syrphidae	Sphegina clunipes (Fallén, 1816)	*		h	*1
Diptera	Syrphidae	Sphegina cornifera Becker, 1921	*		ss	*1
Diptera	Syrphidae	Sphegina elegans Schummel, 1843	*		mh	*1
Diptera	Syrphidae	Sphegina latifrons Egger, 1865	*		s	*1
Diptera	Syrphidae	Sphegina montana Becker, 1921	*		s	*1
Diptera	Syrphidae	Sphegina platychira Szilády, 1937	2		ss	*1
Diptera	Syrphidae	Sphegina sibirica Stackelberg, 1953	*		mh	*1
Diptera	Syrphidae	Sphegina spheginea (Zetterstedt, 1838)	2		ss	*1
Diptera	Syrphidae	Sphegina verecunda Collin, 1937	*		h	*1
Diptera	Syrphidae	Sphiximorpha binominata (Verrall, 1901)	R		es	*1
Diptera	Syrphidae	Sphiximorpha subsessilis (Illiger in Rossi, 1807)	2		ss	*1
Diptera	Syrphidae	Spilomyia digitata (Rondani, 1865)	D		?	*1
Diptera	Syrphidae	Spilomyia diophthalma (Linnaeus, 1758)	1		es	*1
Diptera	Syrphidae	Spilomyia manicata (Rondani, 1865)	1		es	*1

Order	Family	Species	K	L	P	S
Diptera	Syrphidae	Syritta pipiens (Linnaeus, 1758)	*		sh	*1
Diptera	Syrphidae	Syrphocheilosia claviventris (Strobl, 1910)	*		ss	*1
Diptera	Syrphidae	Syrphus auberti Goeldlin de Tiefenau, 1996	R		es	*1
Diptera	Syrphidae	Syrphus nitidifrons Becker, 1921	*		s	*1
Diptera	Syrphidae	Syrphus ribesii (Linnaeus, 1758)	*		sh	*1
Diptera	Syrphidae	Syrphus torvus Osten-Sacken, 1875	*		h	*1
Diptera	Syrphidae	Syrphus vitripennis Meigen, 1822	*		sh	*1
Diptera	Syrphidae	Temnostoma apiforme (Fabricius, 1794)	3		s	*1
Diptera	Syrphidae	Temnostoma bombylans (Fabricius, 1805)	*		mh	*1
Diptera	Syrphidae	Temnostoma meridionale Krivosheina & Mamaev, 1962	3		ss	*1
Diptera	Syrphidae	Temnostoma vespiforme (Linnaeus, 1758)	*		mh	*1
Diptera	Syrphidae	Trichopsomyia flavitarsis (Meigen, 1822)	*		s	*1
Diptera	Syrphidae	Trichopsomyia joratensis Goeldlin de Tiefenau, 1997	*		s	*1
Diptera	Syrphidae	Trichopsomyia lucida (Meigen, 1822)	3		s	*1
Diptera	Syrphidae	Triglyphus primus Loew, 1840	*		s	*1
Diptera	Syrphidae	Tropidia fasciata Meigen, 1822	1		es	*1
Diptera	Syrphidae	Tropidia scita (Harris, [1780])	*		mh	*1
Diptera	Syrphidae	Volucella bombylans (Linnaeus, 1758)	*		h	*1
Diptera	Syrphidae	Volucella inanis (Linnaeus, 1758)	*		s	*1
Diptera	Syrphidae	Volucella inflata (Fabricius, 1794)	3		s	*1
Diptera	Syrphidae	Volucella pellucens (Linnaeus, 1758)	*		h	*1
Diptera	Syrphidae	Volucella zonaria (Poda, 1761)	*		s	*1
Diptera	Syrphidae	Xanthandrus comtus (Harris, [1780])	*		mh	*1
Diptera	Syrphidae	Xanthogramma citrofasciatum (De Geer, 1776)	V		mh	*1
Diptera	Syrphidae	Xanthogramma dives (Rondani, 1857)	D		?	*1
Diptera	Syrphidae	Xanthogramma laetum (Fabricius, 1794)	*		s	*1
Diptera	Syrphidae	Xanthogramma pedissequum (Harris, [1776])	*		mh	*1
Diptera	Syrphidae	Xanthogramma stackelbergi Violovitsh, 1975	D		?	*1
Diptera	Syrphidae	Xylota abiens Meigen, 1822	*		s	*1
Diptera	Syrphidae	Xylota caeruleiventris Zetterstedt, 1838	1		es	*1
Diptera	Syrphidae	Xylota florum (Fabricius, 1805)	*		s	*1
Diptera	Syrphidae	Xylota ignava (Panzer, [1798])	3		ss	*1
Diptera	Syrphidae	Xylota jakutorum Bagatshanova, 1980	*		mh	*1
Diptera	Syrphidae	Xylota meigeniana Stackelberg, 1964	2		ss	*1
Diptera	Syrphidae	Xylota segnis (Linnaeus, 1758)	*		h	*1
Diptera	Syrphidae	Xylota sylvarum (Linnaeus, 1758)	*		mh	*1
Diptera	Syrphidae	Xylota tarda Meigen, 1822	*		s	*1
Diptera	Syrphidae	Xylota xanthocnema Collin, 1939	3		s	*1
Diptera	Thaumaleidae	Androprosopa larvata (Mik, 1888)	*		s	*1
Diptera	Thaumaleidae	Androprosopa nigra (Loew, 1871)	R		es	*1
Diptera	Thaumaleidae	Thaumalea austriaca Edwards, 1929	*		mh	*1
Diptera	Thaumaleidae	Thaumalea bezzii Edwards, 1929	*		h	*1
Diptera	Thaumaleidae	Thaumalea brevidens Edwards, 1929	D		s	*1
Diptera	Thaumaleidae	Thaumalea caudata Bezzi, 1913	D		s	*1
Diptera	Thaumaleidae	Thaumalea cebennica Vaillant, 1977	*		mh	*1
Diptera	Thaumaleidae	Thaumalea digitata Edwards, 1929	D		s	*1
Diptera	Thaumaleidae	Thaumalea divaricata Bezzi, 1913	D		s	*1
Diptera	Thaumaleidae	Thaumalea furva Edwards, 1929	D		s	*1
Diptera	Thaumaleidae	Thaumalea inflata Bezzi, 1913	D		s	*1
Diptera	Thaumaleidae	Thaumalea miki Edwards, 1929	D		s	*1
Diptera	Thaumaleidae	Thaumalea pulla Edwards, 1929	D		s	*1
Diptera	Thaumaleidae	Thaumalea testacea Ruthé, 1831	*		h	*1
Diptera	Thaumaleidae	Thaumalea truncata Edwards, 1929	G		mh	*1
Diptera	Thaumaleidae	Thaumalea verralli Edwards, 1929	G		s	*1
Ephemeroptera	Ameletidae	Ameletus inopinatus Eaton, 1887	2		ss	*3
Ephemeroptera	Ameletidae	Metreletus balcanicus (Ulmer, 1920)	2		ss	*3
Ephemeroptera	Ametropodidae	Ametropus fragilis Albarda, 1878	1		es	*3
Ephemeroptera	Arthropleidae	Arthroplea congener Bengtsson, 1908	1		es	*3
Ephemeroptera	Baetidae	Baetis alpinus (Pictet, 1843)	*		h	*3
Ephemeroptera	Baetidae	Baetis atrebatinus Eaton, 1870	R		es	*3
Ephemeroptera	Baetidae	Baetis buceratus Eaton, 1870	3		s	*3
Ephemeroptera	Baetidae	Baetis calcaratus Keffermüller, 1972	D		ss	*3
Ephemeroptera	Baetidae	Baetis digitatus Bengtsson, 1912	1		es	*3
Ephemeroptera	Baetidae	Baetis fuscatus (Linnaeus, 1761)	*		h	*3
Ephemeroptera	Baetidae	Baetis gemellus Eaton, 1885	D		?	*3
Ephemeroptera	Baetidae	Baetis inexpectatus (Tshernova, 1928)	R		es	*3
Ephemeroptera	Baetidae	Baetis liebenauae Keffermüller, 1974	*		mh	*3
Ephemeroptera	Baetidae	Baetis lutheri Müller-Liebenau, 1967	*		mh	*3
Ephemeroptera	Baetidae	Baetis melanonyx (Pictet, 1843)	V		s	*3
Ephemeroptera	Baetidae	Baetis muticus (Linnaeus, 1758)	*		mh	*3
Ephemeroptera	Baetidae	Baetis nexus Navás, 1918	*		mh	*3
Ephemeroptera	Baetidae	Baetis niger (Linnaeus, 1761)	V		s	*3
Ephemeroptera	Baetidae	Baetis rhodani (Pictet, 1843)	*		sh	*3
Ephemeroptera	Baetidae	Baetis scambus Eaton, 1870	*		h	*3
Ephemeroptera	Baetidae	Baetis tracheatus Keffermüller & Machel, 1967	3		ss	*3
Ephemeroptera	Baetidae	Baetis tricolor Tshernova, 1928	2		ss	*3
Ephemeroptera	Baetidae	Baetis vardarensis Ikonomov, 1962	*		mh	*3
Ephemeroptera	Baetidae	Baetis vernus Curtis, 1834	*		sh	*3
Ephemeroptera	Baetidae	Baetopus tenellus (Albarda, 1878)	1		ss	*3
Ephemeroptera	Baetidae	Baetopus wartensis Keffermüller, 1960	R		es	*3

Order	Family	Species	K	L	P	S
Ephemeroptera	Baetidae	Centroptilum luteolum (O.F. Müller, 1776)	*		h	*3
Ephemeroptera	Baetidae	Cloeon cognatum Stephens, 1836	*		sh	*3
Ephemeroptera	Baetidae	Cloeon dipterum (Linnaeus, 1761)	*		sh	*3
Ephemeroptera	Baetidae	Cloeon inscriptum Bengtsson, 1914	D		s	*3
Ephemeroptera	Baetidae	Cloeon simile Eaton, 1870	*		s	*3
Ephemeroptera	Baetidae	Procloeon bifidum (Bengtsson, 1912)	*		mh	*3
Ephemeroptera	Baetidae	Procloeon pennulatum (Eaton, 1870)	3		ss	*3
Ephemeroptera	Baetidae	Procloeon pulchrum (Eaton, 1885)	1		es	*3
Ephemeroptera	Caenidae	Brachycercus harrisella Curtis, 1834	3		ss	*3
Ephemeroptera	Caenidae	Brachycercus minutus Tshernova, 1952	R		es	*3
Ephemeroptera	Caenidae	Caenis beskidensis Sowa, 1973	V		s	*3
Ephemeroptera	Caenidae	Caenis horaria (Linnaeus, 1758)	*		h	*3
Ephemeroptera	Caenidae	Caenis lactea (Burmeister, 1839)	V		s	*3
Ephemeroptera	Caenidae	Caenis luctuosa (Burmeister, 1839)	*		sh	*3
Ephemeroptera	Caenidae	Caenis macrura Stephens, 1836	*		h	*3
Ephemeroptera	Caenidae	Caenis pseudorivulorum Keffermüller, 1960	3		s	*3
Ephemeroptera	Caenidae	Caenis pusilla Navás, 1913	1		es	*3
Ephemeroptera	Caenidae	Caenis rivulorum Eaton, 1884	*		mh	*3
Ephemeroptera	Caenidae	Caenis robusta Eaton, 1884	*		s	*3
Ephemeroptera	Ephemerellidae	Ephemerella ignita (Poda, 1761)	*		sh	*3
Ephemeroptera	Ephemerellidae	Ephemerella mesoleuca (Brauer, 1857)	0	1928	ex	*3
Ephemeroptera	Ephemerellidae	Ephemerella mucronata (Bengtsson, 1909)	*		h	*3
Ephemeroptera	Ephemerellidae	Ephemerella notata Eaton, 1887	3		s	*3
Ephemeroptera	Ephemerellidae	Torleya major (Klapálek, 1905)	*		mh	*3
Ephemeroptera	Ephemeridae	Ephemera danica O.F. Müller, 1764	*		h	*3
Ephemeroptera	Ephemeridae	Ephemera glaucops Pictet, 1843	*		s	*3
Ephemeroptera	Ephemeridae	Ephemera lineata Eaton, 1870	1		es	*3
Ephemeroptera	Ephemeridae	Ephemera vulgata Linnaeus, 1758	*		mh	*3
Ephemeroptera	Heptageniidae	Ecdyonurus aurantiacus (Burmeister, 1839)	2		ss	*3
Ephemeroptera	Heptageniidae	Ecdyonurus austriacus Kimmins, 1958	2		ss	*3
Ephemeroptera	Heptageniidae	Ecdyonurus carpathicus Sowa, 1973	1		es	*3
Ephemeroptera	Heptageniidae	Ecdyonurus dispar (Curtis, 1834)	*		h	*3
Ephemeroptera	Heptageniidae	Ecdyonurus helveticus Eaton, 1883	*		mh	*3
Ephemeroptera	Heptageniidae	Ecdyonurus insignis (Eaton, 1870)	3		s	*3
Ephemeroptera	Heptageniidae	Ecdyonurus macani Thomas & Sowa, 1970	2		ss	*3
Ephemeroptera	Heptageniidae	Ecdyonurus picteti (Meyer-Dür, 1864)	V		s	*3
Ephemeroptera	Heptageniidae	Ecdyonurus starmachi Sowa, 1971	R		es	*3
Ephemeroptera	Heptageniidae	Ecdyonurus subalpinus Klapálek, 1907	V		mh	*3
Ephemeroptera	Heptageniidae	Ecdyonurus submontanus Landa, 1969	*		mh	*3
Ephemeroptera	Heptageniidae	Ecdyonurus torrentis Kimmins, 1942	*		h	*3
Ephemeroptera	Heptageniidae	Ecdyonurus venosus (Fabricius, 1775)	*		h	*3
Ephemeroptera	Heptageniidae	Ecdyonurus zelleri Eaton, 1885	R		es	*3
Ephemeroptera	Heptageniidae	Electrogena affinis (Eaton, 1883)	2		ss	*3
Ephemeroptera	Heptageniidae	Electrogena lateralis (Curtis, 1834)	G		s	*3
Ephemeroptera	Heptageniidae	Electrogena ujhelyii (Sowa, 1981)	*		mh	*3
Ephemeroptera	Heptageniidae	Epeorus alpicola (Eaton, 1871)	V		s	*3
Ephemeroptera	Heptageniidae	Epeorus assimilis Eaton, 1885	*		h	*3
Ephemeroptera	Heptageniidae	Heptagenia coerulans Rostock, 1878	2		ss	*3
Ephemeroptera	Heptageniidae	Heptagenia flava Rostock, 1878	V		s	*3
Ephemeroptera	Heptageniidae	Heptagenia longicauda (Stephens, 1836)	3		ss	*3
Ephemeroptera	Heptageniidae	Heptagenia sulphurea (O.F. Müller, 1776)	*		h	*3
Ephemeroptera	Heptageniidae	Kageronia fuscogrisea (Retzius, 1783)	V		s	*3
Ephemeroptera	Heptageniidae	Rhithrogena allobrogica Sowa & Degrange, 1987	G		s	*3
Ephemeroptera	Heptageniidae	Rhithrogena alpestris Eaton, 1885	2		ss	*3
Ephemeroptera	Heptageniidae	Rhithrogena austriaca Sowa & Weichselbaumer, 1988	2		es	*3
Ephemeroptera	Heptageniidae	Rhithrogena beskidensis Alba-Tercedor & Sowa, 1987	3		mh	*3
Ephemeroptera	Heptageniidae	Rhithrogena carpatoalpina Klonowska et al., 1987	D		s	*3
Ephemeroptera	Heptageniidae	Rhithrogena circumtatrica Sowa & Soldán, 1986	2		ss	*3
Ephemeroptera	Heptageniidae	Rhithrogena degrangei Sowa, 1969	2		ss	*3
Ephemeroptera	Heptageniidae	Rhithrogena dorieri Sowa, 1971	2		es	*3
Ephemeroptera	Heptageniidae	Rhithrogena germanica Eaton, 1885	2		ss	*3
Ephemeroptera	Heptageniidae	Rhithrogena gratianopolitana Sowa, Degrange & Sartori, 1986	2		ss	*3
Ephemeroptera	Heptageniidae	Rhithrogena hercynia Landa, 1969	3		s	*3
Ephemeroptera	Heptageniidae	Rhithrogena hybrida Eaton, 1885	2		ss	*3
Ephemeroptera	Heptageniidae	Rhithrogena iridina (Kolenati, 1859)	R		es	*3
Ephemeroptera	Heptageniidae	Rhithrogena landai Sowa & Soldán, 1984	G		s	*3
Ephemeroptera	Heptageniidae	Rhithrogena loyolaea Navás, 1922	G		ss	*3
Ephemeroptera	Heptageniidae	Rhithrogena picteti Sowa, 1971	*		h	*3
Ephemeroptera	Heptageniidae	Rhithrogena puthzi Sowa, 1984	*		mh	*3
Ephemeroptera	Heptageniidae	Rhithrogena puytoraci Sowa & Degrange, 1987	*		h	*3
Ephemeroptera	Heptageniidae	Rhithrogena savoiensis Alba-Tercedor & Sowa, 1987	D		s	*3
Ephemeroptera	Heptageniidae	Rhithrogena semicolorata (Curtis, 1834)	*		h	*3
Ephemeroptera	Heptageniidae	Rhithrogena taurisca Bauernfeind, 1992	2		es	*3
Ephemeroptera	Isonychiidae	Isonychia ignota (Walker, 1853)	0	1950	ex	*3
Ephemeroptera	Leptophlebiidae	Choroterpes picteti (Eaton, 1871)	1		es	*3
Ephemeroptera	Leptophlebiidae	Habroleptoides auberti (Biancheri, 1954)	R		es	*3
Ephemeroptera	Leptophlebiidae	Habroleptoides confusa Sartori & Jacob, 1986	*		h	*3
Ephemeroptera	Leptophlebiidae	Habrophlebia fusca (Curtis, 1834)	*		mh	*3
Ephemeroptera	Leptophlebiidae	Habrophlebia lauta Eaton, 1884	*		h	*3
Ephemeroptera	Leptophlebiidae	Leptophlebia cincta (Retzius, 1783)	2		ss	*3

Order	Family	Species	K	L	P	S
Ephemeroptera	Leptophlebiidae	Leptophlebia marginata (Linnaeus, 1767)	V		mh	*3
Ephemeroptera	Leptophlebiidae	Leptophlebia submarginata (Stephens, 1836)	*		h	*3
Ephemeroptera	Leptophlebiidae	Leptophlebia vespertina (Linnaeus, 1758)	3		s	*3
Ephemeroptera	Leptophlebiidae	Leptophlebia werneri Ulmer, 1920	2		es	*3
Ephemeroptera	Leptophlebiidae	Thraulus bellus Eaton, 1881	1		es	*3
Ephemeroptera	Oligoneuriidae	Oligoneuriella rhenana (Imhoff, 1852)	3		ss	*3
Ephemeroptera	Palingeniidae	Palingenia longicauda (Olivier, 1791)	0	1862	ex	*3
Ephemeroptera	Polymitarcyidae	Ephoron virgo (Olivier, 1791)	3		s	*3
Ephemeroptera	Potamanthidae	Potamanthus luteus (Linnaeus, 1767)	3		mh	*3
Ephemeroptera	Prosopistomatidae	Prosopistoma pennigerum (O.F. Müller, 1785)	0	1960	ex	*3
Ephemeroptera	Siphlonuridae	Siphlonurus aestivalis Eaton, 1903	V		s	*3
Ephemeroptera	Siphlonuridae	Siphlonurus alternatus (Say, 1824)	2		es	*3
Ephemeroptera	Siphlonuridae	Siphlonurus armatus Eaton, 1870	2		es	*3
Ephemeroptera	Siphlonuridae	Siphlonurus croaticus Ulmer, 1920	R		es	*3
Ephemeroptera	Siphlonuridae	Siphlonurus lacustris Eaton, 1870	V		s	*3
Heteroptera	Acanthosomatidae	Acanthosoma haemorrhoidale haemorrhoidale (Linnaeus, 1758)	*		h	*3
Heteroptera	Acanthosomatidae	Cyphostethus tristriatus (Fabricius, 1787)	*		h	*3
Heteroptera	Acanthosomatidae	Elasmostethus interstinctus (Linnaeus, 1758)	*		h	*3
Heteroptera	Acanthosomatidae	Elasmostethus minor Horváth, 1899	*		s	*3
Heteroptera	Acanthosomatidae	Elasmucha ferrugata (Fabricius, 1787)	V		s	*3
Heteroptera	Acanthosomatidae	Elasmucha fieberi (Jakovlev, 1865)	*		s	*3
Heteroptera	Acanthosomatidae	Elasmucha grisea grisea (Linnaeus, 1758)	*		sh	*3
Heteroptera	Alydidae	Alydus calcaratus (Linnaeus, 1758)	*		h	*3
Heteroptera	Alydidae	Camptopus lateralis (Germar, 1817)	R		es	*3
Heteroptera	Alydidae	Megalotomus junceus (Scopoli, 1763)	0	1892	ex	*3
Heteroptera	Anthocoridae	Acompocoris alpinus Reuter, 1875	*		mh	*3
Heteroptera	Anthocoridae	Acompocoris montanus Wagner, 1955	R		es	*3
Heteroptera	Anthocoridae	Acompocoris pygmaeus (Fallén, 1807)	*		h	*3
Heteroptera	Anthocoridae	Amphiareus obscuriceps (Poppius, 1909)	nb		nb	*3
Heteroptera	Anthocoridae	Anthocoris amplicollis Horváth, 1893	*		mh	*3
Heteroptera	Anthocoridae	Anthocoris butleri Le Quesne, 1954	*		s	*3
Heteroptera	Anthocoridae	Anthocoris confusus Reuter, 1884	*		h	*3
Heteroptera	Anthocoridae	Anthocoris gallarumulmi (De Geer, 1773)	*		mh	*3
Heteroptera	Anthocoridae	Anthocoris limbatus Fieber, 1836	*		s	*3
Heteroptera	Anthocoridae	Anthocoris minki minki Dohrn, 1860	*		mh	*3
Heteroptera	Anthocoridae	Anthocoris nemoralis (Fabricius, 1794)	*		sh	*3
Heteroptera	Anthocoridae	Anthocoris nemorum (Linnaeus, 1761)	*		sh	*3
Heteroptera	Anthocoridae	Anthocoris pilosus (Jakovlev, 1877)	2		ss	*3
Heteroptera	Anthocoridae	Anthocoris sarothamni Douglas & Scott, 1865	*		mh	*3
Heteroptera	Anthocoridae	Anthocoris simulans Reuter, 1884	*		s	*3
Heteroptera	Anthocoridae	Anthocoris visci Douglas, 1889	R		es	*3
Heteroptera	Anthocoridae	Brachysteles parvicornis (A. Costa, 1847)	G		ss	*3
Heteroptera	Anthocoridae	Cardiastethus fasciiventris (Garbiglietti, 1869)	*		mh	*3
Heteroptera	Anthocoridae	Dufouriellus ater (Dufour, 1833)	*		mh	*3
Heteroptera	Anthocoridae	Dysepicritus rufescens (A. Costa, 1847)	0	1913	ex	*3
Heteroptera	Anthocoridae	Elatophilus nigricornis (Zetterstedt, 1838)	*		s	*3
Heteroptera	Anthocoridae	Elatophilus pini (Baerensprung, 1858)	R		es	*3
Heteroptera	Anthocoridae	Elatophilus stigmatellus (Zetterstedt, 1838)	D		ss	*3
Heteroptera	Anthocoridae	Lyctocoris campestris (Fabricius, 1794)	*		mh	*3
Heteroptera	Anthocoridae	Lyctocoris dimidiatus (Spinola, 1837)	G		ss	*3
Heteroptera	Anthocoridae	Orius agilis (Flor, 1860)	*		s	*3
Heteroptera	Anthocoridae	Orius horvathi (Reuter, 1884)	*		mh	*3
Heteroptera	Anthocoridae	Orius laticollis laticollis (Reuter, 1884)	*		mh	*3
Heteroptera	Anthocoridae	Orius majusculus (Reuter, 1879)	*		h	*3
Heteroptera	Anthocoridae	Orius minutus (Linnaeus, 1758)	*		sh	*3
Heteroptera	Anthocoridae	Orius niger (Wolff, 1811)	*		sh	*3
Heteroptera	Anthocoridae	Orius vicinus (Ribaut, 1923)	*		h	*3
Heteroptera	Anthocoridae	Scoloposcelis pulchella pulchella (Zetterstedt, 1838)	*		mh	*3
Heteroptera	Anthocoridae	Temnostethus dacicus (Puton, 1888)	R		es	*3
Heteroptera	Anthocoridae	Temnostethus gracilis Horváth, 1907	*		h	*3
Heteroptera	Anthocoridae	Temnostethus longirostris (Horváth, 1907)	D		ss	*3
Heteroptera	Anthocoridae	Temnostethus pusillus (Herrich-Schaeffer, 1835)	*		h	*3
Heteroptera	Anthocoridae	Temnostethus reduvinus reduvinus (Herrich-Schaeffer, 1850)	D		ss	*3
Heteroptera	Anthocoridae	Temnostethus wichmanni Wagner, 1961	R		es	*3
Heteroptera	Anthocoridae	Tetraphleps aterrima (J. Sahlberg, 1878)	D		?	*3
Heteroptera	Anthocoridae	Tetraphleps bicuspis (Herrich-Schaeffer, 1835)	*		mh	*3
Heteroptera	Anthocoridae	Xylocoridea brevipennis Reuter, 1876	*		ss	*3
Heteroptera	Anthocoridae	Xylocoris cursitans (Fallén, 1807)	*		h	*3
Heteroptera	Anthocoridae	Xylocoris formicetorum (Boheman, 1844)	V		s	*3
Heteroptera	Anthocoridae	Xylocoris galactinus (Fieber, 1836)	*		mh	*3
Heteroptera	Anthocoridae	Xylocoris lativentris (J. Sahlberg, 1870)	1		es	*3
Heteroptera	Anthocoridae	Xylocoris parvulus (Reuter, 1871)	R		es	*3
Heteroptera	Anthocoridae	Xyloecocoris ovatulus Reuter, 1879	R		es	*3
Heteroptera	Aphelocheiridae	Aphelocheirus aestivalis (Fabricius, 1794)	*		h	*3
Heteroptera	Aradidae	Aneurus avenius (Dufour, 1833)	*		mh	*3
Heteroptera	Aradidae	Aneurus laevis (Fabricius, 1775)	*		s	*3
Heteroptera	Aradidae	Aradus aterrimus Fieber, 1864	0	1971	ex	*3
Heteroptera	Aradidae	Aradus betulae (Linnaeus, 1758)	G		s	*3
Heteroptera	Aradidae	Aradus betulinus Fallén, 1807	3		ss	*3
Heteroptera	Aradidae	Aradus bimaculatus Reuter, 1872	1		es	*3

Order	Family	Species	K	L	P	S
Heteroptera	Aradidae	Aradus brevicollis Fallén, 1807	2		es	*3
Heteroptera	Aradidae	Aradus cinnamomeus Panzer, 1806	*		h	*3
Heteroptera	Aradidae	Aradus conspicuus Herrich-Schaeffer, 1835	*		mh	*3
Heteroptera	Aradidae	Aradus corticalis (Linnaeus, 1758)	3		ss	*3
Heteroptera	Aradidae	Aradus crenaticollis R.F. Sahlberg, 1848	1		es	*3
Heteroptera	Aradidae	Aradus depressus depressus (Fabricius, 1794)	*		h	*3
Heteroptera	Aradidae	Aradus dissimilis A. Costa, 1847	1		es	*3
Heteroptera	Aradidae	Aradus distinctus Fieber, 1860	R		es	*3
Heteroptera	Aradidae	Aradus erosus Fallén, 1807	3		ss	*3
Heteroptera	Aradidae	Aradus krueperi Reuter, 1884	R		es	*3
Heteroptera	Aradidae	Aradus lugubris Fallén, 1807	0	1960	ex	*3
Heteroptera	Aradidae	Aradus obtectus Vásárhelyi, 1988	3		ss	*3
Heteroptera	Aradidae	Aradus pallescens Herrich-Schaeffer, 1840	1		es	*3
Heteroptera	Aradidae	Aradus ribauti Wagner, 1956	R		es	*3
Heteroptera	Aradidae	Aradus serbicus Horváth, 1888	1		es	*3
Heteroptera	Aradidae	Aradus signaticornis R.F. Sahlberg, 1848	G		ss	*3
Heteroptera	Aradidae	Aradus truncatus Fieber, 1860	R		es	*3
Heteroptera	Aradidae	Aradus versicolor Herrich-Schaeffer, 1835	3		ss	*3
Heteroptera	Aradidae	Mezira tremulae tremulae (Germar, 1822)	1		es	*3
Heteroptera	Artheneidae	Chilacis typhae (Perris, 1857)	*		mh	*3
Heteroptera	Artheneidae	Holcocranum saturejae (Kolenati, 1845)	R		es	*3
Heteroptera	Berytidae	Berytinus clavipes (Fabricius, 1775)	*		mh	*3
Heteroptera	Berytidae	Berytinus crassipes (Herrich-Schaeffer, 1835)	2		s	*3
Heteroptera	Berytidae	Berytinus geniculatus (Horváth, 1885)	2		es	*3
Heteroptera	Berytidae	Berytinus hirticornis hirticornis (Brullé, 1836)	2		ss	*3
Heteroptera	Berytidae	Berytinus minor minor (Herrich-Schaeffer, 1835)	*		h	*3
Heteroptera	Berytidae	Berytinus montivagus (Meyer-Dür, 1841)	2		ss	*3
Heteroptera	Berytidae	Berytinus signoreti (Fieber, 1859)	3		s	*3
Heteroptera	Berytidae	Gampsocoris culicinus culicinus Seidenstücker, 1948	G		ss	*3
Heteroptera	Berytidae	Gampsocoris punctipes punctipes (Germar, 1822)	*		mh	*3
Heteroptera	Berytidae	Metatropis rufescens (Herrich-Schaeffer, 1835)	*		h	*3
Heteroptera	Berytidae	Neides tipularius (Linnaeus, 1758)	*		h	*3
Heteroptera	Blissidae	Dimorphopterus spinolae (Signoret, 1857)	*		mh	*3
Heteroptera	Blissidae	Ischnodemus sabuleti (Fallén, 1826)	*		sh	*3
Heteroptera	Ceratocombidae	Ceratocombus brevipennis Poppius, 1910	2		es	*3
Heteroptera	Ceratocombidae	Ceratocombus coleoptratus (Zetterstedt, 1819)	*		mh	*3
Heteroptera	Cimicidae	Cimex columbarius Jenyns, 1839	R		es	*3
Heteroptera	Cimicidae	Cimex dissimilis (Horváth, 1910)	D		s	*3
Heteroptera	Cimicidae	Cimex lectularius Linnaeus, 1758	nb		nb	*3
Heteroptera	Cimicidae	Cimex pipistrelli Jenyns, 1839	D		s	*3
Heteroptera	Cimicidae	Oeciacus hirundinis (Lamarck, 1816)	*		mh	*3
Heteroptera	Coreidae	Arenocoris fallenii (Schilling, 1829)	V		mh	*3
Heteroptera	Coreidae	Arenocoris waltlii (Herrich-Schaeffer, 1835)	3		ss	*3
Heteroptera	Coreidae	Bathysolen nubilus (Fallén, 1807)	*		mh	*3
Heteroptera	Coreidae	Bothrostethus annulipes (Herrich-Schaeffer, 1835)	R		es	*3
Heteroptera	Coreidae	Ceraleptus gracilicornis (Herrich-Schaeffer, 1835)	*		mh	*3
Heteroptera	Coreidae	Ceraleptus lividus Stein, 1858	*		mh	*3
Heteroptera	Coreidae	Coreus marginatus marginatus (Linnaeus, 1758)	*		sh	*3
Heteroptera	Coreidae	Coriomeris alpinus (Horváth, 1895)	R		es	*3
Heteroptera	Coreidae	Coriomeris denticulatus (Scopoli, 1763)	*		sh	*3
Heteroptera	Coreidae	Coriomeris scabricornis scabricornis (Panzer, 1805)	3		s	*3
Heteroptera	Coreidae	Enoplops scapha (Fabricius, 1794)	*		mh	*3
Heteroptera	Coreidae	Gonocerus acuteangulatus (Goeze, 1778)	*		h	*3
Heteroptera	Coreidae	Gonocerus juniperi Herrich-Schaeffer, 1839	*		mh	*3
Heteroptera	Coreidae	Haploprocta sulcicornis (Fabricius, 1794)	G		s	*3
Heteroptera	Coreidae	Leptoglossus occidentalis Heidemann, 1910	nb		nb	*3
Heteroptera	Coreidae	Nemocoris fallenii R.F. Sahlberg, 1848	R		es	*3
Heteroptera	Coreidae	Spathocera dalmanii (Schilling, 1829)	3		s	*3
Heteroptera	Coreidae	Spathocera laticornis (Schilling, 1829)	2		ss	*3
Heteroptera	Coreidae	Syromastus rhombeus (Linnaeus, 1767)	*		sh	*3
Heteroptera	Coreidae	Ulmicola spinipes (Fallén, 1807)	R		es	*3
Heteroptera	Corixidae	Arctocorisa carinata carinata (C.R. Sahlberg, 1819)	2		es	*3
Heteroptera	Corixidae	Arctocorisa germari germari (Fieber, 1848)	2		ss	*3
Heteroptera	Corixidae	Callicorixa praeusta praeusta (Fieber, 1848)	*		h	*3
Heteroptera	Corixidae	Callicorixa producta producta (Reuter, 1880)	1		es	*3
Heteroptera	Corixidae	Corixa affinis Leach, 1817	2		ss	*3
Heteroptera	Corixidae	Corixa dentipes Thomson, 1869	G		s	*3
Heteroptera	Corixidae	Corixa panzeri Fieber, 1848	D		ss	*3
Heteroptera	Corixidae	Corixa punctata (Illiger, 1807)	*		sh	*3
Heteroptera	Corixidae	Cymatia bonsdorffii (C.R. Sahlberg, 1819)	G		s	*3
Heteroptera	Corixidae	Cymatia coleoptrata (Fabricius, 1777)	*		mh	*3
Heteroptera	Corixidae	Cymatia rogenhoferi (Fieber, 1864)	D		s	*3
Heteroptera	Corixidae	Glaenocorisa propinqua (Fieber, 1860)	2		ss	*3
Heteroptera	Corixidae	Hesperocorixa castanea (Thomson, 1869)	3		s	*3
Heteroptera	Corixidae	Hesperocorixa linnaei (Fieber, 1848)	*		h	*3
Heteroptera	Corixidae	Hesperocorixa moesta (Fieber, 1848)	2		ss	*3
Heteroptera	Corixidae	Hesperocorixa sahlbergi (Fieber, 1848)	*		h	*3
Heteroptera	Corixidae	Micronecta griseola Horváth, 1899	D		s	*3
Heteroptera	Corixidae	Micronecta minutissima (Linnaeus, 1758)	D		s	*3
Heteroptera	Corixidae	Micronecta poweri poweri (Douglas & Scott, 1869)	D		mh	*3

Order	Family	Species	K	L	P	S
Heteroptera	Corixidae	Micronecta scholtzi (Fieber, 1860)	*		sh	*3
Heteroptera	Corixidae	Paracorixa concinna concinna (Fieber, 1848)	*		mh	*3
Heteroptera	Corixidae	Sigara distincta (Fieber, 1848)	*		h	*3
Heteroptera	Corixidae	Sigara falleni (Fieber, 1848)	*		sh	*3
Heteroptera	Corixidae	Sigara fossarum (Leach, 1817)	*		mh	*3
Heteroptera	Corixidae	Sigara hellensii (C.R. Sahlberg, 1819)	2		ss	*3
Heteroptera	Corixidae	Sigara iactans Jansson, 1983	D		mh	*3
Heteroptera	Corixidae	Sigara lateralis (Leach, 1817)	*		sh	*3
Heteroptera	Corixidae	Sigara limitata limitata (Fieber, 1848)	G		mh	*3
Heteroptera	Corixidae	Sigara longipalis (J. Sahlberg, 1878)	D		ss	*3
Heteroptera	Corixidae	Sigara nigrolineata nigrolineata (Fieber, 1848)	*		sh	*3
Heteroptera	Corixidae	Sigara scotti (Douglas & Scott, 1868)	3		s	*3
Heteroptera	Corixidae	Sigara selecta (Fieber, 1848)	0	1946	ex	*3
Heteroptera	Corixidae	Sigara semistriata (Fieber, 1848)	3		s	*3
Heteroptera	Corixidae	Sigara stagnalis stagnalis (Leach, 1817)	*		mh	*3
Heteroptera	Corixidae	Sigara striata (Linnaeus, 1758)	*		sh	*3
Heteroptera	Corixidae	Sigara venusta (Douglas & Scott, 1869)	R		es	*3
Heteroptera	Cydnidae	Adomerus biguttatus (Linnaeus, 1758)	3		s	*3
Heteroptera	Cydnidae	Byrsinus flavicornis (Fabricius, 1794)	2		ss	*3
Heteroptera	Cydnidae	Canthophorus dubius (Scopoli, 1763)	2		ss	*3
Heteroptera	Cydnidae	Canthophorus impressus (Horváth, 1880)	3		s	*3
Heteroptera	Cydnidae	Cydnus aterrimus (Forster, 1771)	G		mh	*3
Heteroptera	Cydnidae	Geotomus elongatus (Herrich-Schaeffer, 1840)	1		es	*3
Heteroptera	Cydnidae	Legnotus limbosus (Geoffroy, 1785)	*		h	*3
Heteroptera	Cydnidae	Legnotus picipes (Fallén, 1807)	*		mh	*3
Heteroptera	Cydnidae	Microporus nigrita (Fabricius, 1794)	2		ss	*3
Heteroptera	Cydnidae	Ochetostethus opacus (Scholtz, 1847)	2		ss	*3
Heteroptera	Cydnidae	Sehirus luctuosus Mulsant & Rey, 1866	*		mh	*3
Heteroptera	Cydnidae	Sehirus morio (Linnaeus, 1761)	V		s	*3
Heteroptera	Cydnidae	Thyreocoris scarabaeoides (Linnaeus, 1758)	*		mh	*3
Heteroptera	Cydnidae	Tritomegas bicolor (Linnaeus, 1758)	*		h	*3
Heteroptera	Cydnidae	Tritomegas rotundipennis (Dohrn, 1862)	0	1938	ex	*3
Heteroptera	Cydnidae	Tritomegas sexmaculatus (Rambur, 1839)	*		sh	*3
Heteroptera	Cymidae	Cymus aurescens Distant, 1883	*		h	*3
Heteroptera	Cymidae	Cymus claviculus (Fallén, 1807)	*		h	*3
Heteroptera	Cymidae	Cymus glandicolor Hahn, 1832	*		h	*3
Heteroptera	Cymidae	Cymus melanocephalus Fieber, 1861	*		h	*3
Heteroptera	Dipsocoridae	Cryptostemma alienum Herrich-Schaeffer, 1835	2		ss	*3
Heteroptera	Dipsocoridae	Pachycoleus pusillimus (J. Sahlberg, 1870)	R		es	*3
Heteroptera	Dipsocoridae	Pachycoleus waltli Fieber, 1860	2		ss	*3
Heteroptera	Geocoridae	Geocoris ater (Fabricius, 1787)	2		s	*3
Heteroptera	Geocoridae	Geocoris dispar (Waga, 1839)	G		s	*3
Heteroptera	Geocoridae	Geocoris grylloides (Linnaeus, 1761)	*		mh	*3
Heteroptera	Geocoridae	Henestaris halophilus (Burmeister, 1835)	G		s	*3
Heteroptera	Gerridae	Aquarius najas (De Geer, 1773)	G		s	*3
Heteroptera	Gerridae	Aquarius paludum paludum (Fabricius, 1794)	*		h	*3
Heteroptera	Gerridae	Gerris argentatus Schummel, 1832	*		sh	*3
Heteroptera	Gerridae	Gerris asper (Fieber, 1860)	G		s	*3
Heteroptera	Gerridae	Gerris costae costae (Herrich-Schaeffer, 1850)	2		ss	*3
Heteroptera	Gerridae	Gerris gibbifer Schummel, 1832	*		h	*3
Heteroptera	Gerridae	Gerris lacustris (Linnaeus, 1758)	*		sh	*3
Heteroptera	Gerridae	Gerris lateralis Schummel, 1832	G		s	*3
Heteroptera	Gerridae	Gerris odontogaster (Zetterstedt, 1828)	*		h	*3
Heteroptera	Gerridae	Gerris sphagnetorum Gaunitz, 1947	R		es	*3
Heteroptera	Gerridae	Gerris thoracicus Schummel, 1832	*		h	*3
Heteroptera	Gerridae	Limnoporus rufoscutellatus (Latreille, 1807)	G		s	*3
Heteroptera	Hebridae	Hebrus pusillus pusillus (Fallén, 1807)	*		mh	*3
Heteroptera	Hebridae	Hebrus ruficeps Thomson, 1871	*		mh	*3
Heteroptera	Heterogastridae	Heterogaster affinis Herrich-Schaeffer, 1835	2		es	*3
Heteroptera	Heterogastridae	Heterogaster artemisiae Schilling, 1829	G		s	*3
Heteroptera	Heterogastridae	Heterogaster cathariae (Geoffroy, 1785)	0	1868	ex	*3
Heteroptera	Heterogastridae	Heterogaster urticae (Fabricius, 1775)	*		h	*3
Heteroptera	Heterogastridae	Platyplax salviae (Schilling, 1829)	*		mh	*3
Heteroptera	Hydrometridae	Hydrometra gracilenta Horváth, 1899	V		s	*3
Heteroptera	Hydrometridae	Hydrometra stagnorum (Linnaeus, 1758)	*		sh	*3
Heteroptera	Leptopodidae	Leptopus marmoratus (Goeze, 1778)	G		ss	*3
Heteroptera	Lygaeidae	Arocatus longiceps Stål, 1872	nb		nb	*3
Heteroptera	Lygaeidae	Arocatus melanocephalus (Fabricius, 1798)	D		ss	*3
Heteroptera	Lygaeidae	Arocatus roeselii (Schilling, 1829)	*		mh	*3
Heteroptera	Lygaeidae	Belonochilus numenius (Say, 1831)	nb		nb	*3
Heteroptera	Lygaeidae	Horvathiolus superbus (Pollich, 1781)	2		ss	*3
Heteroptera	Lygaeidae	Kleidocerys ericae (Horváth, 1908)	D		?	*3
Heteroptera	Lygaeidae	Kleidocerys privignus (Horváth, 1894)	D		?	*3
Heteroptera	Lygaeidae	Kleidocerys resedae resedae (Panzer, 1797)	*		sh	*3
Heteroptera	Lygaeidae	Lygaeosoma sardeum sardeum Spinola, 1837	1		es	*3
Heteroptera	Lygaeidae	Lygaeus equestris (Linnaeus, 1758)	*		mh	*3
Heteroptera	Lygaeidae	Lygaeus simulans Deckert, 1985	1		es	*3
Heteroptera	Lygaeidae	Melanocoryphus albomaculatus (Goeze, 1778)	*		s	*3
Heteroptera	Lygaeidae	Nithecus jacobaeae (Schilling, 1829)	*		h	*3
Heteroptera	Lygaeidae	Nysius cymoides (Spinola, 1837)	*		s	*3

Order	Family	Species	K	L	P	S
Heteroptera	Lygaeidae	Nysius ericae ericae (Schilling, 1829)	*		sh	*3
Heteroptera	Lygaeidae	Nysius graminicola graminicola (Kolenati, 1845)	R		es	*3
Heteroptera	Lygaeidae	Nysius helveticus (Herrich-Schaeffer, 1850)	*		mh	*3
Heteroptera	Lygaeidae	Nysius senecionis senecionis (Schilling, 1829)	*		sh	*3
Heteroptera	Lygaeidae	Nysius thymi thymi (Wolff, 1804)	*		sh	*3
Heteroptera	Lygaeidae	Orsillus depressus (Mulsant & Rey, 1852)	nb		nb	*3
Heteroptera	Lygaeidae	Ortholomus punctipennis (Herrich-Schaeffer, 1838)	*		h	*3
Heteroptera	Lygaeidae	Spilostethus saxatilis (Scopoli, 1763)	G		mh	*3
Heteroptera	Lygaeidae	Tropidothorax leucopterus (Goeze, 1778)	*		mh	*3
Heteroptera	Lygaeidae	Tropistethus holosericus (Scholtz, 1846)	*		h	*3
Heteroptera	Mesoveliidae	Mesovelia furcata Mulsant & Rey, 1852	*		mh	*3
Heteroptera	Microphysidae	Loricula bipunctata (Perris, 1857)	*		ss	*3
Heteroptera	Microphysidae	Loricula coleoptrata (Fallén, 1807)	*		mh	*3
Heteroptera	Microphysidae	Loricula distinguenda (Reuter, 1884)	G		ss	*3
Heteroptera	Microphysidae	Loricula elegantula (Baerensprung, 1858)	*		h	*3
Heteroptera	Microphysidae	Loricula exilis (Fallén, 1807)	*		mh	*3
Heteroptera	Microphysidae	Loricula pselaphiformis Curtis, 1833	*		mh	*3
Heteroptera	Microphysidae	Loricula ruficeps (Reuter, 1884)	3		ss	*3
Heteroptera	Microphysidae	Loricula rufoscutellata (Baerensprung, 1857)	R		es	*3
Heteroptera	Miridae	Acetropis carinata (Herrich-Schaeffer, 1841)	*		mh	*3
Heteroptera	Miridae	Acetropis gimmerthalii gimmerthalii (Flor, 1860)	V		s	*3
Heteroptera	Miridae	Actinonotus pulcher (Herrich-Schaeffer, 1835)	3		ss	*3
Heteroptera	Miridae	Adelphocoris detritus (Fieber, 1861)	1		es	*3
Heteroptera	Miridae	Adelphocoris hercynicus Wagner, 1938	2		ss	*3
Heteroptera	Miridae	Adelphocoris lineolatus (Goeze, 1778)	*		sh	*3
Heteroptera	Miridae	Adelphocoris quadripunctatus (Fabricius, 1794)	*		sh	*3
Heteroptera	Miridae	Adelphocoris reichelii (Fieber, 1836)	2		ss	*3
Heteroptera	Miridae	Adelphocoris seticornis (Fabricius, 1775)	*		h	*3
Heteroptera	Miridae	Adelphocoris ticinensis (Meyer-Dür, 1843)	3		ss	*3
Heteroptera	Miridae	Adelphocoris vandalicus (Rossi, 1790)	R		es	*3
Heteroptera	Miridae	Agnocoris reclairei (Wagner, 1949)	*		mh	*3
Heteroptera	Miridae	Agnocoris rubicundus (Fallén, 1807)	*		mh	*3
Heteroptera	Miridae	Alloeonotus fulvipes (Scopoli, 1763)	R		es	*3
Heteroptera	Miridae	Alloeotomus germanicus Wagner, 1939	*		mh	*3
Heteroptera	Miridae	Alloeotomus gothicus (Fallén, 1807)	*		mh	*3
Heteroptera	Miridae	Amblytylus albidus (Hahn, 1834)	3		s	*3
Heteroptera	Miridae	Amblytylus brevicollis Fieber, 1858	2		ss	*3
Heteroptera	Miridae	Amblytylus delicatus (Perris, 1857)	0	1950	ex	*3
Heteroptera	Miridae	Amblytylus nasutus (Kirschbaum, 1856)	*		sh	*3
Heteroptera	Miridae	Apolygus limbatus (Fallén, 1807)	V		s	*3
Heteroptera	Miridae	Apolygus lucorum (Meyer-Dür, 1843)	*		h	*3
Heteroptera	Miridae	Apolygus rhamnicola (Reuter, 1885)	*		mh	*3
Heteroptera	Miridae	Apolygus spinolae (Meyer-Dür, 1841)	*		h	*3
Heteroptera	Miridae	Asciodema obsoleta (Fieber, 1864)	V		s	*3
Heteroptera	Miridae	Atomoscelis onusta (Fieber, 1861)	3		ss	*3
Heteroptera	Miridae	Atractotomus kolenatii (Flor, 1860)	D		ss	*3
Heteroptera	Miridae	Atractotomus magnicornis (Fallén, 1807)	*		sh	*3
Heteroptera	Miridae	Atractotomus mali (Meyer-Dür, 1843)	*		h	*3
Heteroptera	Miridae	Atractotomus marcoi Carapezza, 1982	R		es	*3
Heteroptera	Miridae	Atractotomus parvulus Reuter, 1878	*		mh	*3
Heteroptera	Miridae	Atractotomus rhodani Fieber, 1861	1		es	*3
Heteroptera	Miridae	Blepharidopterus angulatus (Fallén, 1807)	*		sh	*3
Heteroptera	Miridae	Blepharidopterus diaphanus (Kirschbaum, 1856)	*		mh	*3
Heteroptera	Miridae	Bothynotus pilosus (Boheman, 1852)	G		ss	*3
Heteroptera	Miridae	Brachyarthrum limitatum Fieber, 1858	3		s	*3
Heteroptera	Miridae	Brachycoleus decolor Reuter, 1887	2		ss	*3
Heteroptera	Miridae	Brachycoleus pilicornis pilicornis (Panzer, 1805)	3		s	*3
Heteroptera	Miridae	Brachynotocoris puncticornis Reuter, 1880	*		s	*3
Heteroptera	Miridae	Bryocoris pteridis (Fallén, 1807)	*		h	*3
Heteroptera	Miridae	Calocoris affinis (Herrich-Schaeffer, 1835)	*		h	*3
Heteroptera	Miridae	Calocoris alpestris (Meyer-Dür, 1843)	2		ss	*3
Heteroptera	Miridae	Calocoris nemoralis (Fabricius, 1787)	0	1950	ex	*3
Heteroptera	Miridae	Calocoris roseomaculatus roseomaculatus (De Geer, 1773)	*		mh	*3
Heteroptera	Miridae	Camptozygum aequale (Villers, 1789)	*		h	*3
Heteroptera	Miridae	Camptozygum pumilio Reuter, 1902	D		ss	*3
Heteroptera	Miridae	Campylomma annulicorne (Signoret, 1865)	*		s	*3
Heteroptera	Miridae	Campylomma verbasci (Meyer-Dür, 1843)	*		h	*3
Heteroptera	Miridae	Campyloneura virgula (Herrich-Schaeffer, 1835)	*		h	*3
Heteroptera	Miridae	Capsodes flavomarginatus (Donovan, 1798)	G		ss	*3
Heteroptera	Miridae	Capsodes gothicus gothicus (Linnaeus, 1758)	*		h	*3
Heteroptera	Miridae	Capsus ater (Linnaeus, 1758)	*		sh	*3
Heteroptera	Miridae	Capsus pilifer (Remane, 1950)	2		ss	*3
Heteroptera	Miridae	Capsus wagneri (Remane, 1950)	3		s	*3
Heteroptera	Miridae	Charagochilus gyllenhalii (Fallén, 1807)	*		sh	*3
Heteroptera	Miridae	Charagochilus spiralifer Kerzhner, 1988	D		s	*3
Heteroptera	Miridae	Charagochilus weberi Wagner, 1953	D		?	*3
Heteroptera	Miridae	Chlamydatus evanescens (Boheman, 1852)	*		h	*3
Heteroptera	Miridae	Chlamydatus pulicarius (Fallén, 1807)	*		sh	*3
Heteroptera	Miridae	Chlamydatus pullus (Reuter, 1870)	*		sh	*3
Heteroptera	Miridae	Chlamydatus saltitans (Fallén, 1807)	*		mh	*3

Order	Family	Species	K	L	P	S
Heteroptera	Miridae	Closterotomus biclavatus biclavatus (Herrich-Schaeffer, 1835)	*		h	*3
Heteroptera	Miridae	Closterotomus fulvomaculatus (De Geer, 1773)	*		h	*3
Heteroptera	Miridae	Closterotomus norwegicus (Gmelin, 1790)	*		sh	*3
Heteroptera	Miridae	Closterotomus trivialis (A. Costa, 1853)	nb		nb	*3
Heteroptera	Miridae	Compsidolon salicellum (Herrich-Schaeffer, 1841)	*		h	*3
Heteroptera	Miridae	Conostethus griseus Douglas & Scott, 1870	G		s	*3
Heteroptera	Miridae	Conostethus roseus (Fallén, 1807)	3		s	*3
Heteroptera	Miridae	Conostethus venustus venustus (Fieber, 1858)	*		s	*3
Heteroptera	Miridae	Cremnocephalus albolineatus Reuter, 1875	*		mh	*3
Heteroptera	Miridae	Cremnocephalus alpestris Wagner, 1941	*		mh	*3
Heteroptera	Miridae	Criocoris crassicornis (Hahn, 1834)	*		sh	*3
Heteroptera	Miridae	Criocoris nigricornis Reuter, 1894	1		es	*3
Heteroptera	Miridae	Criocoris nigripes Fieber, 1861	2		ss	*3
Heteroptera	Miridae	Criocoris sulcicornis (Kirschbaum, 1856)	1		es	*3
Heteroptera	Miridae	Cyllecoris histrionius (Linnaeus, 1767)	*		sh	*3
Heteroptera	Miridae	Cyrtorhinus caricis (Fallén, 1807)	2		ss	*3
Heteroptera	Miridae	Deraeocoris annulipes (Herrich-Schaeffer, 1842)	*		h	*3
Heteroptera	Miridae	Deraeocoris cordiger (Hahn, 1834)	V		s	*3
Heteroptera	Miridae	Deraeocoris flavilinea (A. Costa, 1862)	*		h	*3
Heteroptera	Miridae	Deraeocoris lutescens (Schilling, 1837)	*		sh	*3
Heteroptera	Miridae	Deraeocoris morio (Boheman, 1852)	2		ss	*3
Heteroptera	Miridae	Deraeocoris olivaceus (Fabricius, 1777)	*		mh	*3
Heteroptera	Miridae	Deraeocoris punctulatus (Fallén, 1807)	3		s	*3
Heteroptera	Miridae	Deraeocoris ruber (Linnaeus, 1758)	*		sh	*3
Heteroptera	Miridae	Deraeocoris scutellaris (Fabricius, 1794)	2		ss	*3
Heteroptera	Miridae	Deraeocoris serenus (Douglas & Scott, 1868)	D		?	*3
Heteroptera	Miridae	Deraeocoris trifasciatus (Linnaeus, 1767)	*		mh	*3
Heteroptera	Miridae	Deraeocoris ventralis ventralis Reuter, 1904	R		es	*3
Heteroptera	Miridae	Dichrooscytus gustavi Josifov, 1981	*		mh	*3
Heteroptera	Miridae	Dichrooscytus intermedius Reuter, 1885	*		h	*3
Heteroptera	Miridae	Dichrooscytus rufipennis (Fallén, 1807)	*		h	*3
Heteroptera	Miridae	Dicyphus annulatus (Wolff, 1804)	*		h	*3
Heteroptera	Miridae	Dicyphus botrydis Rieger, 2002	2		es	*3
Heteroptera	Miridae	Dicyphus constrictus constrictus (Boheman, 1852)	*		ss	*3
Heteroptera	Miridae	Dicyphus epilobii Reuter, 1883	*		h	*3
Heteroptera	Miridae	Dicyphus errans (Wolff, 1804)	*		sh	*3
Heteroptera	Miridae	Dicyphus escalerae Lindberg, 1934	nb		nb	*3
Heteroptera	Miridae	Dicyphus globulifer (Fallén, 1829)	*		h	*3
Heteroptera	Miridae	Dicyphus hyalinipennis (Burmeister, 1835)	*		mh	*3
Heteroptera	Miridae	Dicyphus pallicornis (Fieber, 1861)	*		h	*3
Heteroptera	Miridae	Dicyphus pallidus (Herrich-Schaeffer, 1836)	*		h	*3
Heteroptera	Miridae	Dicyphus stachydis stachydis J. Sahlberg, 1878	*		s	*3
Heteroptera	Miridae	Dryophilocoris flavoquadrimaculatus (De Geer, 1773)	*		sh	*3
Heteroptera	Miridae	Europiella albipennis (Fallén, 1829)	G		s	*3
Heteroptera	Miridae	Europiella alpina (Reuter, 1875)	V		s	*3
Heteroptera	Miridae	Europiella artemisiae (Becker, 1864)	*		sh	*3
Heteroptera	Miridae	Europiella decolor (Uhler, 1893)	G		mh	*3
Heteroptera	Miridae	Eurycolpus flaveolus (Stål, 1858)	3		s	*3
Heteroptera	Miridae	Euryopicoris nitidus (Meyer-Dür, 1843)	1		es	*3
Heteroptera	Miridae	Excentricus planicornis (Herrich-Schaeffer, 1836)	1		es	*3
Heteroptera	Miridae	Fieberocapsus flaveolus (Reuter, 1870)	2		ss	*3
Heteroptera	Miridae	Globiceps flavomaculatus (Fabricius, 1794)	*		h	*3
Heteroptera	Miridae	Globiceps fulvicollis Jakovlev, 1877	*		h	*3
Heteroptera	Miridae	Globiceps juniperi Reuter, 1902	2		ss	*3
Heteroptera	Miridae	Globiceps sphaegiformis (Rossi, 1790)	*		s	*3
Heteroptera	Miridae	Grypocoris sexguttatus (Fabricius, 1777)	*		s	*3
Heteroptera	Miridae	Hadrodemus m-flavum (Goeze, 1778)	*		mh	*3
Heteroptera	Miridae	Hallodapus montandoni Reuter, 1895	0	1974	ex	*3
Heteroptera	Miridae	Hallodapus rufescens (Burmeister, 1835)	2		ss	*3
Heteroptera	Miridae	Halticus apterus apterus (Linnaeus, 1758)	*		sh	*3
Heteroptera	Miridae	Halticus luteicollis (Panzer, 1804)	*		mh	*3
Heteroptera	Miridae	Halticus macrocephalus Fieber, 1858	0	1971	ex	*3
Heteroptera	Miridae	Halticus major Wagner, 1951	D		?	*3
Heteroptera	Miridae	Halticus pusillus (Herrich-Schaeffer, 1835)	G		ss	*3
Heteroptera	Miridae	Halticus saltator (Geoffroy, 1785)	2		ss	*3
Heteroptera	Miridae	Harpocera thoracica (Fallén, 1807)	*		sh	*3
Heteroptera	Miridae	Heterocordylus erythropthalmus erythropthalmus (Hahn, 1833)	V		s	*3
Heteroptera	Miridae	Heterocordylus genistae (Scopoli, 1763)	G		s	*3
Heteroptera	Miridae	Heterocordylus leptocerus (Kirschbaum, 1856)	1		es	*3
Heteroptera	Miridae	Heterocordylus tibialis (Hahn, 1833)	*		h	*3
Heteroptera	Miridae	Heterocordylus tumidicornis (Herrich-Schaeffer, 1835)	*		h	*3
Heteroptera	Miridae	Heterotoma merioptera (Scopoli, 1763)	R		es	*3
Heteroptera	Miridae	Heterotoma planicornis (Pallas, 1772)	*		sh	*3
Heteroptera	Miridae	Hoplomachus thunbergii (Fallén, 1807)	V		mh	*3
Heteroptera	Miridae	Horistus orientalis (Gmelin, 1790)	V		mh	*3
Heteroptera	Miridae	Horwathia lineolata (A. Costa, 1862)	1		es	*3
Heteroptera	Miridae	Hypseloecus visci (Puton, 1888)	*		s	*3
Heteroptera	Miridae	Icodema infuscata (Fieber, 1861)	R		es	*3
Heteroptera	Miridae	Isometopus intrusus (Herrich-Schaeffer, 1835)	*		mh	*3
Heteroptera	Miridae	Isometopus mirificus Mulsant & Rey, 1879	D		ss	*3

Order	Family	Species	K	L	P	S
Heteroptera	Miridae	Lepidargyrus ancorifer (Fieber, 1858)	V		s	*3
Heteroptera	Miridae	Leptopterna dolabrata (Linnaeus, 1758)	*		sh	*3
Heteroptera	Miridae	Leptopterna ferrugata (Fallén, 1807)	*		mh	*3
Heteroptera	Miridae	Liocoris tripustulatus (Fabricius, 1781)	*		sh	*3
Heteroptera	Miridae	Lopus decolor (Fallén, 1807)	*		sh	*3
Heteroptera	Miridae	Lopus longiceps (Flor, 1860)	1		es	*3
Heteroptera	Miridae	Lygocoris minor (Wagner, 1950)	G		ss	*3
Heteroptera	Miridae	Lygocoris pabulinus (Linnaeus, 1761)	*		sh	*3
Heteroptera	Miridae	Lygocoris rugicollis (Fallén, 1807)	*		mh	*3
Heteroptera	Miridae	Lygus gemellatus (Herrich-Schaeffer, 1835)	*		h	*3
Heteroptera	Miridae	Lygus maritimus Wagner, 1949	*		s	*3
Heteroptera	Miridae	Lygus pratensis (Linnaeus, 1758)	*		sh	*3
Heteroptera	Miridae	Lygus punctatus (Zetterstedt, 1838)	*		s	*3
Heteroptera	Miridae	Lygus rugulipennis Poppius, 1911	*		sh	*3
Heteroptera	Miridae	Lygus wagneri Remane, 1955	*		mh	*3
Heteroptera	Miridae	Macrolophus pygmaeus (Rambur, 1839)	*		h	*3
Heteroptera	Miridae	Macrolophus rubi Woodroffe, 1957	*		s	*3
Heteroptera	Miridae	Macrotylus herrichi (Reuter, 1873)	V		s	*3
Heteroptera	Miridae	Macrotylus horvathi (Reuter, 1876)	*		s	*3
Heteroptera	Miridae	Macrotylus paykullii (Fallén, 1807)	*		h	*3
Heteroptera	Miridae	Macrotylus quadrilineatus (Schrank, 1785)	3		ss	*3
Heteroptera	Miridae	Macrotylus solitarius (Meyer-Dür, 1843)	3		s	*3
Heteroptera	Miridae	Malacocoris chlorizans (Panzer, 1794)	*		h	*3
Heteroptera	Miridae	Mecomma ambulans ambulans (Fallén, 1807)	V		mh	*3
Heteroptera	Miridae	Mecomma dispar (Boheman, 1852)	2		ss	*3
Heteroptera	Miridae	Megacoelum beckeri (Fieber, 1870)	*		s	*3
Heteroptera	Miridae	Megacoelum infusum (Herrich-Schaeffer, 1837)	*		mh	*3
Heteroptera	Miridae	Megaloceroea recticornis (Geoffroy, 1785)	*		sh	*3
Heteroptera	Miridae	Megalocoleus exsanguis (Herrich-Schaeffer, 1835)	1		es	*3
Heteroptera	Miridae	Megalocoleus molliculus (Fallén, 1807)	*		sh	*3
Heteroptera	Miridae	Megalocoleus naso (Reuter, 1879)	D		?	*3
Heteroptera	Miridae	Megalocoleus tanaceti (Fallén, 1807)	*		sh	*3
Heteroptera	Miridae	Mermitelocerus schmidtii (Fieber, 1836)	*		mh	*3
Heteroptera	Miridae	Miridius quadrivirgatus (A. Costa, 1853)	R		es	*3
Heteroptera	Miridae	Miris striatus (Linnaeus, 1758)	*		h	*3
Heteroptera	Miridae	Monalocoris filicis (Linnaeus, 1758)	*		h	*3
Heteroptera	Miridae	Monosynamma bohemanni (Fallén, 1829)	*		mh	*3
Heteroptera	Miridae	Monosynamma maritimum (Wagner, 1947)	D		?	*3
Heteroptera	Miridae	Monosynamma sabulicola (Wagner, 1947)	D		?	*3
Heteroptera	Miridae	Myrmecoris gracilis (R.F. Sahlberg, 1848)	V		s	*3
Heteroptera	Miridae	Neolygus contaminatus (Fallén, 1807)	*		h	*3
Heteroptera	Miridae	Neolygus viridis (Fallén, 1807)	*		h	*3
Heteroptera	Miridae	Neolygus zebei (Günther, 1997)	*		s	*3
Heteroptera	Miridae	Notostira elongata (Geoffroy, 1785)	*		sh	*3
Heteroptera	Miridae	Notostira erratica (Linnaeus, 1758)	*		mh	*3
Heteroptera	Miridae	Omphalonotus quadriguttatus (Kirschbaum, 1856)	3		s	*3
Heteroptera	Miridae	Oncotylus punctipes Reuter, 1875	*		sh	*3
Heteroptera	Miridae	Oncotylus viridiflavus viridiflavus (Goeze, 1778)	3		ss	*3
Heteroptera	Miridae	Orthocephalus brevis (Panzer, 1798)	1		es	*3
Heteroptera	Miridae	Orthocephalus coriaceus (Fabricius, 1777)	*		h	*3
Heteroptera	Miridae	Orthocephalus saltator (Hahn, 1835)	*		mh	*3
Heteroptera	Miridae	Orthocephalus vittipennis (Herrich-Schaeffer, 1835)	R		es	*3
Heteroptera	Miridae	Orthonotus rufifrons (Fallén, 1807)	*		h	*3
Heteroptera	Miridae	Orthops basalis (A. Costa, 1853)	*		sh	*3
Heteroptera	Miridae	Orthops campestris (Linnaeus, 1758)	*		h	*3
Heteroptera	Miridae	Orthops forelii Fieber, 1858	1		es	*3
Heteroptera	Miridae	Orthops kalmii (Linnaeus, 1758)	*		h	*3
Heteroptera	Miridae	Orthops montanus (Schilling, 1837)	2		ss	*3
Heteroptera	Miridae	Orthotylus adenocarpi adenocarpi (Perris, 1857)	*		mh	*3
Heteroptera	Miridae	Orthotylus bilineatus (Fallén, 1807)	G		s	*3
Heteroptera	Miridae	Orthotylus caprai Wagner, 1955	nb		nb	*3
Heteroptera	Miridae	Orthotylus concolor (Kirschbaum, 1856)	*		mh	*3
Heteroptera	Miridae	Orthotylus ericetorum ericetorum (Fallén, 1807)	*		mh	*3
Heteroptera	Miridae	Orthotylus flavinervis (Kirschbaum, 1856)	*		mh	*3
Heteroptera	Miridae	Orthotylus flavosparsus (C.R. Sahlberg, 1841)	*		sh	*3
Heteroptera	Miridae	Orthotylus fuscescens (Kirschbaum, 1856)	V		s	*3
Heteroptera	Miridae	Orthotylus interpositus Schmidt, 1938	*		s	*3
Heteroptera	Miridae	Orthotylus marginalis Reuter, 1883	*		sh	*3
Heteroptera	Miridae	Orthotylus moncreaffi (Douglas & Scott, 1874)	G		s	*3
Heteroptera	Miridae	Orthotylus nassatus (Fabricius, 1787)	*		h	*3
Heteroptera	Miridae	Orthotylus obscurus Reuter, 1875	R		es	*3
Heteroptera	Miridae	Orthotylus prasinus (Fallén, 1826)	*		mh	*3
Heteroptera	Miridae	Orthotylus rubidus (Puton, 1874)	2		ss	*3
Heteroptera	Miridae	Orthotylus schoberiae Reuter, 1876	1		es	*3
Heteroptera	Miridae	Orthotylus tenellus tenellus (Fallén, 1807)	*		mh	*3
Heteroptera	Miridae	Orthotylus virens (Fallén, 1807)	3		s	*3
Heteroptera	Miridae	Orthotylus virescens (Douglas & Scott, 1865)	*		sh	*3
Heteroptera	Miridae	Orthotylus viridinervis (Kirschbaum, 1856)	*		mh	*3
Heteroptera	Miridae	Pachypterna fieberi Fieber, 1858	R		es	*3
Heteroptera	Miridae	Pachytomella parallela (Meyer-Dür, 1843)	V		s	*3

Order	Family	Species	K	L	P	S
Heteroptera	Miridae	Pantilius tunicatus (Fabricius, 1781)	*		h	*3
Heteroptera	Miridae	Phoenicocoris dissimilis (Reuter, 1878)	V		s	*3
Heteroptera	Miridae	Phoenicocoris modestus (Meyer-Dür, 1843)	*		mh	*3
Heteroptera	Miridae	Phoenicocoris obscurellus (Fallén, 1829)	*		h	*3
Heteroptera	Miridae	Phylus coryli (Linnaeus, 1758)	*		sh	*3
Heteroptera	Miridae	Phylus melanocephalus (Linnaeus, 1767)	*		sh	*3
Heteroptera	Miridae	Phylus plagiatus (Herrich-Schaeffer, 1835)	D		ss	*3
Heteroptera	Miridae	Phytocoris austriacus Wagner, 1954	G		s	*3
Heteroptera	Miridae	Phytocoris confusus Reuter, 1896	R		es	*3
Heteroptera	Miridae	Phytocoris dimidiatus Kirschbaum, 1856	*		h	*3
Heteroptera	Miridae	Phytocoris hirsutulus Flor, 1861	2		s	*3
Heteroptera	Miridae	Phytocoris insignis Reuter, 1876	G		s	*3
Heteroptera	Miridae	Phytocoris intricatus Flor, 1861	*		mh	*3
Heteroptera	Miridae	Phytocoris jordani Wagner, 1954	2		ss	*3
Heteroptera	Miridae	Phytocoris juniperi Frey-Gessner, 1865	2		es	*3
Heteroptera	Miridae	Phytocoris longipennis Flor, 1861	*		mh	*3
Heteroptera	Miridae	Phytocoris meridionalis Herrich-Schaeffer, 1835	R		es	*3
Heteroptera	Miridae	Phytocoris minor Kirschbaum, 1856	1		es	*3
Heteroptera	Miridae	Phytocoris nowickyi Fieber, 1870	D		ss	*3
Heteroptera	Miridae	Phytocoris parvulus Reuter, 1880	nb		nb	*3
Heteroptera	Miridae	Phytocoris pini Kirschbaum, 1856	*		h	*3
Heteroptera	Miridae	Phytocoris populi (Linnaeus, 1758)	V		s	*3
Heteroptera	Miridae	Phytocoris reuteri Saunders, 1876	*		mh	*3
Heteroptera	Miridae	Phytocoris tiliae tiliae (Fabricius, 1777)	*		h	*3
Heteroptera	Miridae	Phytocoris ulmi (Linnaeus, 1758)	*		h	*3
Heteroptera	Miridae	Phytocoris varipes Boheman, 1852	*		sh	*3
Heteroptera	Miridae	Pilophorus cinnamopterus (Kirschbaum, 1856)	*		h	*3
Heteroptera	Miridae	Pilophorus clavatus (Linnaeus, 1767)	*		h	*3
Heteroptera	Miridae	Pilophorus confusus (Kirschbaum, 1856)	*		mh	*3
Heteroptera	Miridae	Pilophorus perplexus Douglas & Scott, 1875	*		h	*3
Heteroptera	Miridae	Pilophorus simulans Josifov, 1989	*		s	*3
Heteroptera	Miridae	Pinalitus atomarius (Meyer-Dür, 1843)	D		mh	*3
Heteroptera	Miridae	Pinalitus cervinus (Herrich-Schaeffer, 1841)	*		h	*3
Heteroptera	Miridae	Pinalitus rubricatus (Fallén, 1807)	*		h	*3
Heteroptera	Miridae	Pinalitus viscicola (Puton, 1888)	*		mh	*3
Heteroptera	Miridae	Pithanus hrabei Stehlík 1952	R		es	*3
Heteroptera	Miridae	Pithanus maerkelii (Herrich-Schaeffer, 1838)	*		mh	*3
Heteroptera	Miridae	Placochilus seladonicus seladonicus (Fallén, 1807)	3		s	*3
Heteroptera	Miridae	Plagiognathus arbustorum arbustorum (Fabricius, 1794)	*		sh	*3
Heteroptera	Miridae	Plagiognathus chrysanthemi (Wolff, 1804)	*		sh	*3
Heteroptera	Miridae	Plagiognathus fulvipennis (Kirschbaum, 1856)	3		s	*3
Heteroptera	Miridae	Plagiognathus vitellinus (Scholtz, 1847)	*		h	*3
Heteroptera	Miridae	Plesiodema pinetella (Zetterstedt, 1828)	*		mh	*3
Heteroptera	Miridae	Polymerus asperulae (Fieber, 1861)	1		es	*3
Heteroptera	Miridae	Polymerus brevicornis (Reuter, 1879)	2		ss	*3
Heteroptera	Miridae	Polymerus carpathicus (Horváth, 1882)	2		ss	*3
Heteroptera	Miridae	Polymerus cognatus (Fieber, 1858)	V		s	*3
Heteroptera	Miridae	Polymerus holosericeus Hahn, 1831	*		mh	*3
Heteroptera	Miridae	Polymerus lammesi Rinne, 1989	D		?	*3
Heteroptera	Miridae	Polymerus microphthalmus (Wagner, 1951)	*		mh	*3
Heteroptera	Miridae	Polymerus nigrita (Fallén, 1807)	*		h	*3
Heteroptera	Miridae	Polymerus palustris (Reuter, 1907)	3		s	*3
Heteroptera	Miridae	Polymerus unifasciatus (Fabricius, 1794)	*		sh	*3
Heteroptera	Miridae	Polymerus vulneratus (Panzer, 1806)	3		s	*3
Heteroptera	Miridae	Psallodema fieberi (Fieber, 1864)	1		ss	*3
Heteroptera	Miridae	Psallus aethiops (Zetterstedt, 1838)	D		ss	*3
Heteroptera	Miridae	Psallus albicinctus (Kirschbaum, 1856)	*		mh	*3
Heteroptera	Miridae	Psallus ambiguus (Fallén, 1807)	*		h	*3
Heteroptera	Miridae	Psallus assimilis Stichel, 1956	*		mh	*3
Heteroptera	Miridae	Psallus betuleti (Fallén, 1826)	*		s	*3
Heteroptera	Miridae	Psallus confusus Rieger, 1981	*		mh	*3
Heteroptera	Miridae	Psallus cruentatus (Mulsant & Rey, 1852)	*		mh	*3
Heteroptera	Miridae	Psallus falleni Reuter, 1883	*		mh	*3
Heteroptera	Miridae	Psallus flavellus Stichel, 1933	*		h	*3
Heteroptera	Miridae	Psallus haematodes (Gmelin, 1790)	*		h	*3
Heteroptera	Miridae	Psallus lapponicus Reuter, 1874	R		es	*3
Heteroptera	Miridae	Psallus lepidus Fieber, 1858	*		h	*3
Heteroptera	Miridae	Psallus luridus Reuter, 1878	*		mh	*3
Heteroptera	Miridae	Psallus mollis (Mulsant & Rey, 1852)	*		h	*3
Heteroptera	Miridae	Psallus montanus Josifov, 1973	*		mh	*3
Heteroptera	Miridae	Psallus perrisi (Mulsant & Rey, 1852)	*		sh	*3
Heteroptera	Miridae	Psallus piceae Reuter, 1878	*		mh	*3
Heteroptera	Miridae	Psallus pinicola Reuter, 1875	*		mh	*3
Heteroptera	Miridae	Psallus pseudoplatani Reichling, 1984	*		s	*3
Heteroptera	Miridae	Psallus punctulatus Puton, 1874	D		ss	*3
Heteroptera	Miridae	Psallus quercus (Kirschbaum, 1856)	G		s	*3
Heteroptera	Miridae	Psallus salicis (Kirschbaum, 1856)	*		s	*3
Heteroptera	Miridae	Psallus variabilis (Fallén, 1807)	*		h	*3
Heteroptera	Miridae	Psallus varians varians (Herrich-Schaeffer, 1841)	*		sh	*3
Heteroptera	Miridae	Psallus vittatus (Fieber, 1861)	D		ss	*3

Order	Family	Species	K	L	P	S
Heteroptera	Miridae	Psallus wagneri Ossiannilsson, 1953	*		h	*3
Heteroptera	Miridae	Pseudoloxops coccineus (Meyer-Dür, 1843)	*		mh	*3
Heteroptera	Miridae	Reuteria marqueti Puton, 1875	D		ss	*3
Heteroptera	Miridae	Rhabdomiris striatellus striatellus (Fabricius, 1794)	*		sh	*3
Heteroptera	Miridae	Salicarus roseri (Herrich-Schaeffer, 1838)	*		mh	*3
Heteroptera	Miridae	Stenodema algoviensis Schmidt, 1934	R		es	*3
Heteroptera	Miridae	Stenodema calcarata (Fallén, 1807)	*		sh	*3
Heteroptera	Miridae	Stenodema holsata (Fabricius, 1787)	*		h	*3
Heteroptera	Miridae	Stenodema laevigata (Linnaeus, 1758)	*		sh	*3
Heteroptera	Miridae	Stenodema sericans (Fieber, 1861)	G		ss	*3
Heteroptera	Miridae	Stenodema trispinosa Reuter, 1904	*		mh	*3
Heteroptera	Miridae	Stenodema virens (Linnaeus, 1767)	V		mh	*3
Heteroptera	Miridae	Stenotus binotatus (Fabricius, 1794)	*		sh	*3
Heteroptera	Miridae	Sthenarus rotermundi (Scholtz, 1847)	*		mh	*3
Heteroptera	Miridae	Strongylocoris atrocoeruleus (Fieber, 1864)	2		ss	*3
Heteroptera	Miridae	Strongylocoris leucocephalus (Linnaeus, 1758)	G		s	*3
Heteroptera	Miridae	Strongylocoris luridus (Fallén, 1807)	3		s	*3
Heteroptera	Miridae	Strongylocoris niger (Herrich-Schaeffer, 1835)	3		s	*3
Heteroptera	Miridae	Strongylocoris steganoides (J. Sahlberg, 1875)	*		mh	*3
Heteroptera	Miridae	Systellonotus triguttatus (Linnaeus, 1767)	V		mh	*3
Heteroptera	Miridae	Teratocoris antennatus (Boheman, 1852)	V		mh	*3
Heteroptera	Miridae	Teratocoris paludum J. Sahlberg, 1870	3		s	*3
Heteroptera	Miridae	Teratocoris saundersi Douglas & Scott, 1869	2		ss	*3
Heteroptera	Miridae	Tinicephalus hortulanus (Meyer-Dür, 1843)	V		mh	*3
Heteroptera	Miridae	Trigonotylus caelestialium (Kirkaldy, 1902)	*		sh	*3
Heteroptera	Miridae	Trigonotylus psammaecolor Reuter, 1885	2		ss	*3
Heteroptera	Miridae	Trigonotylus pulchellus (Hahn, 1834)	2		ss	*3
Heteroptera	Miridae	Trigonotylus ruficornis (Geoffroy, 1785)	G		s	*3
Heteroptera	Miridae	Tupiocoris rhododendri (Dolling, 1972)	nb		nb	*3
Heteroptera	Miridae	Tuponia brevirostris Reuter, 1883	nb		nb	*3
Heteroptera	Miridae	Tuponia hippophaes (Fieber, 1861)	1		es	*3
Heteroptera	Miridae	Tuponia mixticolor (A. Costa, 1862)	nb		nb	*3
Heteroptera	Miridae	Tytthus pubescens (Knight, 1931)	2		ss	*3
Heteroptera	Miridae	Tytthus pygmaeus (Zetterstedt, 1838)	V		mh	*3
Heteroptera	Nabidae	Alloeorhynchus flavipes (Fieber, 1836)	2		ss	*3
Heteroptera	Nabidae	Himacerus apterus (Fabricius, 1798)	*		sh	*3
Heteroptera	Nabidae	Himacerus boops (Schiødte, 1870)	3		s	*3
Heteroptera	Nabidae	Himacerus major (A. Costa, 1842)	*		mh	*3
Heteroptera	Nabidae	Himacerus mirmicoides (O. Costa, 1834)	*		sh	*3
Heteroptera	Nabidae	Nabis brevis brevis Scholtz, 1847	*		h	*3
Heteroptera	Nabidae	Nabis ericetorum Scholtz, 1847	*		mh	*3
Heteroptera	Nabidae	Nabis ferus (Linnaeus, 1758)	*		sh	*3
Heteroptera	Nabidae	Nabis flavomarginatus Scholtz, 1847	*		mh	*3
Heteroptera	Nabidae	Nabis limbatus Dahlbom, 1851	*		mh	*3
Heteroptera	Nabidae	Nabis lineatus Dahlbom, 1851	3		s	*3
Heteroptera	Nabidae	Nabis pseudoferus pseudoferus Remane, 1949	*		sh	*3
Heteroptera	Nabidae	Nabis punctatus punctatus A. Costa, 1847	V		s	*3
Heteroptera	Nabidae	Nabis rugosus (Linnaeus, 1758)	*		sh	*3
Heteroptera	Nabidae	Prostemma guttula guttula (Fabricius, 1787)	V		mh	*3
Heteroptera	Nabidae	Prostemma sanguineum (Rossi, 1790)	1		es	*3
Heteroptera	Naucoridae	Ilyocoris cimicoides cimicoides (Linnaeus, 1758)	*		h	*3
Heteroptera	Nepidae	Nepa cinerea Linnaeus, 1758	*		h	*3
Heteroptera	Nepidae	Ranatra linearis (Linnaeus, 1758)	*		mh	*3
Heteroptera	Notonectidae	Notonecta glauca glauca Linnaeus, 1758	*		sh	*3
Heteroptera	Notonectidae	Notonecta lutea Müller, 1776	G		s	*3
Heteroptera	Notonectidae	Notonecta maculata Fabricius, 1794	*		mh	*3
Heteroptera	Notonectidae	Notonecta obliqua Thunberg, 1787	3		mh	*3
Heteroptera	Notonectidae	Notonecta reuteri reuteri Hungerford, 1928	2		s	*3
Heteroptera	Notonectidae	Notonecta viridis Delcourt, 1909	*		h	*3
Heteroptera	Oxycarenidae	Camptotelus lineolatus lineolatus (Schilling, 1829)	1		es	*3
Heteroptera	Oxycarenidae	Macroplax fasciata fasciata (Herrich-Schaeffer, 1835)	0	1938	ex	*3
Heteroptera	Oxycarenidae	Macroplax preyssleri (Fieber, 1837)	3		s	*3
Heteroptera	Oxycarenidae	Metopoplax ditomoides (A. Costa, 1847)	*		h	*3
Heteroptera	Oxycarenidae	Metopoplax fuscinervis Stål, 1872	D		?	*3
Heteroptera	Oxycarenidae	Metopoplax origani (Kolenati, 1845)	D		?	*3
Heteroptera	Oxycarenidae	Microplax albofasciata (A. Costa, 1847)	D		?	*3
Heteroptera	Oxycarenidae	Microplax interrupta (Fieber, 1837)	R		es	*3
Heteroptera	Oxycarenidae	Oxycarenus lavaterae (Fabricius, 1787)	*		s	*3
Heteroptera	Oxycarenidae	Oxycarenus modestus (Fallén, 1829)	*		mh	*3
Heteroptera	Oxycarenidae	Oxycarenus pallens (Herrich-Schaeffer, 1850)	*		s	*3
Heteroptera	Oxycarenidae	Philomyrmex insignis R.F. Sahlberg, 1848	2		es	*3
Heteroptera	Oxycarenidae	Tropidophlebia costalis (Herrich-Schaeffer, 1850)	1		es	*3
Heteroptera	Pentatomidae	Aelia acuminata (Linnaeus, 1758)	*		sh	*3
Heteroptera	Pentatomidae	Aelia klugii Hahn, 1833	V		s	*3
Heteroptera	Pentatomidae	Aelia rostrata Boheman, 1852	0	1953	ex	*3
Heteroptera	Pentatomidae	Antheminia lunulata (Goeze, 1778)	2		ss	*3
Heteroptera	Pentatomidae	Arma custos (Fabricius, 1794)	*		mh	*3
Heteroptera	Pentatomidae	Carpocoris fuscispinus (Boheman, 1851)	*		h	*3
Heteroptera	Pentatomidae	Carpocoris melanocerus Mulsant & Rey, 1852	R		es	*3
Heteroptera	Pentatomidae	Carpocoris pudicus (Poda, 1761)	2		ss	*3

Order	Family	Species	K	L	P	S
Heteroptera	Pentatomidae	Carpocoris purpureipennis (De Geer, 1773)	*		sh	*3
Heteroptera	Pentatomidae	Chlorochroa juniperina juniperina (Linnaeus, 1758)	G		s	*3
Heteroptera	Pentatomidae	Chlorochroa pinicola (Mulsant & Rey, 1852)	*		mh	*3
Heteroptera	Pentatomidae	Dolycoris baccarum (Linnaeus, 1758)	*		sh	*3
Heteroptera	Pentatomidae	Dyroderes umbraculatus (Fabricius, 1775)	D		?	*3
Heteroptera	Pentatomidae	Eurydema dominulus (Scopoli, 1763)	V		mh	*3
Heteroptera	Pentatomidae	Eurydema fieberi Fieber, 1837	1		es	*3
Heteroptera	Pentatomidae	Eurydema oleracea (Linnaeus, 1758)	*		sh	*3
Heteroptera	Pentatomidae	Eurydema ornata (Linnaeus, 1758)	*		mh	*3
Heteroptera	Pentatomidae	Eurydema rotundicollis (Dohrn, 1860)	R		es	*3
Heteroptera	Pentatomidae	Eurydema ventralis Kolenati, 1846	R		es	*3
Heteroptera	Pentatomidae	Eysarcoris aeneus (Scopoli, 1763)	*		mh	*3
Heteroptera	Pentatomidae	Eysarcoris venustissimus (Schrank, 1776)	*		h	*3
Heteroptera	Pentatomidae	Graphosoma lineatum (Linnaeus, 1758)	*		sh	*3
Heteroptera	Pentatomidae	Halyomorpha halys (Stål, 1855)	nb		nb	*3
Heteroptera	Pentatomidae	Holcostethus sphacelatus (Fabricius, 1794)	V		s	*3
Heteroptera	Pentatomidae	Jalla dumosa (Linnaeus, 1758)	2		ss	*3
Heteroptera	Pentatomidae	Menaccarus arenicola (Scholtz, 1847)	R		es	*3
Heteroptera	Pentatomidae	Neottiglossa leporina (Herrich-Schaeffer, 1830)	*		h	*3
Heteroptera	Pentatomidae	Neottiglossa lineolata (Mulsant & Rey, 1852)	D		?	*3
Heteroptera	Pentatomidae	Neottiglossa pusilla (Gmelin, 1790)	*		h	*3
Heteroptera	Pentatomidae	Nezara viridula (Linnaeus, 1758)	nb		nb	*3
Heteroptera	Pentatomidae	Palomena prasina (Linnaeus, 1761)	*		sh	*3
Heteroptera	Pentatomidae	Palomena viridissima (Poda, 1761)	3		s	*3
Heteroptera	Pentatomidae	Pentatoma rufipes (Linnaeus, 1758)	*		sh	*3
Heteroptera	Pentatomidae	Peribalus strictus strictus (Fabricius, 1803)	*		sh	*3
Heteroptera	Pentatomidae	Picromerus bidens (Linnaeus, 1758)	*		h	*3
Heteroptera	Pentatomidae	Piezodorus lituratus (Fabricius, 1794)	*		sh	*3
Heteroptera	Pentatomidae	Pinthaeus sanguinipes (Fabricius, 1781)	*		ss	*3
Heteroptera	Pentatomidae	Podops inunctus (Fabricius, 1775)	*		mh	*3
Heteroptera	Pentatomidae	Rhacognathus punctatus (Linnaeus, 1758)	V		s	*3
Heteroptera	Pentatomidae	Rhaphigaster nebulosa (Poda, 1761)	*		h	*3
Heteroptera	Pentatomidae	Rubiconia intermedia (Wolff, 1811)	3		s	*3
Heteroptera	Pentatomidae	Sciocoris cursitans cursitans (Fabricius, 1794)	*		sh	*3
Heteroptera	Pentatomidae	Sciocoris distinctus Fieber, 1851	0	1900	ex	*3
Heteroptera	Pentatomidae	Sciocoris homalonotus Fieber, 1851	3		ss	*3
Heteroptera	Pentatomidae	Sciocoris macrocephalus Fieber, 1851	1		es	*3
Heteroptera	Pentatomidae	Sciocoris microphthalmus Flor, 1860	G		s	*3
Heteroptera	Pentatomidae	Sciocoris umbrinus (Wolff, 1804)	2		s	*3
Heteroptera	Pentatomidae	Stagonomus bipunctatus (Linnaeus, 1758)	G		s	*3
Heteroptera	Pentatomidae	Staria lunata (Hahn, 1835)	G		s	*3
Heteroptera	Pentatomidae	Troilus luridus (Fabricius, 1775)	*		mh	*3
Heteroptera	Pentatomidae	Zicrona caerulea (Linnaeus, 1758)	*		mh	*3
Heteroptera	Piesmatidae	Parapiesma quadratum (Fieber, 1844)	*		mh	*3
Heteroptera	Piesmatidae	Parapiesma salsolae (Becker, 1867)	3		ss	*3
Heteroptera	Piesmatidae	Parapiesma silenes (Horváth, 1888)	1		es	*3
Heteroptera	Piesmatidae	Parapiesma variabile (Fieber, 1844)	G		ss	*3
Heteroptera	Piesmatidae	Piesma capitatum (Wolff, 1804)	*		mh	*3
Heteroptera	Piesmatidae	Piesma maculatum (Laporte, 1833)	*		sh	*3
Heteroptera	Plataspidae	Coptosoma scutellatum (Geoffroy, 1785)	*		mh	*3
Heteroptera	Pleidae	Plea minutissima minutissima Leach, 1817	*		sh	*3
Heteroptera	Pyrrhocoridae	Pyrrhocoris apterus (Linnaeus, 1758)	*		sh	*3
Heteroptera	Pyrrhocoridae	Pyrrhocoris marginatus (Kolenati, 1845)	1		es	*3
Heteroptera	Reduviidae	Coranus aethiops Jakovlev 1893	2		es	*3
Heteroptera	Reduviidae	Coranus subapterus (De Geer, 1773)	V		mh	*3
Heteroptera	Reduviidae	Coranus woodroffei P.V. Putshkov, 1982	3		s	*3
Heteroptera	Reduviidae	Empicoris baerensprungi (Dohrn, 1863)	3		ss	*3
Heteroptera	Reduviidae	Empicoris culiciformis (De Geer, 1773)	*		mh	*3
Heteroptera	Reduviidae	Empicoris vagabundus (Linnaeus, 1758)	*		mh	*3
Heteroptera	Reduviidae	Peirates hybridus (Scopoli, 1763)	1		es	*3
Heteroptera	Reduviidae	Phymata crassipes (Fabricius, 1775)	V		s	*3
Heteroptera	Reduviidae	Pygolampis bidentata (Goeze, 1778)	G		ss	*3
Heteroptera	Reduviidae	Reduvius personatus (Linnaeus, 1758)	*		mh	*3
Heteroptera	Reduviidae	Rhynocoris annulatus (Linnaeus, 1758)	*		mh	*3
Heteroptera	Reduviidae	Rhynocoris erythropus (Linnaeus, 1767)	2		es	*3
Heteroptera	Reduviidae	Rhynocoris iracundus (Poda, 1761)	G		s	*3
Heteroptera	Rhopalidae	Brachycarenus tigrinus (Schilling, 1829)	V		mh	*3
Heteroptera	Rhopalidae	Chorosoma schillingii (Schilling, 1829)	*		mh	*3
Heteroptera	Rhopalidae	Corizus hyoscyami hyoscyami (Linnaeus, 1758)	*		sh	*3
Heteroptera	Rhopalidae	Liorhyssus hyalinus (Fabricius, 1794)	*		s	*3
Heteroptera	Rhopalidae	Myrmus miriformis miriformis (Fallén, 1807)	*		h	*3
Heteroptera	Rhopalidae	Rhopalus conspersus (Fieber, 1837)	3		s	*3
Heteroptera	Rhopalidae	Rhopalus distinctus (Signoret, 1859)	2		ss	*3
Heteroptera	Rhopalidae	Rhopalus maculatus (Fieber, 1837)	V		mh	*3
Heteroptera	Rhopalidae	Rhopalus parumpunctatus Schilling, 1829	*		sh	*3
Heteroptera	Rhopalidae	Rhopalus rufus Schilling, 1829	D		?	*3
Heteroptera	Rhopalidae	Rhopalus subrufus (Gmelin, 1790)	*		h	*3
Heteroptera	Rhopalidae	Stictopleurus abutilon (Rossi, 1790)	*		sh	*3
Heteroptera	Rhopalidae	Stictopleurus crassicornis (Linnaeus, 1758)	*		mh	*3
Heteroptera	Rhopalidae	Stictopleurus pictus (Fieber, 1861)	G		ss	*3

Order	Family	Species	K	L	P	S
Heteroptera	Rhopalidae	Stictopleurus punctatonervosus (Goeze, 1778)	*		h	*3
Heteroptera	Rhyparochromidae	Acompus pallipes (Herrich-Schaeffer, 1834)	2		ss	*3
Heteroptera	Rhyparochromidae	Acompus rufipes (Wolff, 1804)	*		mh	*3
Heteroptera	Rhyparochromidae	Aellopus atratus (Goeze, 1778)	V		s	*3
Heteroptera	Rhyparochromidae	Aphanus rolandri (Linnaeus, 1758)	3		s	*3
Heteroptera	Rhyparochromidae	Beosus maritimus (Scopoli, 1763)	*		mh	*3
Heteroptera	Rhyparochromidae	Drymus brunneus brunneus (R.F. Sahlberg, 1848)	*		h	*3
Heteroptera	Rhyparochromidae	Drymus latus latus Douglas & Scott, 1871	2		ss	*3
Heteroptera	Rhyparochromidae	Drymus pilicornis (Mulsant & Rey, 1852)	G		s	*3
Heteroptera	Rhyparochromidae	Drymus pilipes Fieber, 1861	2		es	*3
Heteroptera	Rhyparochromidae	Drymus pumilio Puton, 1877	1		es	*3
Heteroptera	Rhyparochromidae	Drymus ryeii Douglas & Scott, 1865	*		h	*3
Heteroptera	Rhyparochromidae	Drymus sylvaticus (Fabricius, 1775)	*		sh	*3
Heteroptera	Rhyparochromidae	Emblethis denticollis Horváth, 1878	V		s	*3
Heteroptera	Rhyparochromidae	Emblethis duplicatus Seidenstücker, 1963	G		ss	*3
Heteroptera	Rhyparochromidae	Emblethis griseus (Wolff, 1802)	V		s	*3
Heteroptera	Rhyparochromidae	Emblethis verbasci (Fabricius, 1803)	*		mh	*3
Heteroptera	Rhyparochromidae	Eremocoris abietis abietis (Linnaeus, 1758)	*		mh	*3
Heteroptera	Rhyparochromidae	Eremocoris fenestratus (Herrich-Schaeffer, 1839)	*		s	*3
Heteroptera	Rhyparochromidae	Eremocoris plebejus plebejus (Fallén, 1807)	*		h	*3
Heteroptera	Rhyparochromidae	Eremocoris podagricus (Fabricius, 1775)	*		mh	*3
Heteroptera	Rhyparochromidae	Gastrodes abietum Bergroth, 1914	*		h	*3
Heteroptera	Rhyparochromidae	Gastrodes grossipes grossipes (De Geer, 1773)	*		sh	*3
Heteroptera	Rhyparochromidae	Gonianotus marginepunctatus (Wolff, 1804)	2		ss	*3
Heteroptera	Rhyparochromidae	Graptopeltus lynceus (Fabricius, 1775)	*		h	*3
Heteroptera	Rhyparochromidae	Ischnocoris angustulus (Boheman, 1852)	3		s	*3
Heteroptera	Rhyparochromidae	Ischnocoris hemipterus (Schilling, 1829)	V		mh	*3
Heteroptera	Rhyparochromidae	Ischnocoris punctulatus Fieber, 1861	2		es	*3
Heteroptera	Rhyparochromidae	Lamproplax picea (Flor, 1860)	2		ss	*3
Heteroptera	Rhyparochromidae	Lasiosomus enervis (Herrich-Schaeffer, 1835)	G		ss	*3
Heteroptera	Rhyparochromidae	Ligyrocoris sylvestris (Linnaeus, 1758)	2		ss	*3
Heteroptera	Rhyparochromidae	Macrodema microptera (Curtis, 1836)	*		mh	*3
Heteroptera	Rhyparochromidae	Megalonotus antennatus (Schilling, 1829)	V		mh	*3
Heteroptera	Rhyparochromidae	Megalonotus chiragra (Fabricius, 1794)	*		sh	*3
Heteroptera	Rhyparochromidae	Megalonotus dilatatus (Herrich-Schaeffer, 1840)	2		ss	*3
Heteroptera	Rhyparochromidae	Megalonotus emarginatus (Rey, 1888)	3		ss	*3
Heteroptera	Rhyparochromidae	Megalonotus hirsutus Fieber, 1861	2		ss	*3
Heteroptera	Rhyparochromidae	Megalonotus praetextatus (Herrich-Schaeffer, 1835)	*		mh	*3
Heteroptera	Rhyparochromidae	Megalonotus puncticollis (Lucas, 1849)	D		?	*3
Heteroptera	Rhyparochromidae	Megalonotus sabulicola (Thomson, 1870)	*		h	*3
Heteroptera	Rhyparochromidae	Notochilus limbatus Fieber, 1870	1		es	*3
Heteroptera	Rhyparochromidae	Pachybrachius fracticollis (Schilling, 1829)	V		mh	*3
Heteroptera	Rhyparochromidae	Pachybrachius luridus Hahn, 1826	2		s	*3
Heteroptera	Rhyparochromidae	Panaorus adspersus (Mulsant & Rey, 1852)	2		es	*3
Heteroptera	Rhyparochromidae	Peritrechus angusticollis (R.F. Sahlberg, 1848)	2		ss	*3
Heteroptera	Rhyparochromidae	Peritrechus convivus (Stål, 1858)	G		ss	*3
Heteroptera	Rhyparochromidae	Peritrechus geniculatus (Hahn, 1832)	*		sh	*3
Heteroptera	Rhyparochromidae	Peritrechus gracilicornis Puton, 1877	V		s	*3
Heteroptera	Rhyparochromidae	Peritrechus lundii (Gmelin, 1790)	3		s	*3
Heteroptera	Rhyparochromidae	Peritrechus nubilus (Fallén, 1807)	G		s	*3
Heteroptera	Rhyparochromidae	Pionosomus opacellus Horváth, 1895	2		ss	*3
Heteroptera	Rhyparochromidae	Pionosomus varius (Wolff, 1804)	V		mh	*3
Heteroptera	Rhyparochromidae	Plinthisus brevipennis (Latreille, 1807)	*		h	*3
Heteroptera	Rhyparochromidae	Plinthisus minutissimus Fieber, 1864	0	1900	ex	*3
Heteroptera	Rhyparochromidae	Plinthisus pusillus (Scholtz, 1847)	*		mh	*3
Heteroptera	Rhyparochromidae	Pterotmetus staphyliniformis (Schilling, 1829)	*		h	*3
Heteroptera	Rhyparochromidae	Raglius alboacuminatus alboacuminatus (Goeze, 1778)	*		mh	*3
Heteroptera	Rhyparochromidae	Raglius confusus (Reuter, 1886)	1		es	*3
Heteroptera	Rhyparochromidae	Rhyparochromus phoeniceus (Rossi, 1794)	2		s	*3
Heteroptera	Rhyparochromidae	Rhyparochromus pini (Linnaeus, 1758)	*		sh	*3
Heteroptera	Rhyparochromidae	Rhyparochromus sanguineus (Douglas & Scott, 1868)	0	1950	ex	*3
Heteroptera	Rhyparochromidae	Rhyparochromus vulgaris (Schilling, 1829)	*		sh	*3
Heteroptera	Rhyparochromidae	Scolopostethus affinis (Schilling, 1829)	*		sh	*3
Heteroptera	Rhyparochromidae	Scolopostethus decoratus (Hahn, 1833)	*		mh	*3
Heteroptera	Rhyparochromidae	Scolopostethus grandis Horváth, 1880	*		s	*3
Heteroptera	Rhyparochromidae	Scolopostethus pictus (Schilling, 1829)	*		h	*3
Heteroptera	Rhyparochromidae	Scolopostethus pilosus pilosus Reuter, 1875	G		s	*3
Heteroptera	Rhyparochromidae	Scolopostethus puberulus Horváth, 1887	3		s	*3
Heteroptera	Rhyparochromidae	Scolopostethus thomsoni Reuter, 1875	*		sh	*3
Heteroptera	Rhyparochromidae	Sphragisticus nebulosus (Fallén, 1807)	V		mh	*3
Heteroptera	Rhyparochromidae	Stygnocoris cimbricus (Gredler, 1870)	G		ss	*3
Heteroptera	Rhyparochromidae	Stygnocoris fuligineus (Geoffroy, 1785)	*		sh	*3
Heteroptera	Rhyparochromidae	Stygnocoris rusticus (Fallén, 1807)	*		h	*3
Heteroptera	Rhyparochromidae	Stygnocoris sabulosus (Schilling, 1829)	*		sh	*3
Heteroptera	Rhyparochromidae	Taphropeltus andrei (Puton, 1877)	1		es	*3
Heteroptera	Rhyparochromidae	Taphropeltus contractus (Herrich-Schaeffer, 1835)	*		mh	*3
Heteroptera	Rhyparochromidae	Taphropeltus hamulatus (Thomson, 1870)	G		ss	*3
Heteroptera	Rhyparochromidae	Trapezonotus anorus (Flor, 1860)	R		es	*3
Heteroptera	Rhyparochromidae	Trapezonotus arenarius arenarius (Linnaeus, 1758)	*		sh	*3
Heteroptera	Rhyparochromidae	Trapezonotus desertus Seidenstücker, 1951	V		s	*3

Order	Family	Species	K	L	P	S
Heteroptera	Rhyparochromidae	Trapezonotus dispar Stål, 1872	*		h	*3
Heteroptera	Rhyparochromidae	Trapezonotus ullrichi (Fieber, 1837)	1		es	*3
Heteroptera	Rhyparochromidae	Xanthochilus quadratus (Fabricius, 1798)	G		mh	*3
Heteroptera	Saldidae	Chartoscirta cincta cincta (Herrich-Schaeffer, 1841)	*		h	*3
Heteroptera	Saldidae	Chartoscirta cocksii (Curtis, 1835)	G		mh	*3
Heteroptera	Saldidae	Chartoscirta elegantula elegantula (Fallén, 1807)	G		s	*3
Heteroptera	Saldidae	Chiloxanthus pilosus (Fallén, 1807)	2		ss	*3
Heteroptera	Saldidae	Halosalda lateralis (Fallén, 1807)	V		mh	*3
Heteroptera	Saldidae	Macrosaldula scotica (Curtis, 1835)	V		mh	*3
Heteroptera	Saldidae	Macrosaldula variabilis (Herrich-Schaeffer, 1835)	2		es	*3
Heteroptera	Saldidae	Micracanthia fennica (Reuter, 1884)	1		es	*3
Heteroptera	Saldidae	Micracanthia marginalis (Fallén, 1807)	2		ss	*3
Heteroptera	Saldidae	Salda henschii (Reuter, 1891)	1		es	*3
Heteroptera	Saldidae	Salda littoralis (Linnaeus, 1758)	V		mh	*3
Heteroptera	Saldidae	Salda morio Zetterstedt, 1838	2		ss	*3
Heteroptera	Saldidae	Salda muelleri (Gmelin, 1790)	2		ss	*3
Heteroptera	Saldidae	Saldula arenicola arenicola (Scholtz, 1847)	*		h	*3
Heteroptera	Saldidae	Saldula c-album (Fieber, 1859)	*		mh	*3
Heteroptera	Saldidae	Saldula fucicola (J. Sahlberg, 1870)	G		s	*3
Heteroptera	Saldidae	Saldula melanoscela (Fieber, 1859)	G		s	*3
Heteroptera	Saldidae	Saldula nobilis (Horváth, 1884)	0	1961	ex	*3
Heteroptera	Saldidae	Saldula opacula (Zetterstedt, 1838)	G		s	*3
Heteroptera	Saldidae	Saldula orthochila (Fieber, 1859)	*		mh	*3
Heteroptera	Saldidae	Saldula pallipes (Fabricius, 1794)	*		sh	*3
Heteroptera	Saldidae	Saldula palustris (Douglas, 1874)	V		mh	*3
Heteroptera	Saldidae	Saldula pilosella pilosella (Thomson, 1871)	*		mh	*3
Heteroptera	Saldidae	Saldula saltatoria (Linnaeus, 1758)	*		sh	*3
Heteroptera	Saldidae	Saldula xanthochila (Fieber, 1859)	1		es	*3
Heteroptera	Scutelleridae	Eurygaster austriaca (Schrank, 1776)	2		ss	*3
Heteroptera	Scutelleridae	Eurygaster fokkeri Puton, 1892	G		ss	*3
Heteroptera	Scutelleridae	Eurygaster maura (Linnaeus, 1758)	*		sh	*3
Heteroptera	Scutelleridae	Eurygaster testudinaria testudinaria (Geoffroy, 1785)	*		sh	*3
Heteroptera	Scutelleridae	Odontoscelis fuliginosa (Linnaeus, 1761)	*		mh	*3
Heteroptera	Scutelleridae	Odontoscelis lineola Rambur, 1839	V		s	*3
Heteroptera	Scutelleridae	Odontotarsus purpureolineatus (Rossi, 1790)	2		ss	*3
Heteroptera	Scutelleridae	Phimodera flori Fieber, 1863	1		es	*3
Heteroptera	Scutelleridae	Phimodera humeralis (Dalman, 1823)	2		ss	*3
Heteroptera	Scutelleridae	Psacasta exanthematica exanthematica (Scopoli, 1763)	0	1964	ex	*3
Heteroptera	Stenocephalidae	Dicranocephalus agilis (Scopoli, 1763)	V		mh	*3
Heteroptera	Stenocephalidae	Dicranocephalus albipes (Fabricius, 1781)	2		es	*3
Heteroptera	Stenocephalidae	Dicranocephalus medius (Mulsant & Rey, 1870)	2		ss	*3
Heteroptera	Tingidae	Acalypta brunnea (Germar, 1837)	0	1938	ex	*3
Heteroptera	Tingidae	Acalypta carinata (Panzer, 1806)	V		mh	*3
Heteroptera	Tingidae	Acalypta gracilis gracilis (Fieber, 1844)	*		mh	*3
Heteroptera	Tingidae	Acalypta marginata (Wolff, 1804)	*		mh	*3
Heteroptera	Tingidae	Acalypta musci (Schrank, 1781)	G		s	*3
Heteroptera	Tingidae	Acalypta nigrina (Fallén, 1807)	3		s	*3
Heteroptera	Tingidae	Acalypta parvula (Fallén, 1807)	*		h	*3
Heteroptera	Tingidae	Acalypta platycheila (Fieber, 1844)	G		ss	*3
Heteroptera	Tingidae	Agramma confusum (Puton, 1879)	G		s	*3
Heteroptera	Tingidae	Agramma femorale Thomson, 1871	2		es	*3
Heteroptera	Tingidae	Agramma laetum (Fallén, 1807)	V		mh	*3
Heteroptera	Tingidae	Agramma minutum Horváth, 1874	1		es	*3
Heteroptera	Tingidae	Agramma ruficorne (Germar, 1835)	G		s	*3
Heteroptera	Tingidae	Agramma tropidopterum Flor, 1860	0	1975	ex	*3
Heteroptera	Tingidae	Campylosteira verna (Fallén, 1826)	3		s	*3
Heteroptera	Tingidae	Catoplatus carthusianus (Goeze, 1778)	G		s	*3
Heteroptera	Tingidae	Catoplatus fabricii (Stål, 1868)	G		s	*3
Heteroptera	Tingidae	Catoplatus horvathi (Puton, 1878)	1		es	*3
Heteroptera	Tingidae	Catoplatus nigriceps Horváth, 1905	0	1945	ex	*3
Heteroptera	Tingidae	Copium clavicorne clavicorne (Linnaeus, 1758)	V		s	*3
Heteroptera	Tingidae	Copium teucrii teucrii (Host, 1788)	G		ss	*3
Heteroptera	Tingidae	Corythucha ciliata (Say, 1832)	nb		nb	*3
Heteroptera	Tingidae	Derephysia cristata (Panzer, 1806)	1		es	*3
Heteroptera	Tingidae	Derephysia foliacea foliacea (Fallén, 1807)	*		mh	*3
Heteroptera	Tingidae	Derephysia sinuatocollis Puton, 1879	*		ss	*3
Heteroptera	Tingidae	Dictyla convergens (Herrich-Schaeffer, 1835)	3		s	*3
Heteroptera	Tingidae	Dictyla echii (Schrank, 1782)	*		sh	*3
Heteroptera	Tingidae	Dictyla humuli (Fabricius, 1794)	*		h	*3
Heteroptera	Tingidae	Dictyla lupuli (Herrich-Schaeffer, 1837)	2		es	*3
Heteroptera	Tingidae	Dictyla rotundata (Herrich-Schaeffer, 1835)	0	1978	ex	*3
Heteroptera	Tingidae	Dictyonota fuliginosa A. Costa, 1853	*		mh	*3
Heteroptera	Tingidae	Dictyonota strichnocera Fieber, 1844	*		s	*3
Heteroptera	Tingidae	Elasmotropis testacea testacea (Herrich-Schaeffer, 1833)	nb		nb	*3
Heteroptera	Tingidae	Galeatus affinis (Herrich-Schaeffer, 1835)	G		ss	*3
Heteroptera	Tingidae	Galeatus maculatus (Herrich-Schaeffer, 1838)	G		s	*3
Heteroptera	Tingidae	Galeatus spinifrons (Fallén, 1807)	2		ss	*3
Heteroptera	Tingidae	Kalama henschi (Puton, 1892)	1		es	*3
Heteroptera	Tingidae	Kalama tricornis (Schrank, 1801)	*		h	*3
Heteroptera	Tingidae	Lasiacantha capucina capucina (Germar, 1837)	3		s	*3

Order	Family	Species	K	L	P	S
Heteroptera	Tingidae	Lasiacantha gracilis (Herrich-Schaeffer, 1833)	0	1830	ex	*3
Heteroptera	Tingidae	Lasiacantha hermani Vásárhelyi, 1977	1		es	*3
Heteroptera	Tingidae	Oncochila scapularis (Fieber, 1844)	0	1950	ex	*3
Heteroptera	Tingidae	Oncochila simplex (Herrich-Schaeffer, 1833)	*		mh	*3
Heteroptera	Tingidae	Physatocheila confinis Horváth, 1905	D		?	*3
Heteroptera	Tingidae	Physatocheila costata (Fabricius, 1794)	*		mh	*3
Heteroptera	Tingidae	Physatocheila dumetorum (Herrich-Schaeffer, 1838)	*		h	*3
Heteroptera	Tingidae	Physatocheila harwoodi China, 1936	*		ss	*3
Heteroptera	Tingidae	Physatocheila smreczynskii China, 1952	*		mh	*3
Heteroptera	Tingidae	Stephanitis oberti (Kolenati, 1857)	nb		nb	*3
Heteroptera	Tingidae	Stephanitis pyri (Fabricius, 1775)	D		?	*3
Heteroptera	Tingidae	Stephanitis rhododendri Horváth, 1905	nb		nb	*3
Heteroptera	Tingidae	Stephanitis takeyai Drake & Maa, 1955	nb		nb	*3
Heteroptera	Tingidae	Tingis ampliata (Herrich-Schaeffer, 1838)	*		mh	*3
Heteroptera	Tingidae	Tingis angustata (Herrich-Schaeffer, 1838)	0	1950	ex	*3
Heteroptera	Tingidae	Tingis auriculata (A. Costa, 1847)	G		ss	*3
Heteroptera	Tingidae	Tingis cardui (Linnaeus, 1758)	*		mh	*3
Heteroptera	Tingidae	Tingis crispata (Herrich-Schaeffer, 1838)	*		mh	*3
Heteroptera	Tingidae	Tingis geniculata (Fieber, 1844)	0	1858	ex	*3
Heteroptera	Tingidae	Tingis grisea Germar, 1835	0	1835	ex	*3
Heteroptera	Tingidae	Tingis maculata (Herrich-Schaeffer, 1838)	2		ss	*3
Heteroptera	Tingidae	Tingis marrubii Vallot, 1829	1		es	*3
Heteroptera	Tingidae	Tingis pilosa Hummel, 1825	*		mh	*3
Heteroptera	Tingidae	Tingis ragusana (Fieber, 1861)	1		es	*3
Heteroptera	Tingidae	Tingis reticulata Herrich-Schaeffer, 1835	*		mh	*3
Heteroptera	Veliidae	Microvelia buenoi Drake, 1920	G		s	*3
Heteroptera	Veliidae	Microvelia pygmaea (Dufour, 1833)	G		ss	*3
Heteroptera	Veliidae	Microvelia reticulata (Burmeister, 1835)	*		sh	*3
Heteroptera	Veliidae	Velia caprai caprai Tamanini, 1947	*		h	*3
Heteroptera	Veliidae	Velia saulii Tamanini, 1947	*		mh	*3
Hymenoptera	Ampulicidae	Ampulex fasciata Jurine 1807	3		s	*2
Hymenoptera	Ampulicidae	Dolichurus bicolor Lepeletier 1845	G		ss	*2
Hymenoptera	Ampulicidae	Dolichurus corniculus Spinola 1808	*		mh	*2
Hymenoptera	Anthophila	Ammobates punctatus (Fabricius, 1804)	2		ss	*1
Hymenoptera	Anthophila	Ammobatoides abdominalis (Eversmann, 1852)	0	1959	ex	*1
Hymenoptera	Anthophila	Andrena aberrans Eversmann, 1852	1		es	*1
Hymenoptera	Anthophila	Andrena agilissima (Scopoli, 1770)	3		s	*1
Hymenoptera	Anthophila	Andrena alfkenella Perkins, 1914	V		s	*1
Hymenoptera	Anthophila	Andrena angustior (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Andrena apicata Smith, 1847	G		mh	*1
Hymenoptera	Anthophila	Andrena argentata Smith, 1844	3		mh	*1
Hymenoptera	Anthophila	Andrena barbareae Panzer, 1805	0	1952	ex	*1
Hymenoptera	Anthophila	Andrena barbilabris (Kirby, 1802)	V		mh	*1
Hymenoptera	Anthophila	Andrena bicolor Fabricius, 1775	*		sh	*1
Hymenoptera	Anthophila	Andrena bimaculata (Kirby, 1802)	V		mh	*1
Hymenoptera	Anthophila	Andrena bucephala Stephens, 1846	3		s	*1
Hymenoptera	Anthophila	Andrena chrysopus Pérez, 1903	V		s	*1
Hymenoptera	Anthophila	Andrena chrysopyga Schenck, 1853	2		ss	*1
Hymenoptera	Anthophila	Andrena chrysosceles (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Andrena cineraria (Linnaeus, 1758)	*		h	*1
Hymenoptera	Anthophila	Andrena clarkella (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Andrena coitana (Kirby, 1802)	3		s	*1
Hymenoptera	Anthophila	Andrena combinata (Christ, 1791)	3		s	*1
Hymenoptera	Anthophila	Andrena congruens Schmiedeknecht, 1883	2		ss	*1
Hymenoptera	Anthophila	Andrena curtula Pérez, 1903	D		?	*1
Hymenoptera	Anthophila	Andrena curvungula Thomson, 1870	3		mh	*1
Hymenoptera	Anthophila	Andrena decipiens Schenck, 1861	2		ss	*1
Hymenoptera	Anthophila	Andrena denticulata (Kirby, 1802)	V		mh	*1
Hymenoptera	Anthophila	Andrena distinguenda Schenck, 1871	3		s	*1
Hymenoptera	Anthophila	Andrena dorsata (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Andrena enslinella Stöckhert, 1924	G		ss	*1
Hymenoptera	Anthophila	Andrena falsifica Perkins, 1915	*		mh	*1
Hymenoptera	Anthophila	Andrena ferox Smith, 1847	2		ss	*1
Hymenoptera	Anthophila	Andrena flavilabris Schenck, 1874	2		ss	*1
Hymenoptera	Anthophila	Andrena flavipes Panzer, 1799	*		h	*1
Hymenoptera	Anthophila	Andrena florea Fabricius, 1793	*		mh	*1
Hymenoptera	Anthophila	Andrena floricola Eversmann, 1852	2		s	*1
Hymenoptera	Anthophila	Andrena florivaga Eversmann, 1852	*		s	*1
Hymenoptera	Anthophila	Andrena fucata Smith, 1847	*		mh	*1
Hymenoptera	Anthophila	Andrena fulva (Müller, 1766)	*		h	*1
Hymenoptera	Anthophila	Andrena fulvago (Christ, 1791)	3		mh	*1
Hymenoptera	Anthophila	Andrena fulvata Stöckhert, 1930	*		mh	*1
Hymenoptera	Anthophila	Andrena fulvida Schenck, 1853	3		s	*1
Hymenoptera	Anthophila	Andrena fuscipes (Kirby, 1802)	V		mh	*1
Hymenoptera	Anthophila	Andrena gallica Schmiedeknecht, 1883	2		ss	*1
Hymenoptera	Anthophila	Andrena gelriae van der Vecht, 1927	3		s	*1
Hymenoptera	Anthophila	Andrena granulosa Pérez, 1903	2		es	*1
Hymenoptera	Anthophila	Andrena gravida Imhoff, 1832	*		sh	*1
Hymenoptera	Anthophila	Andrena haemorrhoa (Fabricius, 1781)	*		sh	*1
Hymenoptera	Anthophila	Andrena hattorfiana (Fabricius, 1775)	3		mh	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Anthophila	Andrena helvola (Linnaeus, 1758)	*		h	*1
Hymenoptera	Anthophila	Andrena humilis Imhoff, 1832	V		mh	*1
Hymenoptera	Anthophila	Andrena hypopolia Schmiedeknecht, 1883	2		es	*1
Hymenoptera	Anthophila	Andrena intermedia Thomson, 1870	V		s	*1
Hymenoptera	Anthophila	Andrena labialis (Kirby, 1802)	V		mh	*1
Hymenoptera	Anthophila	Andrena labiata Fabricius, 1781	*		h	*1
Hymenoptera	Anthophila	Andrena lagopus (Latreille, 1809)	*		mh	*1
Hymenoptera	Anthophila	Andrena lapponica Zetterstedt, 1838	V		mh	*1
Hymenoptera	Anthophila	Andrena lathyri Alfken, 1899	*		h	*1
Hymenoptera	Anthophila	Andrena lepida Schenck, 1861	0	1974	ex	*1
Hymenoptera	Anthophila	Andrena limata Smith, 1853	2		ss	*1
Hymenoptera	Anthophila	Andrena marginata Fabricius, 1776	2		s	*1
Hymenoptera	Anthophila	Andrena minutula (Kirby, 1802)	*		sh	*1
Hymenoptera	Anthophila	Andrena minutuloides Perkins, 1914	*		sh	*1
Hymenoptera	Anthophila	Andrena mitis Schmiedeknecht, 1883	V		mh	*1
Hymenoptera	Anthophila	Andrena montana Warncke, 1973	D		?	*1
Hymenoptera	Anthophila	Andrena morio Brullé, 1832	0	1961	ex	*1
Hymenoptera	Anthophila	Andrena nana (Kirby, 1802)	3		s	*1
Hymenoptera	Anthophila	Andrena nanaeformis Noskiewicz, 1925	0	1948	ex	*1
Hymenoptera	Anthophila	Andrena nanula Nylander, 1848	R		es	*1
Hymenoptera	Anthophila	Andrena nasuta Giraud, 1863	2		s	*1
Hymenoptera	Anthophila	Andrena nigriceps (Kirby, 1802)	2		ss	*1
Hymenoptera	Anthophila	Andrena nigroaenea (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Andrena nitida (Müller, 1776)	*		sh	*1
Hymenoptera	Anthophila	Andrena nitidiuscula Schenck, 1853	3		mh	*1
Hymenoptera	Anthophila	Andrena nitidula Pérez, 1903	D		?	*1
Hymenoptera	Anthophila	Andrena niveata Friese, 1887	3		s	*1
Hymenoptera	Anthophila	Andrena nuptialis Pérez, 1902	1		es	*1
Hymenoptera	Anthophila	Andrena nycthemera Imhoff, 1868	3		s	*1
Hymenoptera	Anthophila	Andrena ovatula (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Andrena pallitarsis Pérez, 1903	1		es	*1
Hymenoptera	Anthophila	Andrena pandellei Pérez, 1895	3		mh	*1
Hymenoptera	Anthophila	Andrena paucisquama Noskiewicz, 1924	1		es	*1
Hymenoptera	Anthophila	Andrena pilipes Fabricius, 1781	3		mh	*1
Hymenoptera	Anthophila	Andrena polita Smith, 1847	2		s	*1
Hymenoptera	Anthophila	Andrena potentillae Panzer, 1809	2		ss	*1
Hymenoptera	Anthophila	Andrena praecox (Scopoli, 1763)	*		mh	*1
Hymenoptera	Anthophila	Andrena proxima (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Andrena pusilla Pérez, 1903	D		?	*1
Hymenoptera	Anthophila	Andrena rhenana Stöckhert, 1930	R		es	*1
Hymenoptera	Anthophila	Andrena rogenhoferi Morawitz, 1872	R		es	*1
Hymenoptera	Anthophila	Andrena rosae Panzer, 1801	3		s	*1
Hymenoptera	Anthophila	Andrena ruficrus Nylander, 1848	G		s	*1
Hymenoptera	Anthophila	Andrena rufizona Imhoff, 1834	1		es	*1
Hymenoptera	Anthophila	Andrena rugulosa Stöckhert, 1935	G		ss	*1
Hymenoptera	Anthophila	Andrena saxonica Stöckhert, 1935	2		es	*1
Hymenoptera	Anthophila	Andrena schencki Morawitz, 1866	2		es	*1
Hymenoptera	Anthophila	Andrena scotica Perkins, 1916	*		mh	*1
Hymenoptera	Anthophila	Andrena semilaevis Pérez, 1903	G		s	*1
Hymenoptera	Anthophila	Andrena sericata Imhoff, 1868	R		es	*1
Hymenoptera	Anthophila	Andrena similis Smith, 1849	G		s	*1
Hymenoptera	Anthophila	Andrena simillima Smith, 1851	1		es	*1
Hymenoptera	Anthophila	Andrena stragulata Illiger, 1806	3		s	*1
Hymenoptera	Anthophila	Andrena strohmella Stöckhert, 1928	*		mh	*1
Hymenoptera	Anthophila	Andrena subopaca Nylander, 1848	*		h	*1
Hymenoptera	Anthophila	Andrena suerinensis Friese, 1884	2		ss	*1
Hymenoptera	Anthophila	Andrena symphyti Schmiedeknecht, 1883	*		ss	*1
Hymenoptera	Anthophila	Andrena synadelpha Perkins, 1914	*		s	*1
Hymenoptera	Anthophila	Andrena taraxaci Giraud, 1861	R		es	*1
Hymenoptera	Anthophila	Andrena tarsata Nylander, 1848	2		ss	*1
Hymenoptera	Anthophila	Andrena thoracica (Fabricius, 1775)	2		ss	*1
Hymenoptera	Anthophila	Andrena tibialis (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Andrena tscheki Morawitz, 1872	3		s	*1
Hymenoptera	Anthophila	Andrena vaga Panzer, 1799	*		mh	*1
Hymenoptera	Anthophila	Andrena varians (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Andrena ventralis Imhoff, 1832	*		mh	*1
Hymenoptera	Anthophila	Andrena viridescens Viereck, 1916	V		mh	*1
Hymenoptera	Anthophila	Andrena wilkella (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Anthidium byssinum (Panzer, 1798)	3		mh	*1
Hymenoptera	Anthophila	Anthidium manicatum (Linnaeus, 1758)	*		h	*1
Hymenoptera	Anthophila	Anthidium melanurum Klug, 1832	0	1899	ex	*1
Hymenoptera	Anthophila	Anthidium montanum Morawitz, 1864	2		es	*1
Hymenoptera	Anthophila	Anthidium nanum Mocsáry, 1879	3		s	*1
Hymenoptera	Anthophila	Anthidium oblongatum (Illiger, 1806)	V		mh	*1
Hymenoptera	Anthophila	Anthidium punctatum Latreille, 1809	V		mh	*1
Hymenoptera	Anthophila	Anthidium septemspinosum Lepeletier, 1841	R		es	*1
Hymenoptera	Anthophila	Anthidium strigatum (Panzer, 1805)	V		mh	*1
Hymenoptera	Anthophila	Anthidium tenellum Mocsáry, 1879	nb		nb	*1
Hymenoptera	Anthophila	Anthophora aestivalis (Panzer, 1801)	3		s	*1
Hymenoptera	Anthophila	Anthophora bimaculata (Panzer, 1798)	3		s	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Anthophila	Anthophora borealis Morawitz, 1864	0	1958	ex	*1
Hymenoptera	Anthophila	Anthophora crassipes Lepeletier, 1841	0	1973	ex	*1
Hymenoptera	Anthophila	Anthophora fulvitarsis Brullé, 1832	0	1964	ex	*1
Hymenoptera	Anthophila	Anthophora furcata (Panzer, 1798)	V		mh	*1
Hymenoptera	Anthophila	Anthophora plagiata (Illiger, 1806)	2		es	*1
Hymenoptera	Anthophila	Anthophora plumipes (Pallas, 1772)	*		sh	*1
Hymenoptera	Anthophila	Anthophora pubescens (Fabricius, 1781)	1		es	*1
Hymenoptera	Anthophila	Anthophora quadrifasciata (Villers, 1789)	1		es	*1
Hymenoptera	Anthophila	Anthophora quadrimaculata (Panzer, 1798)	V		mh	*1
Hymenoptera	Anthophila	Anthophora retusa (Linnaeus, 1758)	V		mh	*1
Hymenoptera	Anthophila	Apis mellifera Linnaeus, 1758	*		sh	*1
Hymenoptera	Anthophila	Biastes brevicornis (Panzer, 1798)	1		es	*1
Hymenoptera	Anthophila	Biastes emarginatus (Schenck, 1853)	2		ss	*1
Hymenoptera	Anthophila	Biastes truncatus (Nylander, 1848)	3		s	*1
Hymenoptera	Anthophila	Bombus alpinus (Linnaeus, 1758)	0	1924	ex	*1
Hymenoptera	Anthophila	Bombus barbutellus (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Bombus bohemicus Seidl, 1838	*		h	*1
Hymenoptera	Anthophila	Bombus campestris (Panzer, 1801)	*		h	*1
Hymenoptera	Anthophila	Bombus confusus Schenck, 1861	1		es	*1
Hymenoptera	Anthophila	Bombus cryptarum (Fabricius, 1775)	D		?	*1
Hymenoptera	Anthophila	Bombus cullumanus (Kirby, 1802)	0	1960	ex	*1
Hymenoptera	Anthophila	Bombus distinguendus Morawitz, 1869	2		ss	*1
Hymenoptera	Anthophila	Bombus flavidus Eversmann, 1852	G		s	*1
Hymenoptera	Anthophila	Bombus gerstaeckeri Morawitz, 1882	R		es	*1
Hymenoptera	Anthophila	Bombus hortorum (Linnaeus, 1761)	*		h	*1
Hymenoptera	Anthophila	Bombus humilis Illiger, 1806	3		mh	*1
Hymenoptera	Anthophila	Bombus hypnorum (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Anthophila	Bombus jonellus (Kirby, 1802)	3		s	*1
Hymenoptera	Anthophila	Bombus lapidarius (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Anthophila	Bombus lucorum (Linnaeus, 1761)	*		sh	*1
Hymenoptera	Anthophila	Bombus magnus Vogt, 1911	D		?	*1
Hymenoptera	Anthophila	Bombus mendax Gerstäcker, 1869	*		s	*1
Hymenoptera	Anthophila	Bombus mesomelas Gerstäcker, 1869	0	1956	ex	*1
Hymenoptera	Anthophila	Bombus monticola Smith, 1849	*		s	*1
Hymenoptera	Anthophila	Bombus mucidus Gerstäcker, 1869	*		s	*1
Hymenoptera	Anthophila	Bombus muscorum (Linnaeus, 1758)	2		s	*1
Hymenoptera	Anthophila	Bombus norvegicus (Sparre−Schneider, 1918)	*		mh	*1
Hymenoptera	Anthophila	Bombus pascuorum (Scopoli, 1763)	*		sh	*1
Hymenoptera	Anthophila	Bombus pomorum (Panzer, 1805)	2		s	*1
Hymenoptera	Anthophila	Bombus pratorum (Linnaeus, 1761)	*		sh	*1
Hymenoptera	Anthophila	Bombus pyrenaeus Pérez, 1879	*		s	*1
Hymenoptera	Anthophila	Bombus quadricolor (Lepeletier, 1832)	2		ss	*1
Hymenoptera	Anthophila	Bombus ruderarius (Müller, 1776)	3		s	*1
Hymenoptera	Anthophila	Bombus ruderatus (Fabricius, 1775)	D		?	*1
Hymenoptera	Anthophila	Bombus rupestris (Fabricius, 1793)	*		h	*1
Hymenoptera	Anthophila	Bombus semenoviellus Skorikov, 1910	*		ss	*1
Hymenoptera	Anthophila	Bombus sichelii Radoszkowski, 1859	G		ss	*1
Hymenoptera	Anthophila	Bombus soroeensis (Fabricius, 1776)	V		mh	*1
Hymenoptera	Anthophila	Bombus subterraneus (Linnaeus, 1758)	2		s	*1
Hymenoptera	Anthophila	Bombus sylvarum (Linnaeus, 1761)	V		mh	*1
Hymenoptera	Anthophila	Bombus sylvestris (Lepeletier, 1832)	*		h	*1
Hymenoptera	Anthophila	Bombus terrestris (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Anthophila	Bombus vestalis (Geoffroy, 1785)	*		mh	*1
Hymenoptera	Anthophila	Bombus veteranus (Fabricius, 1793)	3		s	*1
Hymenoptera	Anthophila	Bombus wurflenii Radoszkowski, 1859	V		mh	*1
Hymenoptera	Anthophila	Camptopoeum frontale (Fabricius, 1804)	2		es	*1
Hymenoptera	Anthophila	Ceratina chalybea Chevrier, 1872	3		s	*1
Hymenoptera	Anthophila	Ceratina cucurbitina (Rossi, 1792)	*		mh	*1
Hymenoptera	Anthophila	Ceratina cyanea (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Coelioxys afra Lepeletier, 1841	3		s	*1
Hymenoptera	Anthophila	Coelioxys alata Förster, 1853	1		es	*1
Hymenoptera	Anthophila	Coelioxys aurolimbata Förster, 1853	V		mh	*1
Hymenoptera	Anthophila	Coelioxys brevis Eversmann, 1852	2		ss	*1
Hymenoptera	Anthophila	Coelioxys conica (Linnaeus, 1758)	V		mh	*1
Hymenoptera	Anthophila	Coelioxys conoidea (Illiger, 1806)	3		s	*1
Hymenoptera	Anthophila	Coelioxys echinata Förster, 1853	*		s	*1
Hymenoptera	Anthophila	Coelioxys elongata Lepeletier, 1841	*		s	*1
Hymenoptera	Anthophila	Coelioxys inermis (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Coelioxys lanceolata Nylander, 1852	2		es	*1
Hymenoptera	Anthophila	Coelioxys mandibularis Nylander, 1848	*		mh	*1
Hymenoptera	Anthophila	Coelioxys rufescens Lepeletier & Serville, 1825	V		s	*1
Hymenoptera	Anthophila	Colletes caspicus Morawitz, 1874	0	1936	ex	*1
Hymenoptera	Anthophila	Colletes collaris Dours, 1872	R		es	*1
Hymenoptera	Anthophila	Colletes cunicularius (Linnaeus, 1761)	*		mh	*1
Hymenoptera	Anthophila	Colletes daviesanus Smith, 1846	*		h	*1
Hymenoptera	Anthophila	Colletes floralis Eversmann, 1852	0	1909	ex	*1
Hymenoptera	Anthophila	Colletes fodiens (Geoffroy, 1785)	3		s	*1
Hymenoptera	Anthophila	Colletes halophilus Verhoeff, 1944	R		es	*1
Hymenoptera	Anthophila	Colletes hederae Schmidt & Westrich, 1993	*		mh	*1
Hymenoptera	Anthophila	Colletes hylaeiformis Eversmann, 1852	1		es	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Anthophila	Colletes impunctatus Nylander, 1852	G		ss	*1
Hymenoptera	Anthophila	Colletes marginatus Smith, 1846	3		s	*1
Hymenoptera	Anthophila	Colletes mlokossewiczi Radoszkowski, 1891	R		es	*1
Hymenoptera	Anthophila	Colletes nasutus Smith, 1853	2		ss	*1
Hymenoptera	Anthophila	Colletes similis Schenck, 1853	V		mh	*1
Hymenoptera	Anthophila	Colletes succinctus (Linnaeus, 1758)	V		mh	*1
Hymenoptera	Anthophila	Dasypoda argentata (Panzer, 1809)	1		es	*1
Hymenoptera	Anthophila	Dasypoda hirtipes (Fabricius, 1793)	V		mh	*1
Hymenoptera	Anthophila	Dasypoda suripes (Christ, 1791)	0	2001	ex	*1
Hymenoptera	Anthophila	Dioxys tridentata (Nylander, 1848)	2		ss	*1
Hymenoptera	Anthophila	Dufourea alpina Morawitz, 1865	R		es	*1
Hymenoptera	Anthophila	Dufourea dentiventris (Nylander, 1848)	3		mh	*1
Hymenoptera	Anthophila	Dufourea halictula (Nylander, 1852)	2		s	*1
Hymenoptera	Anthophila	Dufourea inermis (Nylander, 1848)	2		s	*1
Hymenoptera	Anthophila	Dufourea minuta Lepeletier, 1841	3		s	*1
Hymenoptera	Anthophila	Dufourea paradoxa (Morawitz, 1867)	R		es	*1
Hymenoptera	Anthophila	Epeoloides coecutiens (Fabricius, 1775)	*		s	*1
Hymenoptera	Anthophila	Epeolus alpinus Friese, 1893	R		es	*1
Hymenoptera	Anthophila	Epeolus cruciger (Panzer, 1799)	3		mh	*1
Hymenoptera	Anthophila	Epeolus schummeli Schilling, 1849	1		es	*1
Hymenoptera	Anthophila	Epeolus variegatus (Linnaeus, 1758)	V		mh	*1
Hymenoptera	Anthophila	Eucera alticincta (Lepeletier, 1841)	0	1926	ex	*1
Hymenoptera	Anthophila	Eucera cineraria Eversmann, 1852	0	1954	ex	*1
Hymenoptera	Anthophila	Eucera dentata Germar, 1839	2		ss	*1
Hymenoptera	Anthophila	Eucera interrupta Baer, 1850	3		s	*1
Hymenoptera	Anthophila	Eucera longicornis (Linnaeus, 1758)	V		mh	*1
Hymenoptera	Anthophila	Eucera macroglossa Illiger, 1806	2		ss	*1
Hymenoptera	Anthophila	Eucera nigrescens Pérez, 1879	*		mh	*1
Hymenoptera	Anthophila	Eucera salicariae (Lepeletier, 1841)	3		s	*1
Hymenoptera	Anthophila	Halictus confusus Smith, 1853	*		mh	*1
Hymenoptera	Anthophila	Halictus eurygnathus Blüthgen, 1931	*		mh	*1
Hymenoptera	Anthophila	Halictus gavarnicus Pérez, 1903	1		es	*1
Hymenoptera	Anthophila	Halictus langobardicus Blüthgen, 1944	*		mh	*1
Hymenoptera	Anthophila	Halictus leucaheneus Ebmer, 1972	3		mh	*1
Hymenoptera	Anthophila	Halictus maculatus Smith, 1848	*		h	*1
Hymenoptera	Anthophila	Halictus pollinosus Sichel, 1860	*		s	*1
Hymenoptera	Anthophila	Halictus quadricinctus (Fabricius, 1776)	3		s	*1
Hymenoptera	Anthophila	Halictus rubicundus (Christ, 1791)	*		mh	*1
Hymenoptera	Anthophila	Halictus sajoi Blüthgen, 1923	0	1924	ex	*1
Hymenoptera	Anthophila	Halictus scabiosae (Rossi, 1790)	*		mh	*1
Hymenoptera	Anthophila	Halictus semitectus Morawitz, 1874	G		ss	*1
Hymenoptera	Anthophila	Halictus sexcinctus (Fabricius, 1775)	3		mh	*1
Hymenoptera	Anthophila	Halictus simplex Blüthgen, 1923	*		h	*1
Hymenoptera	Anthophila	Halictus smaragdulus Vachal, 1895	3		s	*1
Hymenoptera	Anthophila	Halictus subauratus (Rossi, 1792)	*		mh	*1
Hymenoptera	Anthophila	Halictus tetrazonius (Klug, 1817)	nb		nb	*1
Hymenoptera	Anthophila	Halictus tumulorum (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Anthophila	Hylaeus alpinus (Morawitz, 1867)	R		es	*1
Hymenoptera	Anthophila	Hylaeus angustatus (Schenck, 1861)	*		mh	*1
Hymenoptera	Anthophila	Hylaeus annulatus (Linnaeus, 1758)	R		es	*1
Hymenoptera	Anthophila	Hylaeus brevicornis Nylander, 1852	*		h	*1
Hymenoptera	Anthophila	Hylaeus cardioscapus Cockerell, 1924	R		es	*1
Hymenoptera	Anthophila	Hylaeus clypearis (Schenck, 1853)	*		mh	*1
Hymenoptera	Anthophila	Hylaeus communis Nylander, 1852	*		sh	*1
Hymenoptera	Anthophila	Hylaeus confusus Nylander, 1852	*		h	*1
Hymenoptera	Anthophila	Hylaeus cornutus Curtis, 1831	*		mh	*1
Hymenoptera	Anthophila	Hylaeus difformis (Eversmann, 1852)	*		s	*1
Hymenoptera	Anthophila	Hylaeus dilatatus (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Hylaeus duckei (Alfken, 1904)	3		s	*1
Hymenoptera	Anthophila	Hylaeus gibbus Saunders, 1850	*		h	*1
Hymenoptera	Anthophila	Hylaeus gracilicornis (Morawitz, 1867)	*		s	*1
Hymenoptera	Anthophila	Hylaeus gredleri Förster, 1871	*		h	*1
Hymenoptera	Anthophila	Hylaeus hyalinatus Smith, 1842	*		sh	*1
Hymenoptera	Anthophila	Hylaeus kahri Förster, 1871	*		s	*1
Hymenoptera	Anthophila	Hylaeus leptocephalus (Morawitz, 1870)	*		mh	*1
Hymenoptera	Anthophila	Hylaeus lineolatus (Schenck, 1861)	G		s	*1
Hymenoptera	Anthophila	Hylaeus moricei (Friese, 1898)	G		s	*1
Hymenoptera	Anthophila	Hylaeus nigritus (Fabricius, 1798)	*		sh	*1
Hymenoptera	Anthophila	Hylaeus nivalis (Morawitz, 1867)	R		es	*1
Hymenoptera	Anthophila	Hylaeus paulus Bridwell, 1919	*		mh	*1
Hymenoptera	Anthophila	Hylaeus pectoralis Förster, 1871	3		mh	*1
Hymenoptera	Anthophila	Hylaeus pfankuchi (Alfken, 1919)	3		mh	*1
Hymenoptera	Anthophila	Hylaeus pictipes Nylander, 1852	*		mh	*1
Hymenoptera	Anthophila	Hylaeus pilosulus (Pérez, 1903)	0	1929	ex	*1
Hymenoptera	Anthophila	Hylaeus punctatus (Brullé, 1832)	*		mh	*1
Hymenoptera	Anthophila	Hylaeus punctulatissimus Smith, 1842	G		mh	*1
Hymenoptera	Anthophila	Hylaeus rinki (Gorski, 1852)	*		s	*1
Hymenoptera	Anthophila	Hylaeus signatus (Panzer, 1798)	*		sh	*1
Hymenoptera	Anthophila	Hylaeus sinuatus (Schenck, 1853)	*		mh	*1
Hymenoptera	Anthophila	Hylaeus spilotus Förster, 1871	R		es	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Anthophila	Hylaeus styriacus Förster, 1871	*		mh	*1
Hymenoptera	Anthophila	Hylaeus taeniolatus Förster, 1871	D		?	*1
Hymenoptera	Anthophila	Hylaeus trinotatus (Pérez, 1895)	D		?	*1
Hymenoptera	Anthophila	Hylaeus tyrolensis Förster, 1871	nb		nb	*1
Hymenoptera	Anthophila	Hylaeus variegatus (Fabricius, 1798)	V		mh	*1
Hymenoptera	Anthophila	Lasioglossum aeratum (Kirby, 1802)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum albipes (Fabricius, 1781)	*		sh	*1
Hymenoptera	Anthophila	Lasioglossum albocinctum (Lucas, 1849)	1		es	*1
Hymenoptera	Anthophila	Lasioglossum alpigenum (Dalla Torre, 1877)	R		es	*1
Hymenoptera	Anthophila	Lasioglossum angusticeps (Perkins, 1895)	G		ss	*1
Hymenoptera	Anthophila	Lasioglossum bavaricum (Blüthgen, 1930)	R		es	*1
Hymenoptera	Anthophila	Lasioglossum bluethgeni Ebmer, 1971	G		ss	*1
Hymenoptera	Anthophila	Lasioglossum brevicorne (Schenck, 1868)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum breviventre (Schenck, 1853)	0	1931	ex	*1
Hymenoptera	Anthophila	Lasioglossum buccale (Pérez, 1903)	R		es	*1
Hymenoptera	Anthophila	Lasioglossum calceatum (Scopoli, 1763)	*		sh	*1
Hymenoptera	Anthophila	Lasioglossum clypeare (Schenck, 1853)	2		ss	*1
Hymenoptera	Anthophila	Lasioglossum convexiusculum (Schenck, 1853)	2		ss	*1
Hymenoptera	Anthophila	Lasioglossum corvinum (Morawitz, 1876)	0	1930	ex	*1
Hymenoptera	Anthophila	Lasioglossum costulatum (Kriechbaumer, 1873)	3		mh	*1
Hymenoptera	Anthophila	Lasioglossum cupromicans (Pérez, 1903)	G		ss	*1
Hymenoptera	Anthophila	Lasioglossum euboeense (Strand, 1909)	2		ss	*1
Hymenoptera	Anthophila	Lasioglossum fratellum (Pérez, 1903)	*		mh	*1
Hymenoptera	Anthophila	Lasioglossum fulvicorne (Kirby, 1802)	*		sh	*1
Hymenoptera	Anthophila	Lasioglossum glabriusculum (Morawitz, 1872)	*		mh	*1
Hymenoptera	Anthophila	Lasioglossum griseolum (Morawitz, 1872)	G		ss	*1
Hymenoptera	Anthophila	Lasioglossum intermedium (Schenck, 1868)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum interruptum (Panzer, 1798)	3		mh	*1
Hymenoptera	Anthophila	Lasioglossum laeve (Kirby, 1802)	1		es	*1
Hymenoptera	Anthophila	Lasioglossum laevigatum (Kirby, 1802)	3		mh	*1
Hymenoptera	Anthophila	Lasioglossum laticeps (Schenck, 1868)	*		h	*1
Hymenoptera	Anthophila	Lasioglossum lativentre (Schenck, 1853)	V		mh	*1
Hymenoptera	Anthophila	Lasioglossum leucopus (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Lasioglossum leucozonium (Schrank, 1781)	*		sh	*1
Hymenoptera	Anthophila	Lasioglossum limbellum (Morawitz, 1876)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum lineare (Schenck, 1868)	3		mh	*1
Hymenoptera	Anthophila	Lasioglossum lissonotum (Noskiewicz, 1926)	2		ss	*1
Hymenoptera	Anthophila	Lasioglossum lucidulum (Schenck, 1861)	*		h	*1
Hymenoptera	Anthophila	Lasioglossum majus (Nylander, 1852)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum malachurum (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Lasioglossum marginatum (Brullé, 1832)	R		es	*1
Hymenoptera	Anthophila	Lasioglossum marginellum (Schenck, 1853)	2		ss	*1
Hymenoptera	Anthophila	Lasioglossum minutissimum (Kirby, 1802)	*		s	*1
Hymenoptera	Anthophila	Lasioglossum minutulum (Schenck, 1853)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum morio (Fabricius, 1793)	*		sh	*1
Hymenoptera	Anthophila	Lasioglossum nigripes (Lepeletier, 1841)	2		s	*1
Hymenoptera	Anthophila	Lasioglossum nitidiusculum (Kirby, 1802)	V		mh	*1
Hymenoptera	Anthophila	Lasioglossum nitidulum (Fabricius, 1804)	*		h	*1
Hymenoptera	Anthophila	Lasioglossum pallens (Brullé, 1832)	*		s	*1
Hymenoptera	Anthophila	Lasioglossum parvulum (Schenck, 1853)	V		s	*1
Hymenoptera	Anthophila	Lasioglossum pauperatum (Brullé, 1832)	2		ss	*1
Hymenoptera	Anthophila	Lasioglossum pauxillum (Schenck, 1853)	*		sh	*1
Hymenoptera	Anthophila	Lasioglossum pleurospeculum Herrmann, 2001	*		ss	*1
Hymenoptera	Anthophila	Lasioglossum politum (Schenck, 1853)	*		mh	*1
Hymenoptera	Anthophila	Lasioglossum prasinum (Smith, 1848)	2		s	*1
Hymenoptera	Anthophila	Lasioglossum punctatissimum (Schenck, 1853)	*		mh	*1
Hymenoptera	Anthophila	Lasioglossum puncticolle (Morawitz, 1872)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum pygmaeum (Schenck, 1853)	G		s	*1
Hymenoptera	Anthophila	Lasioglossum quadrinotatulum (Schenck, 1861)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum quadrinotatum (Kirby, 1802)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum quadrisignatum (Schenck, 1853)	2		ss	*1
Hymenoptera	Anthophila	Lasioglossum rufitarse (Zetterstedt, 1838)	*		mh	*1
Hymenoptera	Anthophila	Lasioglossum sabulosum (Warncke, 1986)	D		?	*1
Hymenoptera	Anthophila	Lasioglossum semilucens (Alfken, 1914)	*		mh	*1
Hymenoptera	Anthophila	Lasioglossum setulosum (Strand, 1909)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum sexmaculatum (Schenck, 1853)	G		ss	*1
Hymenoptera	Anthophila	Lasioglossum sexnotatum (Kirby, 1802)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum sexstrigatum (Schenck, 1868)	*		mh	*1
Hymenoptera	Anthophila	Lasioglossum smeathmanellum (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Lasioglossum subfasciatum (Imhoff, 1832)	1		ss	*1
Hymenoptera	Anthophila	Lasioglossum subfulvicorne (Blüthgen, 1934)	R		es	*1
Hymenoptera	Anthophila	Lasioglossum subhirtum (Lepeletier, 1841)	3		ss	*1
Hymenoptera	Anthophila	Lasioglossum tarsatum (Schenck, 1868)	2		s	*1
Hymenoptera	Anthophila	Lasioglossum tricinctum (Schenck, 1874)	3		s	*1
Hymenoptera	Anthophila	Lasioglossum villosulum (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Lasioglossum xanthopus (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Lasioglossum zonulum (Smith, 1848)	*		h	*1
Hymenoptera	Anthophila	Lithurgus chrysurus Fonscolombe, 1834	1		es	*1
Hymenoptera	Anthophila	Macropis europaea Warncke, 1973	*		mh	*1
Hymenoptera	Anthophila	Macropis fulvipes (Fabricius, 1804)	*		s	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Anthophila	Megachile alpicola Alfken, 1924	*		mh	*1
Hymenoptera	Anthophila	Megachile analis Nylander, 1852	2		ss	*1
Hymenoptera	Anthophila	Megachile apicalis Spinola, 1808	2		ss	*1
Hymenoptera	Anthophila	Megachile bombycina Radoszkowski, 1874	0	1898	ex	*1
Hymenoptera	Anthophila	Megachile centuncularis (Linnaeus, 1758)	V		mh	*1
Hymenoptera	Anthophila	Megachile circumcincta (Kirby, 1802)	V		mh	*1
Hymenoptera	Anthophila	Megachile ericetorum Lepeletier, 1841	*		mh	*1
Hymenoptera	Anthophila	Megachile genalis Morawitz, 1880	2		ss	*1
Hymenoptera	Anthophila	Megachile lagopoda (Linnaeus, 1761)	2		ss	*1
Hymenoptera	Anthophila	Megachile lapponica Thomson, 1872	*		mh	*1
Hymenoptera	Anthophila	Megachile leachella Curtis, 1828	3		s	*1
Hymenoptera	Anthophila	Megachile ligniseca (Kirby, 1802)	2		ss	*1
Hymenoptera	Anthophila	Megachile maackii Radoszkowski, 1874	0	1869	ex	*1
Hymenoptera	Anthophila	Megachile maritima (Kirby, 1802)	3		mh	*1
Hymenoptera	Anthophila	Megachile melanopyga Costa, 1863	1		es	*1
Hymenoptera	Anthophila	Megachile nigriventris Schenck, 1868	*		mh	*1
Hymenoptera	Anthophila	Megachile parietina (Geoffroy, 1785)	1		es	*1
Hymenoptera	Anthophila	Megachile pilidens Alfken, 1924	3		s	*1
Hymenoptera	Anthophila	Megachile pyrenaea Pérez, 1890	G		ss	*1
Hymenoptera	Anthophila	Megachile rotundata (Fabricius, 1787)	*		mh	*1
Hymenoptera	Anthophila	Megachile versicolor Smith, 1844	*		h	*1
Hymenoptera	Anthophila	Megachile willughbiella (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Melecta albifrons (Forster, 1771)	*		sh	*1
Hymenoptera	Anthophila	Melecta luctuosa (Scopoli, 1770)	3		s	*1
Hymenoptera	Anthophila	Melitta dimidiata Morawitz, 1876	1		es	*1
Hymenoptera	Anthophila	Melitta haemorrhoidalis (Fabricius, 1775)	*		h	*1
Hymenoptera	Anthophila	Melitta leporina (Panzer, 1799)	*		mh	*1
Hymenoptera	Anthophila	Melitta nigricans Alfken, 1905	*		mh	*1
Hymenoptera	Anthophila	Melitta tricincta Kirby, 1802	V		mh	*1
Hymenoptera	Anthophila	Melitta wankowiczi (Radoszkowski, 1891)	0	1958	ex	*1
Hymenoptera	Anthophila	Melitturga clavicornis (Latreille, 1806)	0	1959	ex	*1
Hymenoptera	Anthophila	Nomada alboguttata Herrich-Schäffer, 1839	*		mh	*1
Hymenoptera	Anthophila	Nomada argentata Herrich-Schäffer, 1839	2		s	*1
Hymenoptera	Anthophila	Nomada armata Herrich-Schäffer, 1839	3		mh	*1
Hymenoptera	Anthophila	Nomada atroscutellaris Strand, 1921	V		mh	*1
Hymenoptera	Anthophila	Nomada baccata Smith, 1844	2		s	*1
Hymenoptera	Anthophila	Nomada bifasciata Olivier, 1811	*		h	*1
Hymenoptera	Anthophila	Nomada bispinosa Mocsáry, 1883	D		?	*1
Hymenoptera	Anthophila	Nomada bluethgeni Stöckhert, 1943	0	1953	ex	*1
Hymenoptera	Anthophila	Nomada braunsiana Schmiedeknecht, 1882	1		es	*1
Hymenoptera	Anthophila	Nomada castellana Dusmet, 1913	*		mh	*1
Hymenoptera	Anthophila	Nomada conjungens Herrich-Schäffer, 1839	*		mh	*1
Hymenoptera	Anthophila	Nomada discedens Pérez, 1884	1		es	*1
Hymenoptera	Anthophila	Nomada distinguenda Morawitz, 1874	G		s	*1
Hymenoptera	Anthophila	Nomada emarginata Morawitz, 1877	*		s	*1
Hymenoptera	Anthophila	Nomada errans Lepeletier, 1841	2		ss	*1
Hymenoptera	Anthophila	Nomada fabriciana (Linnaeus, 1767)	*		sh	*1
Hymenoptera	Anthophila	Nomada facilis Schwarz, 1967	G		ss	*1
Hymenoptera	Anthophila	Nomada femoralis Morawitz, 1869	2		ss	*1
Hymenoptera	Anthophila	Nomada ferruginata (Linnaeus, 1767)	*		mh	*1
Hymenoptera	Anthophila	Nomada flava Panzer, 1798	*		sh	*1
Hymenoptera	Anthophila	Nomada flavoguttata (Kirby, 1802)	*		sh	*1
Hymenoptera	Anthophila	Nomada flavopicta (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Nomada fucata Panzer, 1798	*		h	*1
Hymenoptera	Anthophila	Nomada fulvicornis Fabricius, 1793	*		h	*1
Hymenoptera	Anthophila	Nomada furva Panzer, 1798	D		?	*1
Hymenoptera	Anthophila	Nomada fuscicornis Nylander, 1848	*		mh	*1
Hymenoptera	Anthophila	Nomada goodeniana (Kirby, 1802)	*		sh	*1
Hymenoptera	Anthophila	Nomada guttulata Schenck, 1861	*		s	*1
Hymenoptera	Anthophila	Nomada hirtipes Pérez, 1884	3		s	*1
Hymenoptera	Anthophila	Nomada integra Brullé, 1832	G		s	*1
Hymenoptera	Anthophila	Nomada italica Dalla Torre & Friese, 1894	0	1955	ex	*1
Hymenoptera	Anthophila	Nomada kohli Schmiedeknecht, 1882	2		s	*1
Hymenoptera	Anthophila	Nomada lathburiana (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Nomada leucophthalma (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Nomada marshamella (Kirby, 1802)	*		sh	*1
Hymenoptera	Anthophila	Nomada mauritanica Lepeletier, 1841	0	1818	ex	*1
Hymenoptera	Anthophila	Nomada melathoracica Imhoff, 1834	2		ss	*1
Hymenoptera	Anthophila	Nomada moeschleri Alfken, 1913	*		ss	*1
Hymenoptera	Anthophila	Nomada mutabilis Morawitz, 1870	1		es	*1
Hymenoptera	Anthophila	Nomada mutica Morawitz, 1872	2		ss	*1
Hymenoptera	Anthophila	Nomada nobilis Herrich-Schäffer, 1839	0	1941	ex	*1
Hymenoptera	Anthophila	Nomada obscura Zetterstedt, 1838	*		s	*1
Hymenoptera	Anthophila	Nomada obtusifrons Nylander, 1848	2		s	*1
Hymenoptera	Anthophila	Nomada opaca Alfken, 1913	2		ss	*1
Hymenoptera	Anthophila	Nomada panzeri Lepeletier, 1841	*		h	*1
Hymenoptera	Anthophila	Nomada piccioliana Magretti, 1883	3		s	*1
Hymenoptera	Anthophila	Nomada pleurosticta Herrich-Schäffer, 1839	2		ss	*1
Hymenoptera	Anthophila	Nomada posthuma Blüthgen, 1949	D		ss	*1
Hymenoptera	Anthophila	Nomada pulchra Arnold, 1888	0	1892	ex	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Anthophila	Nomada rhenana Morawitz, 1872	G		s	*1
Hymenoptera	Anthophila	Nomada roberjeotiana Panzer, 1799	G		s	*1
Hymenoptera	Anthophila	Nomada rostrata Herrich-Schäffer, 1839	1		es	*1
Hymenoptera	Anthophila	Nomada ruficornis (Linnaeus, 1758)	*		h	*1
Hymenoptera	Anthophila	Nomada rufipes Fabricius, 1793	V		mh	*1
Hymenoptera	Anthophila	Nomada sexfasciata Panzer, 1799	*		mh	*1
Hymenoptera	Anthophila	Nomada sheppardana (Kirby, 1802)	*		sh	*1
Hymenoptera	Anthophila	Nomada signata Jurine, 1807	*		s	*1
Hymenoptera	Anthophila	Nomada similis Morawitz, 1872	G		s	*1
Hymenoptera	Anthophila	Nomada stigma Fabricius, 1804	*		h	*1
Hymenoptera	Anthophila	Nomada striata Fabricius, 1793	*		h	*1
Hymenoptera	Anthophila	Nomada succincta Panzer, 1798	*		h	*1
Hymenoptera	Anthophila	Nomada symphyti Stöckhert, 1930	G		ss	*1
Hymenoptera	Anthophila	Nomada trapeziformis Schmiedeknecht, 1882	0	1954	ex	*1
Hymenoptera	Anthophila	Nomada villosa Thomson, 1870	G		s	*1
Hymenoptera	Anthophila	Nomada zonata Panzer, 1798	V		s	*1
Hymenoptera	Anthophila	Nomioides minutissimus (Rossi, 1790)	2		es	*1
Hymenoptera	Anthophila	Osmia acuticornis Dufour & Perris, 1840	2		ss	*1
Hymenoptera	Anthophila	Osmia adunca (Panzer, 1798)	*		h	*1
Hymenoptera	Anthophila	Osmia andrenoides Spinola, 1808	2		s	*1
Hymenoptera	Anthophila	Osmia anthocopoides Schenck, 1853	3		mh	*1
Hymenoptera	Anthophila	Osmia aurulenta (Panzer, 1799)	*		mh	*1
Hymenoptera	Anthophila	Osmia bicolor (Schrank, 1781)	*		mh	*1
Hymenoptera	Anthophila	Osmia bicornis (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Anthophila	Osmia brevicornis (Fabricius, 1798)	G		s	*1
Hymenoptera	Anthophila	Osmia caerulescens (Linnaeus, 1758)	*		h	*1
Hymenoptera	Anthophila	Osmia campanularum (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Osmia cantabrica (Benoist, 1935)	*		h	*1
Hymenoptera	Anthophila	Osmia cerinthidis Morawitz, 1876	1		es	*1
Hymenoptera	Anthophila	Osmia claviventris Thomson, 1872	*		h	*1
Hymenoptera	Anthophila	Osmia cornuta (Latreille, 1805)	*		mh	*1
Hymenoptera	Anthophila	Osmia crenulata (Nylander, 1856)	*		mh	*1
Hymenoptera	Anthophila	Osmia florisomnis (Linnaeus, 1758)	*		h	*1
Hymenoptera	Anthophila	Osmia foveolata (Morawitz, 1868)	0	1942	ex	*1
Hymenoptera	Anthophila	Osmia gallarum Spinola, 1808	V		s	*1
Hymenoptera	Anthophila	Osmia hyperborea Tkalcu, 1983	D		?	*1
Hymenoptera	Anthophila	Osmia inermis (Zetterstedt, 1838)	2		ss	*1
Hymenoptera	Anthophila	Osmia labialis Pérez, 1879	nb		nb	*1
Hymenoptera	Anthophila	Osmia leaiana (Kirby, 1802)	3		s	*1
Hymenoptera	Anthophila	Osmia lepeletieri Pérez, 1879	0	1953	ex	*1
Hymenoptera	Anthophila	Osmia leucomelana (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Osmia loti Morawitz, 1867	R		es	*1
Hymenoptera	Anthophila	Osmia maritima Friese, 1885	R		es	*1
Hymenoptera	Anthophila	Osmia mitis Nylander, 1852	2		ss	*1
Hymenoptera	Anthophila	Osmia mustelina Gerstäcker, 1869	2		ss	*1
Hymenoptera	Anthophila	Osmia nigriventris (Zetterstedt, 1838)	1		es	*1
Hymenoptera	Anthophila	Osmia niveata (Fabricius, 1804)	3		mh	*1
Hymenoptera	Anthophila	Osmia papaveris (Latreille, 1799)	1		ss	*1
Hymenoptera	Anthophila	Osmia parietina Curtis, 1828	3		s	*1
Hymenoptera	Anthophila	Osmia pilicornis Smith, 1846	G		ss	*1
Hymenoptera	Anthophila	Osmia rapunculi (Lepeletier, 1841)	*		h	*1
Hymenoptera	Anthophila	Osmia ravouxi Pérez, 1902	2		s	*1
Hymenoptera	Anthophila	Osmia rufohirta Latreille, 1811	3		mh	*1
Hymenoptera	Anthophila	Osmia spinulosa (Kirby, 1802)	3		mh	*1
Hymenoptera	Anthophila	Osmia submicans Morawitz, 1870	2		ss	*1
Hymenoptera	Anthophila	Osmia tridentata Dufour & Perris, 1840	3		s	*1
Hymenoptera	Anthophila	Osmia truncorum (Linnaeus, 1758)	*		h	*1
Hymenoptera	Anthophila	Osmia tuberculata Nylander, 1848	3		s	*1
Hymenoptera	Anthophila	Osmia uncinata Gerstäcker, 1869	G		s	*1
Hymenoptera	Anthophila	Osmia versicolor Latreille, 1811	1		es	*1
Hymenoptera	Anthophila	Osmia villosa (Schenck, 1853)	2		ss	*1
Hymenoptera	Anthophila	Osmia viridana Morawitz, 1874	2		es	*1
Hymenoptera	Anthophila	Osmia xanthomelana (Kirby, 1802)	2		ss	*1
Hymenoptera	Anthophila	Panurginus herzi Morawitz, 1892	R		es	*1
Hymenoptera	Anthophila	Panurginus labiatus (Eversmann, 1852)	0	1912	ex	*1
Hymenoptera	Anthophila	Panurginus montanus Giraud, 1861	*		s	*1
Hymenoptera	Anthophila	Panurgus banksianus (Kirby, 1802)	*		mh	*1
Hymenoptera	Anthophila	Panurgus calcaratus (Scopoli, 1763)	*		mh	*1
Hymenoptera	Anthophila	Panurgus dentipes Latreille, 1811	3		s	*1
Hymenoptera	Anthophila	Pseudapis femoralis (Pallas, 1773)	0	1936	ex	*1
Hymenoptera	Anthophila	Rhophitoides canus (Eversmann, 1852)	V		s	*1
Hymenoptera	Anthophila	Rophites algirus Pérez, 1895	3		s	*1
Hymenoptera	Anthophila	Rophites quinquespinosus Spinola, 1808	2		ss	*1
Hymenoptera	Anthophila	Sphecodes albilabris (Fabricius, 1793)	*		mh	*1
Hymenoptera	Anthophila	Sphecodes crassus Thomson, 1870	*		sh	*1
Hymenoptera	Anthophila	Sphecodes cristatus von Hagens, 1882	G		s	*1
Hymenoptera	Anthophila	Sphecodes croaticus Meyer, 1922	2		s	*1
Hymenoptera	Anthophila	Sphecodes ephippius (Linnaeus, 1767)	*		sh	*1
Hymenoptera	Anthophila	Sphecodes ferruginatus von Hagens, 1882	*		mh	*1
Hymenoptera	Anthophila	Sphecodes geoffrellus (Kirby, 1802)	*		h	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Anthophila	Sphecodes gibbus (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Anthophila	Sphecodes hyalinatus von Hagens, 1882	*		sh	*1
Hymenoptera	Anthophila	Sphecodes longulus von Hagens, 1882	*		mh	*1
Hymenoptera	Anthophila	Sphecodes majalis Pérez, 1903	*		ss	*1
Hymenoptera	Anthophila	Sphecodes marginatus von Hagens, 1882	*		mh	*1
Hymenoptera	Anthophila	Sphecodes miniatus von Hagens, 1882	*		mh	*1
Hymenoptera	Anthophila	Sphecodes monilicornis (Kirby, 1802)	*		sh	*1
Hymenoptera	Anthophila	Sphecodes niger von Hagens, 1874	*		mh	*1
Hymenoptera	Anthophila	Sphecodes pellucidus Smith, 1845	V		mh	*1
Hymenoptera	Anthophila	Sphecodes pseudofasciatus Blüthgen, 1925	D		?	*1
Hymenoptera	Anthophila	Sphecodes puncticeps Thomson, 1870	*		mh	*1
Hymenoptera	Anthophila	Sphecodes reticulatus Thomson, 1870	*		mh	*1
Hymenoptera	Anthophila	Sphecodes rubicundus von Hagens, 1875	3		s	*1
Hymenoptera	Anthophila	Sphecodes ruficrus (Erichson, 1835)	*		ss	*1
Hymenoptera	Anthophila	Sphecodes rufiventris (Panzer, 1798)	*		mh	*1
Hymenoptera	Anthophila	Sphecodes scabricollis Wesmael, 1835	G		s	*1
Hymenoptera	Anthophila	Sphecodes schenckii von Hagens, 1882	1		es	*1
Hymenoptera	Anthophila	Sphecodes spinulosus von Hagens, 1875	G		s	*1
Hymenoptera	Anthophila	Stelis breviuscula (Nylander, 1848)	*		h	*1
Hymenoptera	Anthophila	Stelis franconica Blüthgen, 1930	0	1949	ex	*1
Hymenoptera	Anthophila	Stelis minima Schenck, 1861	*		s	*1
Hymenoptera	Anthophila	Stelis minuta Lepeletier & Serville, 1825	*		s	*1
Hymenoptera	Anthophila	Stelis nasuta (Latreille, 1809)	0	1965	ex	*1
Hymenoptera	Anthophila	Stelis odontopyga Noskiewicz, 1926	3		s	*1
Hymenoptera	Anthophila	Stelis ornatula (Klug, 1807)	*		mh	*1
Hymenoptera	Anthophila	Stelis phaeoptera (Kirby, 1802)	3		s	*1
Hymenoptera	Anthophila	Stelis punctulatissima (Kirby, 1802)	*		h	*1
Hymenoptera	Anthophila	Stelis signata (Latreille, 1809)	3		s	*1
Hymenoptera	Anthophila	Systropha curvicornis (Scopoli, 1770)	3		s	*1
Hymenoptera	Anthophila	Systropha planidens Giraud, 1861	2		s	*1
Hymenoptera	Anthophila	Thyreus histrionicus (Illiger, 1806)	0	1953	ex	*1
Hymenoptera	Anthophila	Thyreus orbatus (Lepeletier, 1841)	2		ss	*1
Hymenoptera	Anthophila	Xylocopa iris (Christ, 1791)	0	1957	ex	*1
Hymenoptera	Anthophila	Xylocopa violacea (Linnaeus, 1758)	*		mh	*1
Hymenoptera	Argidae	Aprosthema austriacum (Konow, 1892)	D		?	*1
Hymenoptera	Argidae	Aprosthema axillare (Zaddach, 1863)	D		?	*1
Hymenoptera	Argidae	Aprosthema bifidum (Klug, 1834)	D		?	*1
Hymenoptera	Argidae	Aprosthema brevicorne (Fallén, 1808)	D		?	*1
Hymenoptera	Argidae	Aprosthema fusicorne (Thomson, 1871)	D		?	*1
Hymenoptera	Argidae	Aprosthema instratum (Zaddach, 1859)	D		?	*1
Hymenoptera	Argidae	Aprosthema intermedium (Zaddach, 1863)	D		?	*1
Hymenoptera	Argidae	Aprosthema konowi (Mocsáry, 1891)	D		?	*1
Hymenoptera	Argidae	Aprosthema melanurum (Klug, 1814)	D		?	*1
Hymenoptera	Argidae	Aprosthema peletieri (Villaret, 1832)	D		?	*1
Hymenoptera	Argidae	Aprosthema tardum (Klug, 1814)	D		?	*1
Hymenoptera	Argidae	Arge berberidis Schrank, 1802	*		h	*1
Hymenoptera	Argidae	Arge ciliaris (Linnaeus, 1767)	*		mh	*1
Hymenoptera	Argidae	Arge cyanocrocea (Forster, 1771)	*		sh	*1
Hymenoptera	Argidae	Arge dimidiata (Fallén, 1808)	3		s	*1
Hymenoptera	Argidae	Arge enodis (Linnaeus, 1767)	*		mh	*1
Hymenoptera	Argidae	Arge expansa (Klug, 1834)	*		ss	*1
Hymenoptera	Argidae	Arge fuscipennis (Herrich-Schäffer, 1833)	G		ss	*1
Hymenoptera	Argidae	Arge fuscipes (Fallén, 1808)	*		mh	*1
Hymenoptera	Argidae	Arge gracilicornis (Klug, 1814)	*		h	*1
Hymenoptera	Argidae	Arge melanochra (Gmelin, 1790)	*		h	*1
Hymenoptera	Argidae	Arge metallica (Klug, 1834)	G		ss	*1
Hymenoptera	Argidae	Arge nigripes (Retzius, 1783)	*		mh	*1
Hymenoptera	Argidae	Arge ochropus (Gmelin, 1790)	*		mh	*1
Hymenoptera	Argidae	Arge pagana (Panzer, 1798)	*		h	*1
Hymenoptera	Argidae	Arge pullata (Zaddach, 1859)	1		es	*1
Hymenoptera	Argidae	Arge rustica (Linnaeus, 1758)	*		mh	*1
Hymenoptera	Argidae	Arge sorbi Schedl & Pschorn-Walcher, 1984	D		ss	*1
Hymenoptera	Argidae	Arge ustulata (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Argidae	Sterictiphora angelicae (Panzer, 1799)	V		mh	*1
Hymenoptera	Argidae	Sterictiphora denticula Koch, 1988	R		es	*1
Hymenoptera	Argidae	Sterictiphora furcata (Villers, 1789)	1		es	*1
Hymenoptera	Argidae	Sterictiphora geminata (Gmelin, 1790)	*		mh	*1
Hymenoptera	Argidae	Sterictiphora longicornis Chevin, 1982	*		mh	*1
Hymenoptera	Blasticotomidae	Blasticotoma filiceti Klug, 1834	*		s	*1
Hymenoptera	Cephidae	Caenocephus lunulatus (Strobl, 1895)	0	1976	ex	*1
Hymenoptera	Cephidae	Calameuta filiformis (Eversmann, 1847)	*		sh	*1
Hymenoptera	Cephidae	Calameuta haemorrhoidalis (Fabricius, 1781)	0	1803	ex	*1
Hymenoptera	Cephidae	Calameuta pallipes (Klug, 1803)	*		mh	*1
Hymenoptera	Cephidae	Calameuta punctata (Klug, 1803)	D		ss	*1
Hymenoptera	Cephidae	Cephus brachycercus Thomson, 1871	G		mh	*1
Hymenoptera	Cephidae	Cephus infuscatus Thomson, 1871	*		s	*1
Hymenoptera	Cephidae	Cephus nigrinus Thomson, 1871	*		sh	*1
Hymenoptera	Cephidae	Cephus pygmeus (Linnaeus, 1767)	*		sh	*1
Hymenoptera	Cephidae	Cephus spinipes (Panzer, 1800)	*		sh	*1
Hymenoptera	Cephidae	Hartigia linearis (Schrank, 1781)	*		mh	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Cephidae	Hartigia nigra (Harris, 1779)	*		mh	*1
Hymenoptera	Cephidae	Hartigia xanthostoma (Eversmann, 1847)	*		mh	*1
Hymenoptera	Cephidae	Janus compressus (Fabricius, 1793)	3		mh	*1
Hymenoptera	Cephidae	Janus cynosbati (Linnaeus, 1758)	*		s	*1
Hymenoptera	Cephidae	Janus luteipes (Lepeletier, 1823)	*		s	*1
Hymenoptera	Cephidae	Trachelus tabidus (Fabricius, 1775)	0	1958	ex	*1
Hymenoptera	Cephidae	Trachelus troglodyta (Fabricius, 1787)	2		s	*1
Hymenoptera	Chrysididae	Chrysidea disclusa pumilionis Linsenmaier 1987	0	1971	ex	*2
Hymenoptera	Chrysididae	Chrysis analis Spinola 1808	3		s	*2
Hymenoptera	Chrysididae	Chrysis angustula Schenck 1856	*		mh	*2
Hymenoptera	Chrysididae	Chrysis bicolor Lepeletier 1806	3		s	*2
Hymenoptera	Chrysididae	Chrysis brevitarsis Thomson 1870	G		ss	*2
Hymenoptera	Chrysididae	Chrysis calimorpha Mocsáry 1882	1		es	*2
Hymenoptera	Chrysididae	Chrysis clarinicollis Linsenmaier 1951	G		ss	*2
Hymenoptera	Chrysididae	Chrysis comparata Lepeletier 1806	0	1963	ex	*2
Hymenoptera	Chrysididae	Chrysis consanguinea prominea Linsenmaier 1959	0	1974	ex	*2
Hymenoptera	Chrysididae	Chrysis cortii Linsenmaier 1951	3		s	*2
Hymenoptera	Chrysididae	Chrysis corusca Valkeila 1971	D		mh	*2
Hymenoptera	Chrysididae	Chrysis equestris Dahlbom 1845	G		ss	*2
Hymenoptera	Chrysididae	Chrysis fasciata Olivier 1790	G		ss	*2
Hymenoptera	Chrysididae	Chrysis fulgida Linnaeus 1791	3		s	*2
Hymenoptera	Chrysididae	Chrysis germari Wesmael 1839	3		s	*2
Hymenoptera	Chrysididae	Chrysis gracillima Förster 1853	V		mh	*2
Hymenoptera	Chrysididae	Chrysis graelsii sybarita Förster, 1853	2		ss	*2
Hymenoptera	Chrysididae	Chrysis ignita Linnaeus 1758 (spec B)	*		mh	*2
Hymenoptera	Chrysididae	Chrysis ignita Linnaeus, 1758 (s str)	*		mh	*2
Hymenoptera	Chrysididae	Chrysis illigeri Wesmael 1939	*		mh	*2
Hymenoptera	Chrysididae	Chrysis immaculata Buysson 1898	G		ss	*2
Hymenoptera	Chrysididae	Chrysis impressa Schenck 1856	D		mh	*2
Hymenoptera	Chrysididae	Chrysis inaequalis Dahlbom 1845	3		s	*2
Hymenoptera	Chrysididae	Chrysis indigotea Dufour & Perris 1840	G		ss	*2
Hymenoptera	Chrysididae	Chrysis iris Christ 1791	2		ss	*2
Hymenoptera	Chrysididae	Chrysis leachii Shuckard 1837	2		ss	*2
Hymenoptera	Chrysididae	Chrysis leptomandibularis Niehuis 2000	*		mh	*2
Hymenoptera	Chrysididae	Chrysis longula Abeille,1879	3		s	*2
Hymenoptera	Chrysididae	Chrysis mediadentata Linsenmaier 1951	D		mh	*2
Hymenoptera	Chrysididae	Chrysis mediata Linsenmaier 1951	*		mh	*2
Hymenoptera	Chrysididae	Chrysis obtusidens Dufour & Perris 1840	G		ss	*2
Hymenoptera	Chrysididae	Chrysis pseudobrevitarsis Linsenmaier 1951	*		mh	*2
Hymenoptera	Chrysididae	Chrysis pulchella Spinola 1808	0	1971	ex	*2
Hymenoptera	Chrysididae	Chrysis ruddii Shuckard 1837	*		mh	*2
Hymenoptera	Chrysididae	Chrysis rutilans Olivier 1790	2		ss	*2
Hymenoptera	Chrysididae	Chrysis rutiliventris Abeille 1879	G		ss	*2
Hymenoptera	Chrysididae	Chrysis schencki Linsenmaier 1968	*		mh	*2
Hymenoptera	Chrysididae	Chrysis scutellaris Fabricius 1794	3		s	*2
Hymenoptera	Chrysididae	Chrysis sexdentata Christ 1791	G		ss	*2
Hymenoptera	Chrysididae	Chrysis solida Haupt 1956	D		mh	*2
Hymenoptera	Chrysididae	Chrysis splendidula Rossi 1790	G		ss	*2
Hymenoptera	Chrysididae	Chrysis subcoriacea Linsenmaier 1959	*		mh	*2
Hymenoptera	Chrysididae	Chrysis succincta Linnaeus 1767	G		ss	*2
Hymenoptera	Chrysididae	Chrysis valida Mocsáry 1912	R		es	*2
Hymenoptera	Chrysididae	Chrysis viridula Linnaeus 1761	*		mh	*2
Hymenoptera	Chrysididae	Chrysura austriaca (Fabricius 1804)	V		mh	*2
Hymenoptera	Chrysididae	Chrysura cuprea (Rossi 1790)	3		s	*2
Hymenoptera	Chrysididae	Chrysura dichroa (Dahlbom 1854)	2		ss	*2
Hymenoptera	Chrysididae	Chrysura hirsuta (Gerstäcker 1869)	G		ss	*2
Hymenoptera	Chrysididae	Chrysura hybrida (Lepeletier 1806)	1		es	*2
Hymenoptera	Chrysididae	Chrysura radians Harris 1776	3		s	*2
Hymenoptera	Chrysididae	Chrysura simplex (Dahlbom 1854)	1		es	*2
Hymenoptera	Chrysididae	Chrysura trimaculata (Förster 1853)	*		mh	*2
Hymenoptera	Chrysididae	Cleptes nitidulus (Fabricius 1793)	*		mh	*2
Hymenoptera	Chrysididae	Cleptes pallipes Lepeletier 1806	*		mh	*2
Hymenoptera	Chrysididae	Cleptes semiauratus (Linnaeus, 1761)	*		mh	*2
Hymenoptera	Chrysididae	Cleptes semicyaneus Tournier 1979	D		mh	*2
Hymenoptera	Chrysididae	Cleptes splendidus (Fabricius 1794)	2		ss	*2
Hymenoptera	Chrysididae	Elampus bidens (Förster 1853)	G		ss	*2
Hymenoptera	Chrysididae	Elampus constrictus (Förster 1853)	D		mh	*2
Hymenoptera	Chrysididae	Elampus foveatus Mocsary 1914	D		mh	*2
Hymenoptera	Chrysididae	Elampus panzeri (Fabricius 1804)	*		mh	*2
Hymenoptera	Chrysididae	Euchroeus purpuratus (Fabricius 1787)	1		es	*2
Hymenoptera	Chrysididae	Hedychridium ardens (Coquebert 1801)	*		mh	*2
Hymenoptera	Chrysididae	Hedychridium caputaureum (Trautmann 1919)	*		mh	*2
Hymenoptera	Chrysididae	Hedychridium coriaceum (Dahlbom 1854)	*		mh	*2
Hymenoptera	Chrysididae	Hedychridium cupreum (Dahlbom 1854)	2		ss	*2
Hymenoptera	Chrysididae	Hedychridium elegantulum Buysson 1887	1		es	*2
Hymenoptera	Chrysididae	Hedychridium femoratum (Dahlbom 1845)	3		s	*2
Hymenoptera	Chrysididae	Hedychridium krajniki Balthasar 1946	V		mh	*2
Hymenoptera	Chrysididae	Hedychridium monochroum Buysson 1888	G		ss	*2
Hymenoptera	Chrysididae	Hedychridium purpurascens Dahlbom 1854	G		ss	*2
Hymenoptera	Chrysididae	Hedychridium roseum (Rossi 1790)	*		mh	*2

Order	Family	Species	K	L	P	S
Hymenoptera	Chrysididae	Hedychridium valesiense Linsenmaier 1959	G		ss	*2
Hymenoptera	Chrysididae	Hedychridium zelleri (Dahlbom 1845)	3		s	*2
Hymenoptera	Chrysididae	Hedychrum chalybaeum Dahlbom 1854	2		ss	*2
Hymenoptera	Chrysididae	Hedychrum gerstäckeri Chevrier 1869	*		mh	*2
Hymenoptera	Chrysididae	Hedychrum niemelai Linsenmaier 1959	*		mh	*2
Hymenoptera	Chrysididae	Hedychrum nobile (Scopoli 1763)	*		mh	*2
Hymenoptera	Chrysididae	Hedychrum rutilans Dahlbom 1854	*		mh	*2
Hymenoptera	Chrysididae	Holopyga austrialis Linsenmaier 1959	G		ss	*2
Hymenoptera	Chrysididae	Holopyga chrysonota (Förster 1853)	2		ss	*2
Hymenoptera	Chrysididae	Holopyga fervida (Fabricius 1781)	2		ss	*2
Hymenoptera	Chrysididae	Holopyga generosa (Förster 1853)	*		mh	*2
Hymenoptera	Chrysididae	Holopyga ignicollis (Dahlbom 1854)	3		s	*2
Hymenoptera	Chrysididae	Omalus aeneus Fabricius 1787	*		mh	*2
Hymenoptera	Chrysididae	Omalus biaccinctus (Buysson 1891)	*		mh	*2
Hymenoptera	Chrysididae	Parnopes grandior (Pallas 1771)	1		es	*2
Hymenoptera	Chrysididae	Philoctetes bidentulus (Lepeletier 1806)	*		mh	*2
Hymenoptera	Chrysididae	Philoctetes truncatus (Dahlbom 1831)	G		ss	*2
Hymenoptera	Chrysididae	Pseudomalus auratus (Linnaeus 1758)	*		mh	*2
Hymenoptera	Chrysididae	Pseudomalus pusillus (Fabricius 1804)	*		mh	*2
Hymenoptera	Chrysididae	Pseudomalus triangulifer (Abeille 1877)	*		mh	*2
Hymenoptera	Chrysididae	Pseudomalus violaceus (Scopoli 1763)	*		mh	*2
Hymenoptera	Chrysididae	Pseudospinolia neglecta (Shuckard 1837)	*		mh	*2
Hymenoptera	Chrysididae	Spinolia unicolor (Dahlbom 1831)	1		es	*2
Hymenoptera	Chrysididae	Spintharina versicolor (Spinola 1808)	1		es	*2
Hymenoptera	Chrysididae	Trichrysis cyanea (Linnaeus 1758)	*		mh	*2
Hymenoptera	Cimbicidae	Abia aenea (Klug, 1820)	G		s	*1
Hymenoptera	Cimbicidae	Abia aurulenta Sichel, 1856	*		ss	*1
Hymenoptera	Cimbicidae	Abia candens Konow, 1887	G		mh	*1
Hymenoptera	Cimbicidae	Abia fasciata (Linnaeus, 1758)	G		mh	*1
Hymenoptera	Cimbicidae	Abia fulgens Zaddach, 1863	*		ss	*1
Hymenoptera	Cimbicidae	Abia mutica Thomson, 1871	G		ss	*1
Hymenoptera	Cimbicidae	Abia nitens (Linnaeus, 1758)	G		mh	*1
Hymenoptera	Cimbicidae	Abia sericea (Linnaeus, 1767)	G		mh	*1
Hymenoptera	Cimbicidae	Cimbex connatus (Schrank, 1776)	G		s	*1
Hymenoptera	Cimbicidae	Cimbex fagi Zaddach, 1863	G		s	*1
Hymenoptera	Cimbicidae	Cimbex femoratus (Linnaeus, 1758)	G		mh	*1
Hymenoptera	Cimbicidae	Cimbex luteus (Linnaeus, 1758)	G		s	*1
Hymenoptera	Cimbicidae	Cimbex quadrimaculatus (O.F. Müller, 1766)	0	1883	ex	*1
Hymenoptera	Cimbicidae	Corynis amoena (Klug, 1834)	R		es	*1
Hymenoptera	Cimbicidae	Corynis crassicornis (Rossi, 1790)	V		mh	*1
Hymenoptera	Cimbicidae	Corynis obscura (Fabricius, 1775)	V		mh	*1
Hymenoptera	Cimbicidae	Praia taczanowskii Wankowicz, 1880	0	1924	ex	*1
Hymenoptera	Cimbicidae	Pseudoclavellaria amerinae (Linnaeus, 1758)	0	1976	ex	*1
Hymenoptera	Cimbicidae	Trichiosoma lucorum (Linnaeus, 1758)	2		s	*1
Hymenoptera	Cimbicidae	Trichiosoma pusillum Leach, 1817	R		es	*1
Hymenoptera	Cimbicidae	Trichiosoma sorbi Hartig, 1840	2		ss	*1
Hymenoptera	Cimbicidae	Trichiosoma tibiale Stephens, 1835	2		ss	*1
Hymenoptera	Cimbicidae	Trichiosoma vitellina (Linnaeus, 1760)	2		s	*1
Hymenoptera	Crabronidae	Alysson ratzeburgi Dahlbom 1843	G		ss	*2
Hymenoptera	Crabronidae	Alysson spinosus Panzer 1801	*		mh	*2
Hymenoptera	Crabronidae	Alysson tricolor Lepeletier & Serville 1825	G		ss	*2
Hymenoptera	Crabronidae	Ammoplanus gegen Tsuneki, 1972	*		mh	*2
Hymenoptera	Crabronidae	Ammoplanus marathroicus (De-Stefani, 1887)	3		s	*2
Hymenoptera	Crabronidae	Ammoplanus perrisi Giraud, 1869	3		s	*2
Hymenoptera	Crabronidae	Ammoplanus pragensis Šnoflák, 1945	R		es	*2
Hymenoptera	Crabronidae	Argogorytes fargeii Shuckard 1837	2		ss	*2
Hymenoptera	Crabronidae	Argogorytes mystaceus Linnaeus 1761	*		mh	*2
Hymenoptera	Crabronidae	Astata boops Schrank 1781	*		mh	*2
Hymenoptera	Crabronidae	Astata kashmirensis Nurse 1909	2		ss	*2
Hymenoptera	Crabronidae	Astata minor Kohl 1884	3		s	*2
Hymenoptera	Crabronidae	Bembecinus hungaricus Friwaldski 1786	0	1900	ex	*2
Hymenoptera	Crabronidae	Bembecinus tridens Fabricius 1781	2		ss	*2
Hymenoptera	Crabronidae	Bembix rostrata Linnaeus 1758	3		s	*2
Hymenoptera	Crabronidae	Bembix tarsata Latreille 1809	0	1900	ex	*2
Hymenoptera	Crabronidae	Brachystegus scalaris Illiger 1807	0	1937	ex	*2
Hymenoptera	Crabronidae	Cerceris arenaria Linnaeus 1758	*		mh	*2
Hymenoptera	Crabronidae	Cerceris eversmanni Schulz 1912	0	1850	ex	*2
Hymenoptera	Crabronidae	Cerceris flavilabris Linnaeus 1793	2		ss	*2
Hymenoptera	Crabronidae	Cerceris hortivaga Kohl 1808	3		s	*2
Hymenoptera	Crabronidae	Cerceris interrupta Panzer 1799	3		s	*2
Hymenoptera	Crabronidae	Cerceris quadricincta Panzer 1799	*		mh	*2
Hymenoptera	Crabronidae	Cerceris quadrifasciata Panzer 1799	3		s	*2
Hymenoptera	Crabronidae	Cerceris quinquefasciata Rossi 1792	*		mh	*2
Hymenoptera	Crabronidae	Cerceris ruficornis Fabricius 1793	3		s	*2
Hymenoptera	Crabronidae	Cerceris rybyensis Linnaeus 1771	*		mh	*2
Hymenoptera	Crabronidae	Cerceris sabulosa Panzer 1799	2		ss	*2
Hymenoptera	Crabronidae	Crabro alpinus Imhoff 1863	R		es	*2
Hymenoptera	Crabronidae	Crabro cribrarius Linnaeus 1758	*		mh	*2
Hymenoptera	Crabronidae	Crabro ingricus Morawitz 1888	1		es	*2
Hymenoptera	Crabronidae	Crabro lapponicus Zetterstedt 1838	R		es	*2

Order	Family	Species	K	L	P	S
Hymenoptera	Crabronidae	Crabro loewi Dahlbom 1845	0	1967	ex	*2
Hymenoptera	Crabronidae	Crabro peltarius Schreber 1784	*		mh	*2
Hymenoptera	Crabronidae	Crabro peltatus Fabricius 1793	R		es	*2
Hymenoptera	Crabronidae	Crabro scutellatus Scheven 1781	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus acanthophorus Kohl 1892	2		ss	*2
Hymenoptera	Crabronidae	Crossocerus annulipes Lepe & Brulle 1834	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus assimilis Smith 1856	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus barbipes Dahlbom 1845	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus binotatus Lep & Brulle 1834	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus capitosus Shuckard 1837	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus cetratus Shuckard 1837	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus cinxius Dahlbom 1838	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus congener Dahlbom 1845	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus denticoxa Bischoff 1932	1		es	*2
Hymenoptera	Crabronidae	Crossocerus denticrus Herrich-Sch 1841	0	1946	ex	*2
Hymenoptera	Crabronidae	Crossocerus dimidiatus Fabricius 1781	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus distinguendus Morawitz 1866	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus elongatulus v d Linden 1829	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus exiguus v d Linden 1829	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus heydeni Kohl 1880	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus leucostoma Linnaeus 1758	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus megacephalus Rossi 1790	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus nigritus Lep & Brulle 1834	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus ovalis Lep & Brulle 1834	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus palmipes Linnaeus 1767	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus podagricus v d Linden 1829	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus pullulus Morawitz, A 1866	R		es	*2
Hymenoptera	Crabronidae	Crossocerus quadrimaculatus Fabricius 1793	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus styrius Kohl 1892	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus tarsatus Shuckard 1837	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus vagabundus Panzer 1798	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus varus Lep & Brulle 1834	*		mh	*2
Hymenoptera	Crabronidae	Crossocerus walkeri Shuckard 1837	3		s	*2
Hymenoptera	Crabronidae	Crossocerus wesmaeli v d Linden 1829	*		mh	*2
Hymenoptera	Crabronidae	Didineis lunicornis Fabricius 1798	*		s	*2
Hymenoptera	Crabronidae	Dinetus pictus Fabricius 1793	*		mh	*2
Hymenoptera	Crabronidae	Diodontus handlirschii Kohl 1888	R		es	*2
Hymenoptera	Crabronidae	Diodontus insidiosus Spooner, 1938	R		es	*2
Hymenoptera	Crabronidae	Diodontus luperus Shuckard 1837	*		mh	*2
Hymenoptera	Crabronidae	Diodontus minutus Fabricius 1793	*		mh	*2
Hymenoptera	Crabronidae	Diodontus tristis v d Linden 1829	*		mh	*2
Hymenoptera	Crabronidae	Dryudella femoralis Mocsary 1877	R		es	*2
Hymenoptera	Crabronidae	Dryudella pinguis Dahlbom 1832	3		s	*2
Hymenoptera	Crabronidae	Dryudella stigma Panzer 1809	3		s	*2
Hymenoptera	Crabronidae	Ectemnius borealis Zetterstedt 1838	*		mh	*2
Hymenoptera	Crabronidae	Ectemnius cavifrons Thomson 1870	*		mh	*2
Hymenoptera	Crabronidae	Ectemnius cephalotes Olivier 1791	*		mh	*2
Hymenoptera	Crabronidae	Ectemnius confinis Walker 1871	3		s	*2
Hymenoptera	Crabronidae	Ectemnius continuus Fabricius 1804	*		mh	*2
Hymenoptera	Crabronidae	Ectemnius dives Lepe & Brulle 1834	*		mh	*2
Hymenoptera	Crabronidae	Ectemnius fossorius Linnaeus 1758	1		es	*2
Hymenoptera	Crabronidae	Ectemnius guttatus v d Linden 1829	*		s	*2
Hymenoptera	Crabronidae	Ectemnius lapidarius Panzer 1804	*		mh	*2
Hymenoptera	Crabronidae	Ectemnius lituratus Panzer 1805	*		mh	*2
Hymenoptera	Crabronidae	Ectemnius nigritarsus Herrich-Sch 1841	3		s	*2
Hymenoptera	Crabronidae	Ectemnius rubicola Dufour & Per 1840	*		mh	*2
Hymenoptera	Crabronidae	Ectemnius ruficornis Zetterstedt 1838	*		mh	*2
Hymenoptera	Crabronidae	Ectemnius rugifer Dahlbom 1845	1		es	*2
Hymenoptera	Crabronidae	Ectemnius sexcinctus Fabricius 1775	*		mh	*2
Hymenoptera	Crabronidae	Entomognathus brevis v d Linden 1829	*		mh	*2
Hymenoptera	Crabronidae	Gorytes albidulus Lepeletier 1832	0	1959	ex	*2
Hymenoptera	Crabronidae	Gorytes fallax Handlirsch 1888	V		s	*2
Hymenoptera	Crabronidae	Gorytes laticinctus Lepeletier 1832	*		mh	*2
Hymenoptera	Crabronidae	Gorytes planifrons Wesmael 1852	G		ss	*2
Hymenoptera	Crabronidae	Gorytes quadrifasciatus Fabricius 1804	V		s	*2
Hymenoptera	Crabronidae	Gorytes quinquecinctus Fabricius 1793	*		mh	*2
Hymenoptera	Crabronidae	Gorytes quinquefasciatus Panzer 1798	V		s	*2
Hymenoptera	Crabronidae	Gorytes sulcifrons Costa 1869	0	1964	ex	*2
Hymenoptera	Crabronidae	Harpactus elegans Lepeletier 1832	V		s	*2
Hymenoptera	Crabronidae	Harpactus exiguus Handlirsch 1888	2		ss	*2
Hymenoptera	Crabronidae	Harpactus formosus Jurine 1807	1		es	*2
Hymenoptera	Crabronidae	Harpactus laevis Latreille 1792	3		s	*2
Hymenoptera	Crabronidae	Harpactus lunatus Dahlbom 1832	*		mh	*2
Hymenoptera	Crabronidae	Harpactus tumidus Panzer 1801	*		mh	*2
Hymenoptera	Crabronidae	Hoplisoides punctuosus Eversmann 1849	1		es	*2
Hymenoptera	Crabronidae	Larra anathema Rossi 1790	0	1977	ex	*2
Hymenoptera	Crabronidae	Lestica alata Panzer 1797	V		s	*2
Hymenoptera	Crabronidae	Lestica clypeata Schreber 1775	*		mh	*2
Hymenoptera	Crabronidae	Lestica subterranea Fabricius 1759	V		s	*2
Hymenoptera	Crabronidae	Lestiphorus bicinctus Rossi 1792	*		mh	*2

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Hymenoptera	Crabronidae	Lestiphorus bilunulatus Costa 1869	0	1971	ex	*2
Hymenoptera	Crabronidae	Lindenius albilabris Fabricius 1793	*		mh	*2
Hymenoptera	Crabronidae	Lindenius panzeri v d Linden 1829	*		mh	*2
Hymenoptera	Crabronidae	Lindenius pygmaeus v d Linden 1829	*		mh	*2
Hymenoptera	Crabronidae	Lindenius subaeneus Lep & Brulle 1834	3		s	*2
Hymenoptera	Crabronidae	Liris niger Fabricius 1775	0	1967	ex	*2
Hymenoptera	Crabronidae	Mellinus arvensis Linnaeus 1758	*		mh	*2
Hymenoptera	Crabronidae	Mellinus crabroneus Thunberg 1791	*		s	*2
Hymenoptera	Crabronidae	Mimesa bicolor Jurine 1807	3		s	*2
Hymenoptera	Crabronidae	Mimesa bruxellensis Bondroit 1933	3		s	*2
Hymenoptera	Crabronidae	Mimesa crassipes Costa 1871	0	1961	ex	*2
Hymenoptera	Crabronidae	Mimesa equestris Fabricius 1804	*		mh	*2
Hymenoptera	Crabronidae	Mimesa lutaria Fabricius 1787	*		mh	*2
Hymenoptera	Crabronidae	Mimumesa atratina Morawitz 1891	*		mh	*2
Hymenoptera	Crabronidae	Mimumesa beaumonti Lith 1949	3		s	*2
Hymenoptera	Crabronidae	Mimumesa dahlbomi Wesmael 1852	*		mh	*2
Hymenoptera	Crabronidae	Mimumesa littoralis Bondroit 1933	2		ss	*2
Hymenoptera	Crabronidae	Mimumesa sibiricana Bohart 1976	R		es	*2
Hymenoptera	Crabronidae	Mimumesa spooneri Richards 1948	G		ss	*2
Hymenoptera	Crabronidae	Mimumesa unicolor v d Linden 1829	*		mh	*2
Hymenoptera	Crabronidae	Miscophus ater Lepeletier 1845	*		mh	*2
Hymenoptera	Crabronidae	Miscophus bicolor Jurine 1807	V		s	*2
Hymenoptera	Crabronidae	Miscophus concolor Dahlbom 1845	3		s	*2
Hymenoptera	Crabronidae	Miscophus eatoni Saunders, 1903	*		mh	*2
Hymenoptera	Crabronidae	Miscophus niger Dahlbom 1844	3		s	*2
Hymenoptera	Crabronidae	Miscophus postumus Bischoff 1922	1		es	*2
Hymenoptera	Crabronidae	Miscophus spurius Dahlbom 1832	2		ss	*2
Hymenoptera	Crabronidae	Nitela borealis Valkeila 1974	*		mh	*2
Hymenoptera	Crabronidae	Nitela fallax Kohl 1883	2		ss	*2
Hymenoptera	Crabronidae	Nitela lucens Gayubo & Felton 2000	3		s	*2
Hymenoptera	Crabronidae	Nitela spinolae Latreille 1809	*		mh	*2
Hymenoptera	Crabronidae	Nitela truncata Gayubo & Felton 2000	3		s	*2
Hymenoptera	Crabronidae	Nysson dimidiatus Jurine 1807	*		s	*2
Hymenoptera	Crabronidae	Nysson distinguendus Chevrier 1867	*		s	*2
Hymenoptera	Crabronidae	Nysson hrubanti Balthasar 1972	G		ss	*2
Hymenoptera	Crabronidae	Nysson interruptus Fabricius 1798	1		es	*2
Hymenoptera	Crabronidae	Nysson maculosus Gmelin 1790	*		mh	*2
Hymenoptera	Crabronidae	Nysson niger Chevrier 1868	*		mh	*2
Hymenoptera	Crabronidae	Nysson quadriguttatus Gerstäcker 1866	G		ss	*2
Hymenoptera	Crabronidae	Nysson spinosus Förster 1771	*		mh	*2
Hymenoptera	Crabronidae	Nysson tridens Gerstäcker 1866	V		s	*2
Hymenoptera	Crabronidae	Nysson trimaculatus Rossi 1790	*		mh	*2
Hymenoptera	Crabronidae	Nysson variabilis Chevrier 1867	0	1954	ex	*2
Hymenoptera	Crabronidae	Oxybelus argentatus Curtis 1833	V		s	*2
Hymenoptera	Crabronidae	Oxybelus bipunctatus Olivier 1811	*		mh	*2
Hymenoptera	Crabronidae	Oxybelus dissectus Dahlbom 1845	0	1954	ex	*2
Hymenoptera	Crabronidae	Oxybelus haemorrhoidalis Olivier 1812	3		s	*2
Hymenoptera	Crabronidae	Oxybelus latidens Gerstäcker 1867	1		es	*2
Hymenoptera	Crabronidae	Oxybelus latro Olivier 1811	2		ss	*2
Hymenoptera	Crabronidae	Oxybelus lineatus Fabricius 1787	2		ss	*2
Hymenoptera	Crabronidae	Oxybelus mandibularis Dahlbom 1845	*		mh	*2
Hymenoptera	Crabronidae	Oxybelus mucronatus Fabricius 1793	1		es	*2
Hymenoptera	Crabronidae	Oxybelus quatuordecimnotatus Jurine 1807	*		mh	*2
Hymenoptera	Crabronidae	Oxybelus trispinosus Jurine 1787	*		mh	*2
Hymenoptera	Crabronidae	Oxybelus uniglumis Linnaeus 1758	*		mh	*2
Hymenoptera	Crabronidae	Oxybelus variegatus Wesmael 1852	3		s	*2
Hymenoptera	Crabronidae	Passaloecus borealis Dahlbom 1845	*		mh	*2
Hymenoptera	Crabronidae	Passaloecus brevilabris Wolf 1958	*		mh	*2
Hymenoptera	Crabronidae	Passaloecus clypealis Faester 1947	V		s	*2
Hymenoptera	Crabronidae	Passaloecus corniger Shuckard 1837	*		mh	*2
Hymenoptera	Crabronidae	Passaloecus eremita Kohl 1893	*		mh	*2
Hymenoptera	Crabronidae	Passaloecus gracilis Curtis 1834	*		mh	*2
Hymenoptera	Crabronidae	Passaloecus insignis v d Linden 1829	*		mh	*2
Hymenoptera	Crabronidae	Passaloecus monilicornis Dahlbom 1842	*		mh	*2
Hymenoptera	Crabronidae	Passaloecus pictus Ribaut 1952	*		mh	*2
Hymenoptera	Crabronidae	Passaloecus singularis Dahlbom 1844	*		mh	*2
Hymenoptera	Crabronidae	Passaloecus turionum Dahlbom 1845	*		mh	*2
Hymenoptera	Crabronidae	Passaloecus vandeli Ribaut 1952	3		s	*2
Hymenoptera	Crabronidae	Pemphredon austriaca Kohl 1888	G		ss	*2
Hymenoptera	Crabronidae	Pemphredon baltica Merisuo 1972	G		ss	*2
Hymenoptera	Crabronidae	Pemphredon beaumonti Hellen 1955	G		ss	*2
Hymenoptera	Crabronidae	Pemphredon clypealis Thomson 1870	*		mh	*2
Hymenoptera	Crabronidae	Pemphredon enslini Wagner 1931	*		mh	*2
Hymenoptera	Crabronidae	Pemphredon fabricii Müller, 1911	V		s	*2
Hymenoptera	Crabronidae	Pemphredon inornata Say 1824	*		mh	*2
Hymenoptera	Crabronidae	Pemphredon lethifer Shuckard 1837	*		mh	*2
Hymenoptera	Crabronidae	Pemphredon littoralis Wagner, 1931	*		mh	*2
Hymenoptera	Crabronidae	Pemphredon lugens Dahlbom 1842	*		mh	*2
Hymenoptera	Crabronidae	Pemphredon lugubris Fabricius 1793	*		mh	*2
Hymenoptera	Crabronidae	Pemphredon montana Dahlbom 1845	*		mh	*2

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Hymenoptera	Crabronidae	Pemphredon morio v d Linden 1929	*		mh	*2
Hymenoptera	Crabronidae	Pemphredon mortifer Valkeila 1972	*		mh	*2
Hymenoptera	Crabronidae	Pemphredon podagrica Chevrier 1870	*		mh	*2
Hymenoptera	Crabronidae	Pemphredon rugifer Dahlbom 1845	*		mh	*2
Hymenoptera	Crabronidae	Pemphredon wesmaeli Morawitz 1864	*		mh	*2
Hymenoptera	Crabronidae	Philanthus coronatus Thunberg 1784	2		ss	*2
Hymenoptera	Crabronidae	Philanthus triangulum Fabricius 1775	*		mh	*2
Hymenoptera	Crabronidae	Pison atrum (Spinola, 1808)	*		mh	*2
Hymenoptera	Crabronidae	Polemistus abnormis Kohl 1888	*		mh	*2
Hymenoptera	Crabronidae	Psen ater Olivier 1794	3		s	*2
Hymenoptera	Crabronidae	Psen exaratus Eversmann 1849	G		ss	*2
Hymenoptera	Crabronidae	Psenulus brevitarsis Merisuo 1937	D		mh	*2
Hymenoptera	Crabronidae	Psenulus concolor Dahlbom 1845	*		mh	*2
Hymenoptera	Crabronidae	Psenulus fulvicornis Schenck 1857	3		s	*2
Hymenoptera	Crabronidae	Psenulus fuscipennis Dahlbom 1843	*		mh	*2
Hymenoptera	Crabronidae	Psenulus laevigatus Schenck 1857	*		mh	*2
Hymenoptera	Crabronidae	Psenulus meridionalis De Beaumont 1937	3		s	*2
Hymenoptera	Crabronidae	Psenulus pallipes Panzer 1798	*		mh	*2
Hymenoptera	Crabronidae	Psenulus schencki Tournier 1889	*		mh	*2
Hymenoptera	Crabronidae	Rhopalum austriacum Kohl 1899	G		ss	*2
Hymenoptera	Crabronidae	Rhopalum beaumonti Moczar 1957	G		ss	*2
Hymenoptera	Crabronidae	Rhopalum clavipes Linnaeus 1758	*		mh	*2
Hymenoptera	Crabronidae	Rhopalum coarctatum Scopoli 1763	*		mh	*2
Hymenoptera	Crabronidae	Rhopalum gracile Wesmael 1852	3		s	*2
Hymenoptera	Crabronidae	Solierella compedita Piccioli 1869	V		s	*2
Hymenoptera	Crabronidae	Spilomena beata Blüthgen 1953	*		mh	*2
Hymenoptera	Crabronidae	Spilomena curruca Dahlbom 1843	*		mh	*2
Hymenoptera	Crabronidae	Spilomena differens Blüthgen, 1853	*		mh	*2
Hymenoptera	Crabronidae	Spilomena enslini Blüthgen 1953	D		mh	*2
Hymenoptera	Crabronidae	Spilomena mocsaryi Kohl 1898	D		mh	*2
Hymenoptera	Crabronidae	Spilomena punctatissima Blüthgen 1853	2		ss	*2
Hymenoptera	Crabronidae	Spilomena troglodytes v d Linden 1829	*		mh	*2
Hymenoptera	Crabronidae	Stigmus pendulus Panzer 1805	*		mh	*2
Hymenoptera	Crabronidae	Stigmus solskyi Morawitz 1864	*		mh	*2
Hymenoptera	Crabronidae	Stizus perrisi Dufour 1838	0	1955	ex	*2
Hymenoptera	Crabronidae	Tachysphex austriacus Kohl, 1892	3		s	*2
Hymenoptera	Crabronidae	Tachysphex fulvitarsis Costa 1867	3		s	*2
Hymenoptera	Crabronidae	Tachysphex helveticus Kohl 1884	3		s	*2
Hymenoptera	Crabronidae	Tachysphex nitidus Spinola 1805	*		s	*2
Hymenoptera	Crabronidae	Tachysphex obscuripennis Schenck 1857	*		mh	*2
Hymenoptera	Crabronidae	Tachysphex panzeri v d Linden 1829	2		ss	*2
Hymenoptera	Crabronidae	Tachysphex pompiliformis Panzer 1805	*		mh	*2
Hymenoptera	Crabronidae	Tachysphex psammobius Kohl 1880	V		s	*2
Hymenoptera	Crabronidae	Tachysphex tarsinus Lepeletier 1845	3		s	*2
Hymenoptera	Crabronidae	Tachysphex unicolor Panzer 1809	*		mh	*2
Hymenoptera	Crabronidae	Tachytes obsoletes Rossi 1792	0	1930	ex	*2
Hymenoptera	Crabronidae	Tachytes panzeri (Dufour, 1841)	2		ss	*2
Hymenoptera	Crabronidae	Trypoxylon attenuatum Smith 1851	*		mh	*2
Hymenoptera	Crabronidae	Trypoxylon beaumonti Antropov 1991	*		mh	*2
Hymenoptera	Crabronidae	Trypoxylon clavicerum Lep & Serville 1825	*		mh	*2
Hymenoptera	Crabronidae	Trypoxylon deceptorium Antropov 1991	*		mh	*2
Hymenoptera	Crabronidae	Trypoxylon figulus Linnaeus 1758	*		mh	*2
Hymenoptera	Crabronidae	Trypoxylon fronticorne Gussakowsky 1936	G		ss	*2
Hymenoptera	Crabronidae	Trypoxylon kolazyi Kohl 1893	G		ss	*2
Hymenoptera	Crabronidae	Trypoxylon kostylevi Antropov, 1986	*		mh	*2
Hymenoptera	Crabronidae	Trypoxylon medium Beaumont 1945	*		mh	*2
Hymenoptera	Crabronidae	Trypoxylon minus Beaumont 1945	*		mh	*2
Hymenoptera	Crabronidae	Trypoxylon scutatum Chevrier 1867	0	1970	ex	*2
Hymenoptera	Diprionidae	Diprion pini (Linnaeus, 1758)	*		mh	*1
Hymenoptera	Diprionidae	Diprion similis (Hartig, 1834)	*		s	*1
Hymenoptera	Diprionidae	Gilpinia abieticola (Dalla Torre, 1894)	D		s	*1
Hymenoptera	Diprionidae	Gilpinia frutetorum (Fabricius, 1793)	*		mh	*1
Hymenoptera	Diprionidae	Gilpinia hercyniae (Hartig, 1837)	*		h	*1
Hymenoptera	Diprionidae	Gilpinia laricis (Jurine, 1807)	*		s	*1
Hymenoptera	Diprionidae	Gilpinia pallida (Klug, 1812)	G		s	*1
Hymenoptera	Diprionidae	Gilpinia polytoma (Hartig, 1834)	*		s	*1
Hymenoptera	Diprionidae	Gilpinia socia (Klug, 1812)	3		s	*1
Hymenoptera	Diprionidae	Gilpinia variegata (Hartig, 1834)	*		s	*1
Hymenoptera	Diprionidae	Gilpinia virens (Klug, 1812)	*		s	*1
Hymenoptera	Diprionidae	Macrodiprion nemoralis (Enslin, 1917)	G		s	*1
Hymenoptera	Diprionidae	Microdiprion pallipes (Fallén,1808)	*		s	*1
Hymenoptera	Diprionidae	Monoctenus juniperi (Linnaeus, 1758)	3		mh	*1
Hymenoptera	Diprionidae	Monoctenus obscuratus (Hartig, 1837)	2		ss	*1
Hymenoptera	Diprionidae	Neodiprion sertifer (Geoffroy, 1785)	*		sh	*1
Hymenoptera	Eumenidae	Alastor atropos (Lepeletier, 1841)	1		es	*2
Hymenoptera	Eumenidae	Allodynerus delphinalis (Giraud, 1866)	*		mh	*2
Hymenoptera	Eumenidae	Allodynerus floricola (Saussure, 1853)	0	1870	ex	*2
Hymenoptera	Eumenidae	Allodynerus rossii (Lepeletier, 1841)	*		mh	*2
Hymenoptera	Eumenidae	Ancistrocerus antilope (Panzer, 1798)	*		mh	*2
Hymenoptera	Eumenidae	Ancistrocerus auctus (Fabricius, 1793)	D		mh	*2

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Hymenoptera	Eumenidae	Ancistrocerus claripennis Thomson, 1874	*		mh	*2
Hymenoptera	Eumenidae	Ancistrocerus dusmetiolus (Strand, 1914)	1		es	*2
Hymenoptera	Eumenidae	Ancistrocerus gazella (Panzer, 1798)	*		mh	*2
Hymenoptera	Eumenidae	Ancistrocerus ichneumonideus (Ratzeburg, 1844)	3		s	*2
Hymenoptera	Eumenidae	Ancistrocerus nigricornis (Curtis, 1826)	*		mh	*2
Hymenoptera	Eumenidae	Ancistrocerus oviventris (Wesmael, 1836)	*		mh	*2
Hymenoptera	Eumenidae	Ancistrocerus parietinus (Linnaeus, 1761)	*		mh	*2
Hymenoptera	Eumenidae	Ancistrocerus parietum (Linnaeus, 1758)	*		mh	*2
Hymenoptera	Eumenidae	Ancistrocerus renimacula (Lepeletier, 1841)	2		ss	*2
Hymenoptera	Eumenidae	Ancistrocerus scoticus (Curtis, 1826)	2		ss	*2
Hymenoptera	Eumenidae	Ancistrocerus trifasciatus (Müller, 1776)	*		mh	*2
Hymenoptera	Eumenidae	Antepipona orbitalis (Herrich-Schaeffer, 1839)	0	1972	ex	*2
Hymenoptera	Eumenidae	Delta unguiculatus (Villers, 1789)	*		mh	*2
Hymenoptera	Eumenidae	Discoelius dufourii Lepeletier, 1841	3		s	*2
Hymenoptera	Eumenidae	Discoelius zonalis (Panzer, 1801)	3		s	*2
Hymenoptera	Eumenidae	Eumenes coarctatus (Linnaeus, 1758)	*		mh	*2
Hymenoptera	Eumenidae	Eumenes coronatus (Panzer, 1799)	*		mh	*2
Hymenoptera	Eumenidae	Eumenes papillarius (Christ, 1791)	*		mh	*2
Hymenoptera	Eumenidae	Eumenes pedunculatus (Panzer, 1799)	*		mh	*2
Hymenoptera	Eumenidae	Eumenes pomiformis (Fabricius, 1781)	0	1961	ex	*2
Hymenoptera	Eumenidae	Eumenes sareptanus insolatus Müller, 1923	2		ss	*2
Hymenoptera	Eumenidae	Eumenes subpomiformis Blüthgen, 1938	3		s	*2
Hymenoptera	Eumenidae	Euodynerus dantici (Rossi, 1790)	2		ss	*2
Hymenoptera	Eumenidae	Euodynerus notatus (Jurine, 1807)	*		mh	*2
Hymenoptera	Eumenidae	Euodynerus quadrifasciatus (Fabricius, 1793)	*		mh	*2
Hymenoptera	Eumenidae	Gymnomerus laevipes (Shuckard, 1837)	*		mh	*2
Hymenoptera	Eumenidae	Katamenes arbustorum (Panzer, 1799)	0	1968	ex	*2
Hymenoptera	Eumenidae	Leptochilus alpestris (Saussure, 1856)	2		ss	*2
Hymenoptera	Eumenidae	Leptochilus regulus (Saussure, 1856)	*		mh	*2
Hymenoptera	Eumenidae	Microdynerus exilis (Herrich-Schaeffer, 1839)	*		mh	*2
Hymenoptera	Eumenidae	Microdynerus longicollis A Morawitz, 1895	G		ss	*2
Hymenoptera	Eumenidae	Microdynerus nugdunensis (Saussure, 1856)	*		mh	*2
Hymenoptera	Eumenidae	Microdynerus parvulus (Herrich-Schaeffer, 1839)	*		mh	*2
Hymenoptera	Eumenidae	Microdynerus timidus (Saussure, 1856)	*		mh	*2
Hymenoptera	Eumenidae	Odynerus alpinus Schulthess, 1897	R		es	*2
Hymenoptera	Eumenidae	Odynerus melanocephalus (Gmelin, 1790)	3		s	*2
Hymenoptera	Eumenidae	Odynerus poecilus Saussure, 1855	G		ss	*2
Hymenoptera	Eumenidae	Odynerus reniformis (Gmelin, 1790)	3		s	*2
Hymenoptera	Eumenidae	Odynerus simillimus (F Morawitz, 1867)	0	1961	ex	*2
Hymenoptera	Eumenidae	Odynerus spinipes (Linnaeus, 1758)	*		mh	*2
Hymenoptera	Eumenidae	Pseudepipona herrichii (Saussure, 1855)	0	1900	ex	*2
Hymenoptera	Eumenidae	Pterocheilus phaleratus (Panzer, 1797)	3		s	*2
Hymenoptera	Eumenidae	Stenodynerus bluethgeni Van der Vecht, 1971	2		ss	*2
Hymenoptera	Eumenidae	Stenodynerus chevrieranus (Saussure, 1856)	G		ss	*2
Hymenoptera	Eumenidae	Stenodynerus clypeopictus (Kostylev, 1840)	G		ss	*2
Hymenoptera	Eumenidae	Stenodynerus dentisquama (Thomson, 1870)	G		ss	*2
Hymenoptera	Eumenidae	Stenodynerus orenburgensis (Andre, 1884)	0	1962	ex	*2
Hymenoptera	Eumenidae	Stenodynerus picticrus (Thomson, 1874)	G		ss	*2
Hymenoptera	Eumenidae	Stenodynerus steckianus (Schulthess, 1897)	G		ss	*2
Hymenoptera	Eumenidae	Stenodynerus xanthomelas (Herrich-Schaeffer, 1839)	*		mh	*2
Hymenoptera	Eumenidae	Symmorphus allobrogus (Saussure, 1856)	*		mh	*2
Hymenoptera	Eumenidae	Symmorphus angustatus (Zetterstedt, 1838)	G		ss	*2
Hymenoptera	Eumenidae	Symmorphus bifasciatus (Linnaeus, 1761)	*		mh	*2
Hymenoptera	Eumenidae	Symmorphus connexus (Curtis, 1826)	*		mh	*2
Hymenoptera	Eumenidae	Symmorphus crassicornis (Panzer, 1798)	*		mh	*2
Hymenoptera	Eumenidae	Symmorphus debilitatus (Saussure, 1855)	*		mh	*2
Hymenoptera	Eumenidae	Symmorphus fuscipes (Herrich-Schaeffer, 1838)	3		s	*2
Hymenoptera	Eumenidae	Symmorphus gracilis (Brullé, 1832)	*		mh	*2
Hymenoptera	Eumenidae	Symmorphus murarius (Linnaeus, 1758)	2		ss	*2
Hymenoptera	Formicidae	Anergates atratulus (Schenck, 1852)	2		ss	*1
Hymenoptera	Formicidae	Aphaenogaster subterranea (Latreille, 1798)	2		ss	*1
Hymenoptera	Formicidae	Camponotus aethiops (Latreille, 1798)	1		es	*1
Hymenoptera	Formicidae	Camponotus fallax (Nylander, 1856)	V		s	*1
Hymenoptera	Formicidae	Camponotus herculeanus (Linnaeus, 1758)	*		mh	*1
Hymenoptera	Formicidae	Camponotus ligniperda (Latreille, 1802)	*		h	*1
Hymenoptera	Formicidae	Camponotus piceus (Leach, 1825)	2		ss	*1
Hymenoptera	Formicidae	Camponotus truncatus (Spinola, 1808)	V		s	*1
Hymenoptera	Formicidae	Camponotus vagus (Scopoli, 1763)	1		es	*1
Hymenoptera	Formicidae	Crematogaster scutellaris (Olivier, 1791)	nb		nb	*1
Hymenoptera	Formicidae	Crematogaster sordidula (Nylander, 1849)	0	1978	ex	*1
Hymenoptera	Formicidae	Dolichoderus quadripunctatus (Linnaeus, 1771)	3		s	*1
Hymenoptera	Formicidae	Formica aquilonia Yarrow, 1955	*		mh	*1
Hymenoptera	Formicidae	Formica bruni Kutter, 1967	1		es	*1
Hymenoptera	Formicidae	Formica cinerea Mayr, 1853	V		s	*1
Hymenoptera	Formicidae	Formica clara Forel, 1886	V		ss	*1
Hymenoptera	Formicidae	Formica cunicularia Latreille, 1798	*		h	*1
Hymenoptera	Formicidae	Formica exsecta Nylander, 1846	3		s	*1
Hymenoptera	Formicidae	Formica foreli Bondroit, 1918	2		ss	*1
Hymenoptera	Formicidae	Formica forsslundi Lohmander, 1949	1		es	*1
Hymenoptera	Formicidae	Formica fusca Linnaeus, 1758	*		h	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Formicidae	Formica fuscocinerea Forel, 1874	V		ss	*1
Hymenoptera	Formicidae	Formica lemani Bondroit, 1917	*		h	*1
Hymenoptera	Formicidae	Formica lugubris Zetterstedt, 1838	*		mh	*1
Hymenoptera	Formicidae	Formica picea Nylander, 1846	2		ss	*1
Hymenoptera	Formicidae	Formica polyctena Förster, 1850	*		h	*1
Hymenoptera	Formicidae	Formica pratensis Retzius, 1783	V		mh	*1
Hymenoptera	Formicidae	Formica pressilabris Nylander, 1846	1		es	*1
Hymenoptera	Formicidae	Formica rufa Linnaeus, 1761	*		h	*1
Hymenoptera	Formicidae	Formica rufibarbis Fabricius, 1793	*		h	*1
Hymenoptera	Formicidae	Formica sanguinea Latreille, 1798	*		h	*1
Hymenoptera	Formicidae	Formica selysi Bondroit, 1918	V		ss	*1
Hymenoptera	Formicidae	Formica truncorum Fabricius, 1804	3		s	*1
Hymenoptera	Formicidae	Formica uralensis Ruzsky, 1895	1		es	*1
Hymenoptera	Formicidae	Formicoxenus nitidulus (Nylander, 1846)	3		s	*1
Hymenoptera	Formicidae	Harpagoxenus sublaevis (Nylander, 1849)	2		ss	*1
Hymenoptera	Formicidae	Hypoponera eduardi (Forel, 1894)	nb		nb	*1
Hymenoptera	Formicidae	Hypoponera punctatissima (Roger, 1859)	*		ss	*1
Hymenoptera	Formicidae	Hypoponera schauinslandi (Emery, 1899)	nb		nb	*1
Hymenoptera	Formicidae	Lasius alienus (Förster, 1850)	V		mh	*1
Hymenoptera	Formicidae	Lasius bicornis (Förster, 1850)	2		ss	*1
Hymenoptera	Formicidae	Lasius brunneus (Latreille, 1798)	*		h	*1
Hymenoptera	Formicidae	Lasius carniolicus Mayr, 1861	1		es	*1
Hymenoptera	Formicidae	Lasius citrinus Emery, 1922	2		ss	*1
Hymenoptera	Formicidae	Lasius distinguendus (Emery, 1916)	R		es	*1
Hymenoptera	Formicidae	Lasius emarginatus (Olivier, 1792)	*		mh	*1
Hymenoptera	Formicidae	Lasius flavus (Fabricius, 1782)	*		sh	*1
Hymenoptera	Formicidae	Lasius fuliginosus (Latreille, 1798)	*		mh	*1
Hymenoptera	Formicidae	Lasius jensi Seifert, 1982	2		ss	*1
Hymenoptera	Formicidae	Lasius meridionalis (Bondroit, 1920)	3		s	*1
Hymenoptera	Formicidae	Lasius mixtus (Nylander, 1846)	*		h	*1
Hymenoptera	Formicidae	Lasius myops Forel, 1894	2		ss	*1
Hymenoptera	Formicidae	Lasius neglectus van Loon, Boomsma & Andrasfalvy, 1990	nb		nb	*1
Hymenoptera	Formicidae	Lasius niger (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Formicidae	Lasius paralienus Seifert, 1992	2		ss	*1
Hymenoptera	Formicidae	Lasius platythorax Seifert, 1991	*		sh	*1
Hymenoptera	Formicidae	Lasius psammophilus Seifert, 1992	V		mh	*1
Hymenoptera	Formicidae	Lasius reginae Faber, 1967	2		ss	*1
Hymenoptera	Formicidae	Lasius sabularum (Bondroit, 1918)	V		s	*1
Hymenoptera	Formicidae	Lasius umbratus (Nylander, 1846)	*		mh	*1
Hymenoptera	Formicidae	Leptothorax acervorum (Fabricius, 1793)	*		h	*1
Hymenoptera	Formicidae	Leptothorax gredleri Mayr, 1855	V		s	*1
Hymenoptera	Formicidae	Leptothorax kutteri Buschinger, 1965	2		ss	*1
Hymenoptera	Formicidae	Leptothorax muscorum (Nylander, 1846)	G		s	*1
Hymenoptera	Formicidae	Leptothorax pacis (Kutter, 1950)	1		es	*1
Hymenoptera	Formicidae	Linepithema humile (Mayr, 1868)	nb		nb	*1
Hymenoptera	Formicidae	Manica rubida (Latreille, 1802)	V		s	*1
Hymenoptera	Formicidae	Messor structor (Latreille, 1798)	R		es	*1
Hymenoptera	Formicidae	Monomorium pharaonis (Linnaeus, 1758)	nb		nb	*1
Hymenoptera	Formicidae	Myrmecina graminicola (Latreille, 1802)	V		s	*1
Hymenoptera	Formicidae	Myrmica bibikoffi Kutter, 1963	R		es	*1
Hymenoptera	Formicidae	Myrmica constricta Karavajev, 1934	2		ss	*1
Hymenoptera	Formicidae	Myrmica curvithorax Bondroit, 1920	2		ss	*1
Hymenoptera	Formicidae	Myrmica gallienii Bondroit, 1920	3		s	*1
Hymenoptera	Formicidae	Myrmica hirsuta Elmes, 1978	2		ss	*1
Hymenoptera	Formicidae	Myrmica karavajevi (Arnoldi, 1930)	2		ss	*1
Hymenoptera	Formicidae	Myrmica lobicornis Nylander, 1846	3		s	*1
Hymenoptera	Formicidae	Myrmica lobulicornis Nylander, 1857	D		ss	*1
Hymenoptera	Formicidae	Myrmica lonae Finzi, 1926	3		ss	*1
Hymenoptera	Formicidae	Myrmica rubra (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Formicidae	Myrmica ruginodis Nylander, 1846	*		sh	*1
Hymenoptera	Formicidae	Myrmica rugulosa Nylander, 1849	V		s	*1
Hymenoptera	Formicidae	Myrmica sabuleti Meinert, 1861	V		mh	*1
Hymenoptera	Formicidae	Myrmica scabrinodis Nylander, 1846	V		h	*1
Hymenoptera	Formicidae	Myrmica schencki Viereck, 1903	3		mh	*1
Hymenoptera	Formicidae	Myrmica specioides Bondroit, 1918	3		s	*1
Hymenoptera	Formicidae	Myrmica sulcinodis Nylander, 1846	2		s	*1
Hymenoptera	Formicidae	Myrmica vandeli Bondroit, 1919	2		ss	*1
Hymenoptera	Formicidae	Myrmoxenus ravouxi (André, 1896)	2		ss	*1
Hymenoptera	Formicidae	Pheidole pallidula Nylander, 1849	nb		nb	*1
Hymenoptera	Formicidae	Plagiolepis pygmaea (Latreille, 1798)	2		ss	*1
Hymenoptera	Formicidae	Plagiolepis vindobonensis Lomnicki, 1925	2		ss	*1
Hymenoptera	Formicidae	Plagiolepis xene Stärcke, 1936	1		es	*1
Hymenoptera	Formicidae	Polyergus rufescens Latreille, 1798	1		ss	*1
Hymenoptera	Formicidae	Ponera coarctata (Latreille, 1802)	3		s	*1
Hymenoptera	Formicidae	Ponera testacea Emery, 1895	2		ss	*1
Hymenoptera	Formicidae	Solenopsis fugax (Latreille, 1798)	3		s	*1
Hymenoptera	Formicidae	Stenamma debile (Förster, 1850)	*		mh	*1
Hymenoptera	Formicidae	Strongylognathus testaceus (Schenck, 1852)	3		s	*1
Hymenoptera	Formicidae	Tapinoma erraticum (Latreille, 1798)	3		s	*1
Hymenoptera	Formicidae	Tapinoma nigerrimum (Nylander, 1856)	nb		nb	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Formicidae	Tapinoma subboreale Seifert, 2012	3		s	*1
Hymenoptera	Formicidae	Temnothorax affinis (Mayr, 1855)	V		mh	*1
Hymenoptera	Formicidae	Temnothorax albipennis (Curtis, 1854)	3		s	*1
Hymenoptera	Formicidae	Temnothorax corticalis (Schenck, 1852)	2		ss	*1
Hymenoptera	Formicidae	Temnothorax crassispinus (Karavajev, 1926)	*		sh	*1
Hymenoptera	Formicidae	Temnothorax interruptus (Schenck, 1852)	3		s	*1
Hymenoptera	Formicidae	Temnothorax nigriceps (Mayr, 1855)	3		s	*1
Hymenoptera	Formicidae	Temnothorax nylanderi (Förster, 1850)	*		sh	*1
Hymenoptera	Formicidae	Temnothorax parvulus (Schenck, 1852)	3		s	*1
Hymenoptera	Formicidae	Temnothorax saxonicus (Seifert, 1995)	2		ss	*1
Hymenoptera	Formicidae	Temnothorax tuberum (Fabricius, 1775)	2		ss	*1
Hymenoptera	Formicidae	Temnothorax unifasciatus (Latreille, 1798)	V		mh	*1
Hymenoptera	Formicidae	Tetramorium caespitum (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Formicidae	Tetramorium impurum (Förster, 1850)	*		h	*1
Hymenoptera	Formicidae	Tetramorium moravicum Kratochvil, 1941	R		es	*1
Hymenoptera	Masaridae	Celonites abbreviatus (Villers 1789)	2		ss	*2
Hymenoptera	Megalodontesidae	Megalodontes cephalotes (Fabricius, 1781)	G		mh	*1
Hymenoptera	Megalodontesidae	Megalodontes fabricii (Leach, 1817)	G		s	*1
Hymenoptera	Megalodontesidae	Megalodontes flavicornis (Klug, 1824)	0	1932	ex	*1
Hymenoptera	Megalodontesidae	Megalodontes panzeri (Leach, 1817)	0	1937	ex	*1
Hymenoptera	Megalodontesidae	Megalodontes plagiocephalus (Fabricius, 1804)	R		es	*1
Hymenoptera	Megalodontesidae	Megalodontes thor Taeger, 2002	2		s	*1
Hymenoptera	Mutillidae	Dasylabris maura (Linnaeus, 1758)	V		s	*2
Hymenoptera	Mutillidae	Mutilla europaea Linnaeus, 1758	*		mh	*2
Hymenoptera	Mutillidae	Mutilla marginata Baer, 1848	*		mh	*2
Hymenoptera	Mutillidae	Myrmilla calva (Villers, 1789)	G		ss	*2
Hymenoptera	Mutillidae	Myrmosa atra Panzer 1801	*		mh	*2
Hymenoptera	Mutillidae	Physetopoda daghestanica (Radoszkowski, 1885)	0	1935	ex	*2
Hymenoptera	Mutillidae	Physetopoda halensis (Fabricius, 1787)	2		ss	*2
Hymenoptera	Mutillidae	Physetopoda scutellaris (Latreille, 1792)	3		s	*2
Hymenoptera	Mutillidae	Ronisia brutia Petagna, 1787	G		ss	*2
Hymenoptera	Mutillidae	Smicromyrme rufipes (Fabricius, 1787)	*		mh	*2
Hymenoptera	Orussusidae	Orussus abietinus (Scopoli, 1763)	*		s	*1
Hymenoptera	Orussusidae	Orussus unicolor Latreille, 1812	R		es	*1
Hymenoptera	Orussusidae	Pseudoryssus henschii (Mocsáry, 1910)	R		es	*1
Hymenoptera	Pamphiliidae	Acantholyda erythrocephala (Linnaeus, 1758)	*		mh	*1
Hymenoptera	Pamphiliidae	Acantholyda flaviceps (Retzius, 1783)	*		ss	*1
Hymenoptera	Pamphiliidae	Acantholyda hieroglyphica (Christ, 1791)	*		s	*1
Hymenoptera	Pamphiliidae	Acantholyda laricis (Giraud, 1861)	D		ss	*1
Hymenoptera	Pamphiliidae	Acantholyda posticalis Matsumura, 1912	*		mh	*1
Hymenoptera	Pamphiliidae	Acantholyda pumilionis (Giraud, 1861)	R		es	*1
Hymenoptera	Pamphiliidae	Caenolyda reticulata (Linnaeus, 1758)	*		s	*1
Hymenoptera	Pamphiliidae	Cephalcia abietis (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Pamphiliidae	Cephalcia alashanica Gussakovskij, 1935	D		ss	*1
Hymenoptera	Pamphiliidae	Cephalcia alpina (Klug, 1808)	*		mh	*1
Hymenoptera	Pamphiliidae	Cephalcia annulicornis (Hartig, 1837)	D		s	*1
Hymenoptera	Pamphiliidae	Cephalcia arvensis Panzer, 1805	*		sh	*1
Hymenoptera	Pamphiliidae	Cephalcia erythrogaster (Hartig, 1837)	*		s	*1
Hymenoptera	Pamphiliidae	Cephalcia fulva Battisti & Zanocco, 1994	D		ss	*1
Hymenoptera	Pamphiliidae	Cephalcia hartigii (Bremi, 1849)	R		es	*1
Hymenoptera	Pamphiliidae	Cephalcia lariciphila (Wachtl, 1898)	*		s	*1
Hymenoptera	Pamphiliidae	Cephalcia masuttii Battisti & Boato, 1998	D		?	*1
Hymenoptera	Pamphiliidae	Neurotoma fausta (Klug, 1808)	*		ss	*1
Hymenoptera	Pamphiliidae	Neurotoma iridescens (André, 1882)	R		es	*1
Hymenoptera	Pamphiliidae	Neurotoma mandibularis (Zaddach, 1866)	G		ss	*1
Hymenoptera	Pamphiliidae	Neurotoma nemoralis (Linnaeus, 1758)	*		mh	*1
Hymenoptera	Pamphiliidae	Neurotoma saltuum (Linnaeus, 1758)	3		s	*1
Hymenoptera	Pamphiliidae	Onycholyda kervillei (Konow, 1903)	D		ss	*1
Hymenoptera	Pamphiliidae	Pamphilius albopictus (Thomson, 1871)	R		es	*1
Hymenoptera	Pamphiliidae	Pamphilius alternans (Costa, 1860)	D		ss	*1
Hymenoptera	Pamphiliidae	Pamphilius aurantiacus (Giraud, 1857)	G		s	*1
Hymenoptera	Pamphiliidae	Pamphilius balteatus (Fallén, 1808)	*		s	*1
Hymenoptera	Pamphiliidae	Pamphilius betulae (Linnaeus, 1758)	V		s	*1
Hymenoptera	Pamphiliidae	Pamphilius brevicornis Hellén, 1948	R		es	*1
Hymenoptera	Pamphiliidae	Pamphilius festivus Pesarini & Pesarini, 1984	G		ss	*1
Hymenoptera	Pamphiliidae	Pamphilius fumipennis (Curtis, 1831)	*		ss	*1
Hymenoptera	Pamphiliidae	Pamphilius gyllenhali (Dahlbom, 1835)	*		s	*1
Hymenoptera	Pamphiliidae	Pamphilius histrio Latreille, 1812	1		ss	*1
Hymenoptera	Pamphiliidae	Pamphilius hortorum (Klug, 1808)	*		mh	*1
Hymenoptera	Pamphiliidae	Pamphilius ignymontiensis Lacourt, 1973	G		s	*1
Hymenoptera	Pamphiliidae	Pamphilius inanitus (Villers, 1789)	D		s	*1
Hymenoptera	Pamphiliidae	Pamphilius jucundus (Eversmann, 1847)	1		es	*1
Hymenoptera	Pamphiliidae	Pamphilius kontuniemii Shinohara, 2003	*		s	*1
Hymenoptera	Pamphiliidae	Pamphilius latifrons (Fallén, 1808)	R		es	*1
Hymenoptera	Pamphiliidae	Pamphilius lethierryi (Konow, 1887)	G		ss	*1
Hymenoptera	Pamphiliidae	Pamphilius marginatus (Serville, 1823)	2		s	*1
Hymenoptera	Pamphiliidae	Pamphilius norimbergensis Enslin, 1917	R		es	*1
Hymenoptera	Pamphiliidae	Pamphilius pallipes (Zetterstedt, 1838)	*		s	*1
Hymenoptera	Pamphiliidae	Pamphilius stramineipes (Hartig, 1837)	D		ss	*1
Hymenoptera	Pamphiliidae	Pamphilius sylvarum (Stephens, 1835)	G		ss	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Pamphiliidae	Pamphilius sylvaticus (Linnaeus, 1758)	*		mh	*1
Hymenoptera	Pamphiliidae	Pamphilius thorwaldi Kontuniemi, 1946	R		es	*1
Hymenoptera	Pamphiliidae	Pamphilius vafer (Linnaeus, 1767)	*		mh	*1
Hymenoptera	Pamphiliidae	Pamphilius varius (Serville, 1823)	*		s	*1
Hymenoptera	Pompilidae	Agenioideus apicalis (Vander Linden 1827)	2		ss	*2
Hymenoptera	Pompilidae	Agenioideus ciliatus (Lepeletier 1845)	1		es	*2
Hymenoptera	Pompilidae	Agenioideus cinctellus (Spinola 1808)	*		mh	*2
Hymenoptera	Pompilidae	Agenioideus nubecula (A Costa 1874)	2		ss	*2
Hymenoptera	Pompilidae	Agenioideus sericeus (Vander Linden 1827)	*		mh	*2
Hymenoptera	Pompilidae	Agenioideus usurarius (Tournier 1889)	*		mh	*2
Hymenoptera	Pompilidae	Anoplius aeruginosus (Tournier 1890)	R		es	*2
Hymenoptera	Pompilidae	Anoplius alpinobalticus Wolf 1965	G		ss	*2
Hymenoptera	Pompilidae	Anoplius caviventris (Aurivillus 1907)	3		s	*2
Hymenoptera	Pompilidae	Anoplius concinnus (Dahlbom 1843)	*		mh	*2
Hymenoptera	Pompilidae	Anoplius infuscatus (Vander Linden 1827)	*		mh	*2
Hymenoptera	Pompilidae	Anoplius nigerrimus (Scopoli 1763)	*		mh	*2
Hymenoptera	Pompilidae	Anoplius tenuicornis (Tournier 1889)	R		es	*2
Hymenoptera	Pompilidae	Anoplius viaticus (Linnaeus 1758)	*		mh	*2
Hymenoptera	Pompilidae	Aporinellus sexmaculatus (Spinola 1805)	3		s	*2
Hymenoptera	Pompilidae	Aporus pollux (Kohl, 1888)	1		es	*2
Hymenoptera	Pompilidae	Aporus unicolor Spinola 1808	*		mh	*2
Hymenoptera	Pompilidae	Arachnospila abnormis (Dahlbom 1842)	G		ss	*2
Hymenoptera	Pompilidae	Arachnospila alvarabnormis (Wolf 1965)	1		es	*2
Hymenoptera	Pompilidae	Arachnospila anceps (Wesmael 1851)	*		mh	*2
Hymenoptera	Pompilidae	Arachnospila asiatica (Morawitz 1888)	1		es	*2
Hymenoptera	Pompilidae	Arachnospila ausa (Tournier 1890)	3		s	*2
Hymenoptera	Pompilidae	Arachnospila consobrina (Dahlbom 1843)	G		ss	*2
Hymenoptera	Pompilidae	Arachnospila fumipennis (Zetterstedt 1838)	G		ss	*2
Hymenoptera	Pompilidae	Arachnospila fuscomarginata (Thomson 1870)	3		s	*2
Hymenoptera	Pompilidae	Arachnospila hedickei (Haupt 1929)	G		ss	*2
Hymenoptera	Pompilidae	Arachnospila minutula (Dahlbom 1842)	*		mh	*2
Hymenoptera	Pompilidae	Arachnospila nivalabnormis (Wolf 1965)	R		es	*2
Hymenoptera	Pompilidae	Arachnospila opinata (Tournier 1890)	1		es	*2
Hymenoptera	Pompilidae	Arachnospila rhaetabnormis (Wolf 1965)	R		es	*2
Hymenoptera	Pompilidae	Arachnospila rufa (Haupt 1927)	3		s	*2
Hymenoptera	Pompilidae	Arachnospila silvana (Kohl 1886)	1		es	*2
Hymenoptera	Pompilidae	Arachnospila sogdianoides (Wolf 1964)	3		s	*2
Hymenoptera	Pompilidae	Arachnospila spissa (Schioedte 1837)	*		mh	*2
Hymenoptera	Pompilidae	Arachnospila trivialis (Dahlbom 1843)	*		mh	*2
Hymenoptera	Pompilidae	Arachnospila virgilabnormis Wolf 1976	1		es	*2
Hymenoptera	Pompilidae	Arachnospila wesmaeli (Thomson 1870)	3		s	*2
Hymenoptera	Pompilidae	Arachnospila westerlundi (A Morawitz 1893)	1		es	*2
Hymenoptera	Pompilidae	Auplopus albifrons (Dalman 1823)	3		s	*2
Hymenoptera	Pompilidae	Auplopus carbonarius (Scopoli 1763)	*		mh	*2
Hymenoptera	Pompilidae	Batozonellus lacerticida (Pallas 1771)	0	1966	ex	*2
Hymenoptera	Pompilidae	Caliadurgus fasciatellus (Spinola 1808)	*		mh	*2
Hymenoptera	Pompilidae	Ceropales albicincta (Rossi 1790)	0	1965	ex	*2
Hymenoptera	Pompilidae	Ceropales maculata (Fabricius 1775)	*		mh	*2
Hymenoptera	Pompilidae	Ceropales variegata (Fabricius 1798)	1		es	*2
Hymenoptera	Pompilidae	Cryptocheilus fabricii (Vander Linden 1827)	3		s	*2
Hymenoptera	Pompilidae	Cryptocheilus notatus (Rossi 1792)	*		mh	*2
Hymenoptera	Pompilidae	Cryptocheilus versicolor (Scopoli 1763)	V		s	*2
Hymenoptera	Pompilidae	Dipogon austriacus Wolf 1964	0	1918	ex	*2
Hymenoptera	Pompilidae	Dipogon bifasciatus (Geoffroy 1785)	*		mh	*2
Hymenoptera	Pompilidae	Dipogon monticolus Wahis 1972	G		ss	*2
Hymenoptera	Pompilidae	Dipogon subintermedius (Magretti 1886)	*		mh	*2
Hymenoptera	Pompilidae	Dipogon variegatus (Linnaeus 1758)	*		mh	*2
Hymenoptera	Pompilidae	Dipogon vechti Day 1979	G		ss	*2
Hymenoptera	Pompilidae	Eoferreola rhombica (Christ 1791)	3		s	*2
Hymenoptera	Pompilidae	Episyron albonotatum (Vander Linden 1827)	*		mh	*2
Hymenoptera	Pompilidae	Episyron arrogans (Smith 1873)	2		ss	*2
Hymenoptera	Pompilidae	Episyron gallicum (Tournier 1889)	2		ss	*2
Hymenoptera	Pompilidae	Episyron rufipes (Linnaeus 1758)	*		mh	*2
Hymenoptera	Pompilidae	Evagetes alamannicus (Blüthgen 1944)	*		mh	*2
Hymenoptera	Pompilidae	Evagetes crassicornis (Shuckard 1835)	*		mh	*2
Hymenoptera	Pompilidae	Evagetes dubius (Vander Linden 1827)	*		mh	*2
Hymenoptera	Pompilidae	Evagetes gibbulus (Lepeletier 1845)	3		s	*2
Hymenoptera	Pompilidae	Evagetes iconionus Wolf 1970	0	1921	ex	*2
Hymenoptera	Pompilidae	Evagetes littoralis (Wesmael 1851)	3		s	*2
Hymenoptera	Pompilidae	Evagetes pectinipes (Linnaeus 1758)	*		s	*2
Hymenoptera	Pompilidae	Evagetes proximus (Dahlbom 1843)	V		s	*2
Hymenoptera	Pompilidae	Evagetes sahlbergi (A Morawitz 1893)	V		mh	*2
Hymenoptera	Pompilidae	Evagetes siculus (Lepeletier 1845)	*		mh	*2
Hymenoptera	Pompilidae	Evagetes subglaber (Haupt 1941)	*		s	*2
Hymenoptera	Pompilidae	Evagetes tumidosus (Tournier 1890)	1		es	*2
Hymenoptera	Pompilidae	Ferreola diffinis (Lepeletier 1845)	1		es	*2
Hymenoptera	Pompilidae	Homonotus sanguinolentus (Fabricius 1793)	G		ss	*2
Hymenoptera	Pompilidae	Nanoclavelia leucoptera (Dahlbom 1843)	2		ss	*2
Hymenoptera	Pompilidae	Poecilagenia rubricans (Lepeletier 1845)	1		es	*2
Hymenoptera	Pompilidae	Pompilus cinereus (Fabricius 1775)	*		mh	*2

Order	Family	Species	K	L	P	S
Hymenoptera	Pompilidae	Priocnemis agilis (Shuckard 1837)	*		s	*2
Hymenoptera	Pompilidae	Priocnemis baltica Blüthgen 1944	1		es	*2
Hymenoptera	Pompilidae	Priocnemis confusor Wahis 2006	3		s	*2
Hymenoptera	Pompilidae	Priocnemis cordivalvata Haupt 1927	*		mh	*2
Hymenoptera	Pompilidae	Priocnemis coriacea (Dahlbom 1843)	*		mh	*2
Hymenoptera	Pompilidae	Priocnemis enslini Haupt 1927	G		ss	*2
Hymenoptera	Pompilidae	Priocnemis exaltata (Fabricius 1775)	*		mh	*2
Hymenoptera	Pompilidae	Priocnemis fallax Verhoeff 1922	0	1965	ex	*2
Hymenoptera	Pompilidae	Priocnemis fennica Haupt 1927	*		mh	*2
Hymenoptera	Pompilidae	Priocnemis hankoi Moczar 1944	G		ss	*2
Hymenoptera	Pompilidae	Priocnemis hyalinata (Fabricius 1793)	*		mh	*2
Hymenoptera	Pompilidae	Priocnemis mesobrometi Wolf 1958	1		es	*2
Hymenoptera	Pompilidae	Priocnemis minuta (Vander Linden 1827)	V		s	*2
Hymenoptera	Pompilidae	Priocnemis parvula (Dahlbom 1845)	*		s	*2
Hymenoptera	Pompilidae	Priocnemis pellipleuris Wahis 1998	3		s	*2
Hymenoptera	Pompilidae	Priocnemis perturbator (Harris 1780)	*		mh	*2
Hymenoptera	Pompilidae	Priocnemis pusilla (Schioedte 1837)	*		mh	*2
Hymenoptera	Pompilidae	Priocnemis schioedtei Haupt 1927	*		mh	*2
Hymenoptera	Pompilidae	Priocnemis susterai Haupt 1927	*		mh	*2
Hymenoptera	Pompilidae	Priocnemis vulgaris (Dufour 1841)	*		mh	*2
Hymenoptera	Sapygidae	Sapyga clavicornis	*		mh	*2
Hymenoptera	Sapygidae	Sapyga quinquepunctata	*		mh	*2
Hymenoptera	Sapygidae	Sapyga similis	G		ss	*2
Hymenoptera	Sapygidae	Sapygina decemguttata	*		mh	*2
Hymenoptera	Scoliidae	Scolia hirta (Schrank)	3		s	*2
Hymenoptera	Scoliidae	Scolia sexmaculata Müller	2		ss	*2
Hymenoptera	Siricidae	Sirex cyaneus Fabricius, 1781	D		s	*1
Hymenoptera	Siricidae	Sirex juvencus (Linnaeus, 1758)	*		mh	*1
Hymenoptera	Siricidae	Sirex noctilio Fabricius, 1773	*		s	*1
Hymenoptera	Siricidae	Tremex fuscicornis (Fabricius, 1787)	*		mh	*1
Hymenoptera	Siricidae	Tremex magus (Fabricius, 1787)	1		es	*1
Hymenoptera	Siricidae	Urocerus augur (Klug, 1803)	3		s	*1
Hymenoptera	Siricidae	Urocerus fantoma (Fabricius, 1781)	D		s	*1
Hymenoptera	Siricidae	Urocerus gigas (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Siricidae	Xeris spectrum (Linnaeus, 1758)	*		h	*1
Hymenoptera	Sphecidae	Ammophila campestris Latreille 1809	*		mh	*2
Hymenoptera	Sphecidae	Ammophila pubescens Curtis 1836	3		s	*2
Hymenoptera	Sphecidae	Ammophila sabulosa Linnaeus 1758	*		mh	*2
Hymenoptera	Sphecidae	Isodontia mexicana Saussure 1867	*		mh	*2
Hymenoptera	Sphecidae	Podalonia affinis Kirby 1758	*		mh	*2
Hymenoptera	Sphecidae	Podalonia alpina Kohl 1888	R		es	*2
Hymenoptera	Sphecidae	Podalonia hirsuta Scopoli 1763	*		mh	*2
Hymenoptera	Sphecidae	Podalonia luffi Saunders 1903	2		ss	*2
Hymenoptera	Sphecidae	Sceliphron curvatum Smith 1870	*		mh	*2
Hymenoptera	Sphecidae	Sceliphron destillatorium (Illiger, 1807)	*		mh	*2
Hymenoptera	Sphecidae	Sphex funerarius Gussakovskij, 1943	3		s	*2
Hymenoptera	Tenthredinidae	Aglaostigma aucupariae (Klug, 1817)	*		sh	*1
Hymenoptera	Tenthredinidae	Aglaostigma discolor (Klug, 1817)	V		mh	*1
Hymenoptera	Tenthredinidae	Aglaostigma fulvipes (Scopoli, 1763)	*		sh	*1
Hymenoptera	Tenthredinidae	Aglaostigma langei (Konow, 1894)	2		ss	*1
Hymenoptera	Tenthredinidae	Aglaostigma lichtwardti (Konow, 1892)	*		mh	*1
Hymenoptera	Tenthredinidae	Aglaostigma nebulosum (André, 1881)	G		ss	*1
Hymenoptera	Tenthredinidae	Aglaostigma pingue (Klug, 1817)	D		ss	*1
Hymenoptera	Tenthredinidae	Allantus basalis (Klug, 1818)	G		ss	*1
Hymenoptera	Tenthredinidae	Allantus calceatus (Klug, 1818)	*		h	*1
Hymenoptera	Tenthredinidae	Allantus cinctus (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Tenthredinidae	Allantus cingillum (Klug, 1818)	D		ss	*1
Hymenoptera	Tenthredinidae	Allantus cingulatus (Scopoli, 1763)	*		h	*1
Hymenoptera	Tenthredinidae	Allantus coryli (Stritt, 1937)	D		ss	*1
Hymenoptera	Tenthredinidae	Allantus coxalis (Klug, 1818)	D		ss	*1
Hymenoptera	Tenthredinidae	Allantus didymus (Klug, 1818)	V		h	*1
Hymenoptera	Tenthredinidae	Allantus laticinctus (Serville, 1823)	V		mh	*1
Hymenoptera	Tenthredinidae	Allantus melanarius (Klug, 1818)	*		s	*1
Hymenoptera	Tenthredinidae	Allantus rufocinctus (Retzius, 1783)	*		sh	*1
Hymenoptera	Tenthredinidae	Allantus togatus (Panzer, 1801)	2		ss	*1
Hymenoptera	Tenthredinidae	Allantus truncatus (Klug, 1818)	D		mh	*1
Hymenoptera	Tenthredinidae	Allantus viennensis (Schrank, 1781)	3		s	*1
Hymenoptera	Tenthredinidae	Amauronematus aeger Konow, 1895	0	1895	ex	*1
Hymenoptera	Tenthredinidae	Amauronematus amentorum (Foerster, 1854)	D		s	*1
Hymenoptera	Tenthredinidae	Amauronematus amplus Konow, 1895	G		s	*1
Hymenoptera	Tenthredinidae	Amauronematus berolinensis (Muche, 1971)	0	1964	ex	*1
Hymenoptera	Tenthredinidae	Amauronematus distinguendus Enslin, 1915	D		ss	*1
Hymenoptera	Tenthredinidae	Amauronematus enslini Lindqvist, 1959	R		es	*1
Hymenoptera	Tenthredinidae	Amauronematus fasciatus Konow, 1897	R		es	*1
Hymenoptera	Tenthredinidae	Amauronematus hartigi Saarinen, 1950	R		es	*1
Hymenoptera	Tenthredinidae	Amauronematus histrio (Serville, 1823)	*		s	*1
Hymenoptera	Tenthredinidae	Amauronematus humeralis (Serville, 1823)	D		ss	*1
Hymenoptera	Tenthredinidae	Amauronematus krausi Taeger & Blank, 1998	*		s	*1
Hymenoptera	Tenthredinidae	Amauronematus lateralis Konow, 1896	D		s	*1
Hymenoptera	Tenthredinidae	Amauronematus leucolenus (Zaddach, 1883)	D		ss	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Tenthredinidae	Amauronematus longiserra (Thomson, 1862)	G		ss	*1
Hymenoptera	Tenthredinidae	Amauronematus microphyes (Foerster, 1854)	0	1854	ex	*1
Hymenoptera	Tenthredinidae	Amauronematus miltonotus (Zaddach,1883)	*		ss	*1
Hymenoptera	Tenthredinidae	Amauronematus mimus Schmidt, 1997	R		es	*1
Hymenoptera	Tenthredinidae	Amauronematus mundus Konow, 1895	D		ss	*1
Hymenoptera	Tenthredinidae	Amauronematus opacipleuris Konow, 1895	R		es	*1
Hymenoptera	Tenthredinidae	Amauronematus pallicercus (Hartig, 1837)	D		?	*1
Hymenoptera	Tenthredinidae	Amauronematus puniceus (Christ, 1791)	R		es	*1
Hymenoptera	Tenthredinidae	Amauronematus semilacteus (Zaddach, 1884)	R		es	*1
Hymenoptera	Tenthredinidae	Amauronematus stenogaster (Foerster, 1854)	D		ss	*1
Hymenoptera	Tenthredinidae	Amauronematus striatus (Hartig, 1837)	R		es	*1
Hymenoptera	Tenthredinidae	Amauronematus toeniatus (Serville, 1823)	R		es	*1
Hymenoptera	Tenthredinidae	Amauronematus tunicatus (Zaddach, 1883)	D		ss	*1
Hymenoptera	Tenthredinidae	Amauronematus viduatoides Lindqvist, 1960	R		es	*1
Hymenoptera	Tenthredinidae	Amauronematus viduatus (Zetterstedt, 1838)	*		s	*1
Hymenoptera	Tenthredinidae	Amauronematus vittatus (Serville, 1823)	*		s	*1
Hymenoptera	Tenthredinidae	Ametastegia albipes (Thomson, 1871)	*		s	*1
Hymenoptera	Tenthredinidae	Ametastegia carpini (Hartig, 1837)	*		sh	*1
Hymenoptera	Tenthredinidae	Ametastegia equiseti (Fallén, 1808)	*		sh	*1
Hymenoptera	Tenthredinidae	Ametastegia glabrata (Fallén, 1808)	*		h	*1
Hymenoptera	Tenthredinidae	Ametastegia pallipes (Spinola, 1808)	*		mh	*1
Hymenoptera	Tenthredinidae	Ametastegia perla (Klug, 1818)	1		es	*1
Hymenoptera	Tenthredinidae	Ametastegia tenera (Fallén, 1808)	*		h	*1
Hymenoptera	Tenthredinidae	Aneugmenus coronatus (Klug, 1818)	*		mh	*1
Hymenoptera	Tenthredinidae	Aneugmenus fuerstenbergensis (Konow, 1885)	*		ss	*1
Hymenoptera	Tenthredinidae	Aneugmenus padi (Linnaeus, 1760)	*		h	*1
Hymenoptera	Tenthredinidae	Aneugmenus temporalis (Thomson, 1871)	D		s	*1
Hymenoptera	Tenthredinidae	Anoplonyx apicalis (Brischke, 1883)	*		sh	*1
Hymenoptera	Tenthredinidae	Anoplonyx destructor Benson, 1952	*		s	*1
Hymenoptera	Tenthredinidae	Anoplonyx lariciphagus (Zaddach, 1883)	R		es	*1
Hymenoptera	Tenthredinidae	Anoplonyx ovatus (Zaddach, 1883)	*		h	*1
Hymenoptera	Tenthredinidae	Apethymus apicalis (Klug, 1818)	G		s	*1
Hymenoptera	Tenthredinidae	Apethymus cereus (Klug, 1818)	*		mh	*1
Hymenoptera	Tenthredinidae	Apethymus filiformis (Klug, 1818)	*		mh	*1
Hymenoptera	Tenthredinidae	Apethymus serotinus (O. F. Müller, 1776)	*		s	*1
Hymenoptera	Tenthredinidae	Apethymus ustus (Klug, 1818)	R		es	*1
Hymenoptera	Tenthredinidae	Ardis pallipes (Serville, 1823)	G		mh	*1
Hymenoptera	Tenthredinidae	Ardis sulcata (Cameron, 1882)	R		es	*1
Hymenoptera	Tenthredinidae	Athalia ancilla Serville, 1823	2		s	*1
Hymenoptera	Tenthredinidae	Athalia bicolor Serville, 1823	*		h	*1
Hymenoptera	Tenthredinidae	Athalia circularis (Klug, 1815)	*		sh	*1
Hymenoptera	Tenthredinidae	Athalia cordata Serville, 1823	*		sh	*1
Hymenoptera	Tenthredinidae	Athalia cornubiae Benson, 1931	*		mh	*1
Hymenoptera	Tenthredinidae	Athalia liberta (Klug, 1815)	*		sh	*1
Hymenoptera	Tenthredinidae	Athalia lugens (Klug, 1815)	G		h	*1
Hymenoptera	Tenthredinidae	Athalia rosae (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Tenthredinidae	Athalia rufoscutellata Mocsáry, 1879	3		s	*1
Hymenoptera	Tenthredinidae	Athalia scutellariae Cameron, 1880	G		mh	*1
Hymenoptera	Tenthredinidae	Bacconematus pumilio (Konow, 1903)	0	1903	ex	*1
Hymenoptera	Tenthredinidae	Birka alpina Lacourt, 1990	*		ss	*1
Hymenoptera	Tenthredinidae	Birka annulitarsis (Thomson, 1870)	D		ss	*1
Hymenoptera	Tenthredinidae	Birka cinereipes (Klug, 1816)	*		h	*1
Hymenoptera	Tenthredinidae	Blennocampa phyllocolpa Viitasaari & Vikberg, 1985	*		h	*1
Hymenoptera	Tenthredinidae	Brachythops flavens (Klug, 1816)	G		s	*1
Hymenoptera	Tenthredinidae	Brachythops wuestneii (Konow, 1885)	G		ss	*1
Hymenoptera	Tenthredinidae	Caliroa annulipes (Klug, 1816)	*		sh	*1
Hymenoptera	Tenthredinidae	Caliroa cerasi (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Tenthredinidae	Caliroa cinxia (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Caliroa cothurnata (Serville, 1823)	D		?	*1
Hymenoptera	Tenthredinidae	Caliroa tremulae Chevin, 1974	*		s	*1
Hymenoptera	Tenthredinidae	Caliroa varipes (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Cladardis elongatula (Klug, 1817)	*		mh	*1
Hymenoptera	Tenthredinidae	Cladardis hartigi Liston, 1995	G		ss	*1
Hymenoptera	Tenthredinidae	Cladius brullei (Dahlbom, 1835)	*		h	*1
Hymenoptera	Tenthredinidae	Cladius compressicornis (Fabricius, 1804)	*		h	*1
Hymenoptera	Tenthredinidae	Cladius grandis (Serville, 1823)	3		s	*1
Hymenoptera	Tenthredinidae	Cladius pectinicornis (Geoffroy, 1785)	*		sh	*1
Hymenoptera	Tenthredinidae	Cladius pilicornis (Curtis, 1833)	*		sh	*1
Hymenoptera	Tenthredinidae	Cladius rufipes (Serville, 1823)	*		s	*1
Hymenoptera	Tenthredinidae	Cladius ulmi (Linnaeus, 1758)	D		s	*1
Hymenoptera	Tenthredinidae	Claremontia alchemillae (Cameron, 1876)	D		?	*1
Hymenoptera	Tenthredinidae	Claremontia alternipes (Klug, 1816)	*		h	*1
Hymenoptera	Tenthredinidae	Claremontia brevicornis (Brischke, 1883)	*		mh	*1
Hymenoptera	Tenthredinidae	Claremontia tenuicornis (Klug, 1816)	*		h	*1
Hymenoptera	Tenthredinidae	Claremontia uncta (Klug, 1816)	D		mh	*1
Hymenoptera	Tenthredinidae	Claremontia waldheimii (Gimmerthal, 1847)	D		mh	*1
Hymenoptera	Tenthredinidae	Craesus alniastri (Scharfenberg, 1805)	*		s	*1
Hymenoptera	Tenthredinidae	Craesus brischkei (Zaddach, 1876)	R		es	*1
Hymenoptera	Tenthredinidae	Craesus latipes (Villaret, 1832)	*		ss	*1
Hymenoptera	Tenthredinidae	Craesus septentrionalis (Linnaeus, 1758)	*		h	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Tenthredinidae	Dineura stilata (Klug, 1816)	G		s	*1
Hymenoptera	Tenthredinidae	Dineura testaceipes (Klug, 1816)	D		ss	*1
Hymenoptera	Tenthredinidae	Dineura virididorsata (Retzius, 1783)	G		s	*1
Hymenoptera	Tenthredinidae	Dolerus aeneus Hartig, 1837	*		sh	*1
Hymenoptera	Tenthredinidae	Dolerus aericeps Thomson, 1871	*		mh	*1
Hymenoptera	Tenthredinidae	Dolerus alpinus Benson, 1947	D		?	*1
Hymenoptera	Tenthredinidae	Dolerus anthracinus (Klug, 1818)	*		s	*1
Hymenoptera	Tenthredinidae	Dolerus anticus (Klug, 1818)	G		ss	*1
Hymenoptera	Tenthredinidae	Dolerus asper Zaddach, 1859	D		s	*1
Hymenoptera	Tenthredinidae	Dolerus bensoni P. R. Müller, 1985	D		?	*1
Hymenoptera	Tenthredinidae	Dolerus bimaculatus (Geoffroy, 1785)	*		h	*1
Hymenoptera	Tenthredinidae	Dolerus blanki Liston, 1995	G		ss	*1
Hymenoptera	Tenthredinidae	Dolerus brevicornis Zaddach, 1859	*		mh	*1
Hymenoptera	Tenthredinidae	Dolerus coracinus (Klug, 1818)	D		ss	*1
Hymenoptera	Tenthredinidae	Dolerus cothurnatus Serville, 1823	V		mh	*1
Hymenoptera	Tenthredinidae	Dolerus eversmanni W. F. Kirby, 1882	*		mh	*1
Hymenoptera	Tenthredinidae	Dolerus ferrugatus Serville, 1823	3		s	*1
Hymenoptera	Tenthredinidae	Dolerus frigidus Benson, 1965	D		?	*1
Hymenoptera	Tenthredinidae	Dolerus fumosus Stephens, 1835	*		h	*1
Hymenoptera	Tenthredinidae	Dolerus genucinctus Zaddach, 1859	*		mh	*1
Hymenoptera	Tenthredinidae	Dolerus germanicus (Fabricius, 1775)	*		h	*1
Hymenoptera	Tenthredinidae	Dolerus gessneri André, 1880	*		s	*1
Hymenoptera	Tenthredinidae	Dolerus gibbosus Hartig, 1837	R		es	*1
Hymenoptera	Tenthredinidae	Dolerus gilvipes (Klug, 1818)	2		s	*1
Hymenoptera	Tenthredinidae	Dolerus gonager (Fabricius, 1771)	*		sh	*1
Hymenoptera	Tenthredinidae	Dolerus haematodes (Schrank, 1781)	*		h	*1
Hymenoptera	Tenthredinidae	Dolerus harwoodi Benson, 1947	D		s	*1
Hymenoptera	Tenthredinidae	Dolerus hibernicus Lacourt, 1988	D		?	*1
Hymenoptera	Tenthredinidae	Dolerus laevigatus Hellén, 1955	R		es	*1
Hymenoptera	Tenthredinidae	Dolerus liogaster Thomson, 1871	D		?	*1
Hymenoptera	Tenthredinidae	Dolerus madidus (Klug, 1818)	3		mh	*1
Hymenoptera	Tenthredinidae	Dolerus niger (Linnaeus, 1767)	*		h	*1
Hymenoptera	Tenthredinidae	Dolerus nigratus (O. F. Müller, 1776)	*		sh	*1
Hymenoptera	Tenthredinidae	Dolerus nitens Zaddach, 1859	*		mh	*1
Hymenoptera	Tenthredinidae	Dolerus pachycerus Hartig, 1837	D		s	*1
Hymenoptera	Tenthredinidae	Dolerus picipes (Klug, 1818)	*		sh	*1
Hymenoptera	Tenthredinidae	Dolerus pratensis (Linnaeus, 1758)	V		mh	*1
Hymenoptera	Tenthredinidae	Dolerus pratorum (Fallén, 1808)	G		ss	*1
Hymenoptera	Tenthredinidae	Dolerus puncticollis Thomson, 1871	*		sh	*1
Hymenoptera	Tenthredinidae	Dolerus sanguinicollis (Klug, 1818)	*		h	*1
Hymenoptera	Tenthredinidae	Dolerus schmidti Konow, 1884	D		?	*1
Hymenoptera	Tenthredinidae	Dolerus stygius Foerster, 1860	D		s	*1
Hymenoptera	Tenthredinidae	Dolerus triplicatus (Klug, 1818)	3		s	*1
Hymenoptera	Tenthredinidae	Dolerus uliginosus (Klug, 1818)	D		?	*1
Hymenoptera	Tenthredinidae	Dolerus varispinus Hartig, 1837	D		?	*1
Hymenoptera	Tenthredinidae	Dolerus vestigialis (Klug, 1818)	*		sh	*1
Hymenoptera	Tenthredinidae	Dolerus zhelochovtsevi Heidemaa & Viitasaari, 2009	D		ss	*1
Hymenoptera	Tenthredinidae	Elinora dominiquei (Konow, 1894)	2		s	*1
Hymenoptera	Tenthredinidae	Elinora flaveola (Gmelin, 1790)	*		mh	*1
Hymenoptera	Tenthredinidae	Elinora koehleri (Klug, 1817)	*		sh	*1
Hymenoptera	Tenthredinidae	Empria alector Benson, 1938	*		mh	*1
Hymenoptera	Tenthredinidae	Empria alpina Benson, 1938	R		es	*1
Hymenoptera	Tenthredinidae	Empria basalis Lindqvist, 1968	D		s	*1
Hymenoptera	Tenthredinidae	Empria candidata (Fallén, 1808)	3		s	*1
Hymenoptera	Tenthredinidae	Empria excisa (Thomson, 1871)	*		mh	*1
Hymenoptera	Tenthredinidae	Empria hungarica (Konow, 1895)	2		es	*1
Hymenoptera	Tenthredinidae	Empria immersa (Klug, 1818)	*		ss	*1
Hymenoptera	Tenthredinidae	Empria liturata (Gmelin, 1790)	*		sh	*1
Hymenoptera	Tenthredinidae	Empria longicornis (Thomson, 1871)	*		mh	*1
Hymenoptera	Tenthredinidae	Empria pallimacula (Serville, 1823)	*		sh	*1
Hymenoptera	Tenthredinidae	Empria parvula (Konow, 1892)	*		mh	*1
Hymenoptera	Tenthredinidae	Empria pumila (Konow, 1896)	G		mh	*1
Hymenoptera	Tenthredinidae	Empria pumiloides Lindqvist, 1968	D		?	*1
Hymenoptera	Tenthredinidae	Empria sexpunctata (Serville, 1823)	*		sh	*1
Hymenoptera	Tenthredinidae	Empria testaceipes (Konow, 1896)	R		es	*1
Hymenoptera	Tenthredinidae	Empria tridens (Konow, 1896)	*		mh	*1
Hymenoptera	Tenthredinidae	Endelomyia aethiops (Gmelin, 1790)	*		mh	*1
Hymenoptera	Tenthredinidae	Endelomyia filipendulae Lacourt, 1998	R		es	*1
Hymenoptera	Tenthredinidae	Endophytus anemones (Hering, 1924)	*		ss	*1
Hymenoptera	Tenthredinidae	Eopsis beaumonti Benson, 1959	*		mh	*1
Hymenoptera	Tenthredinidae	Eriocampa ovata (Linnaeus, 1760)	*		mh	*1
Hymenoptera	Tenthredinidae	Eriocampa umbratica (Klug, 1816)	V		mh	*1
Hymenoptera	Tenthredinidae	Eupareophora exarmata (Thomson, 1871)	R		es	*1
Hymenoptera	Tenthredinidae	Eurhadinoceraea amauros (Zombori, 1977)	R		es	*1
Hymenoptera	Tenthredinidae	Eurhadinoceraea athalioides (Jakovlev, 1891)	0	1921	ex	*1
Hymenoptera	Tenthredinidae	Eurhadinoceraea ventralis (Panzer, 1799)	*		s	*1
Hymenoptera	Tenthredinidae	Eutomostethus ephippium (Panzer, 1798)	*		sh	*1
Hymenoptera	Tenthredinidae	Eutomostethus gagathinus (Klug, 1816)	3		s	*1
Hymenoptera	Tenthredinidae	Eutomostethus luteiventris (Klug, 1816)	*		h	*1
Hymenoptera	Tenthredinidae	Eutomostethus nigrans (Konow, 1887)	*		s	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Tenthredinidae	Eutomostethus punctatus (Konow, 1887)	G		mh	*1
Hymenoptera	Tenthredinidae	Euura amerinae (Linnaeus, 1758)	3		s	*1
Hymenoptera	Tenthredinidae	Euura angusta (Hartig, 1837)	D		ss	*1
Hymenoptera	Tenthredinidae	Euura atra (Jurine, 1807)	*		mh	*1
Hymenoptera	Tenthredinidae	Euura auritae Kopelke, 2000	D		?	*1
Hymenoptera	Tenthredinidae	Euura cinereae Kopelke, 1996	R		es	*1
Hymenoptera	Tenthredinidae	Euura daphnoidica Kopelke, 2001	R		es	*1
Hymenoptera	Tenthredinidae	Euura elaeagnos Kopelke, 1996	D		s	*1
Hymenoptera	Tenthredinidae	Euura gemmacinereae Kopelke, 2001	D		h	*1
Hymenoptera	Tenthredinidae	Euura gemmafoetidae Kopelke, 2001	D		ss	*1
Hymenoptera	Tenthredinidae	Euura mucronata (Hartig, 1837)	*		h	*1
Hymenoptera	Tenthredinidae	Euura myrsinifoliae Kopelke, 2001	D		s	*1
Hymenoptera	Tenthredinidae	Euura nigritarsis Cameron, 1885	*		h	*1
Hymenoptera	Tenthredinidae	Euura purpureae Kopelke, 1996	D		h	*1
Hymenoptera	Tenthredinidae	Euura subgemma Liston, 2006	G		s	*1
Hymenoptera	Tenthredinidae	Euura testaceipes (Brischke, 1883)	*		mh	*1
Hymenoptera	Tenthredinidae	Euura venusta (Zaddach, 1883)	*		s	*1
Hymenoptera	Tenthredinidae	Euura weiffenbachii Ermolenko, 1988	G		s	*1
Hymenoptera	Tenthredinidae	Fenella minuta (Dahlbom, 1835)	1		es	*1
Hymenoptera	Tenthredinidae	Fenella monilicornis (Dahlbom, 1835)	R		es	*1
Hymenoptera	Tenthredinidae	Fenella nigrita Westwood, 1839	*		h	*1
Hymenoptera	Tenthredinidae	Fenusa altenhoferi (Liston, 1993)	G		s	*1
Hymenoptera	Tenthredinidae	Fenusa dohrnii (Tischbein, 1846)	*		mh	*1
Hymenoptera	Tenthredinidae	Fenusa pumila Leach, 1817	*		mh	*1
Hymenoptera	Tenthredinidae	Fenusa ulmi Sundevall, 1847	*		mh	*1
Hymenoptera	Tenthredinidae	Fenusella glaucopis (Konow, 1907)	D		ss	*1
Hymenoptera	Tenthredinidae	Fenusella hortulana (Klug, 1818)	D		?	*1
Hymenoptera	Tenthredinidae	Fenusella nana (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Fenusella wuestneii (Konow, 1894)	*		ss	*1
Hymenoptera	Tenthredinidae	Halidamia affinis (Fallén, 1807)	*		sh	*1
Hymenoptera	Tenthredinidae	Harpiphorus lepidus (Klug, 1818)	*		s	*1
Hymenoptera	Tenthredinidae	Hemichroa australis (Serville, 1823)	2		s	*1
Hymenoptera	Tenthredinidae	Hemichroa crocea (Geoffroy, 1785)	3		s	*1
Hymenoptera	Tenthredinidae	Heptamelus dahlbomi (Thomson, 1870)	*		s	*1
Hymenoptera	Tenthredinidae	Heptamelus ochroleucus (Stephens, 1835)	3		s	*1
Hymenoptera	Tenthredinidae	Heterarthrus aceris (Kaltenbach, 1856)	*		h	*1
Hymenoptera	Tenthredinidae	Heterarthrus cuneifrons Altenhofer & Zombori, 1987	D		s	*1
Hymenoptera	Tenthredinidae	Heterarthrus flavicollis Gussakovskij, 1947	R		es	*1
Hymenoptera	Tenthredinidae	Heterarthrus leucomela (Klug, 1818)	*		mh	*1
Hymenoptera	Tenthredinidae	Heterarthrus microcephalus (Klug, 1818)	*		h	*1
Hymenoptera	Tenthredinidae	Heterarthrus nemoratus (Fallén, 1808)	*		s	*1
Hymenoptera	Tenthredinidae	Heterarthrus ochropoda (Klug, 1818)	*		h	*1
Hymenoptera	Tenthredinidae	Heterarthrus vagans (Fallén, 1808)	*		sh	*1
Hymenoptera	Tenthredinidae	Heterarthrus wuestneii (Konow, 1905)	D		h	*1
Hymenoptera	Tenthredinidae	Hinatara excisa (Konow, 1885)	*		s	*1
Hymenoptera	Tenthredinidae	Hinatara nigripes (Konow, 1907)	R		es	*1
Hymenoptera	Tenthredinidae	Hinatara recta (Thomson, 1871)	*		sh	*1
Hymenoptera	Tenthredinidae	Hoplocampa alpina (Zetterstedt, 1838)	*		ss	*1
Hymenoptera	Tenthredinidae	Hoplocampa ariae Benson, 1933	R		es	*1
Hymenoptera	Tenthredinidae	Hoplocampa brevis (Klug, 1816)	2		es	*1
Hymenoptera	Tenthredinidae	Hoplocampa chrysorrhoea (Klug, 1816)	*		s	*1
Hymenoptera	Tenthredinidae	Hoplocampa crataegi (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Hoplocampa flava (Linnaeus, 1760)	*		mh	*1
Hymenoptera	Tenthredinidae	Hoplocampa fulvicornis (Panzer, 1801)	*		h	*1
Hymenoptera	Tenthredinidae	Hoplocampa minuta (Christ, 1791)	*		s	*1
Hymenoptera	Tenthredinidae	Hoplocampa pectoralis Thomson, 1871	*		mh	*1
Hymenoptera	Tenthredinidae	Hoplocampa plagiata (Klug, 1816)	*		ss	*1
Hymenoptera	Tenthredinidae	Hoplocampa testudinea (Klug, 1816)	*		h	*1
Hymenoptera	Tenthredinidae	Hoplocampoides xylostei (Vallot, 1836)	*		s	*1
Hymenoptera	Tenthredinidae	Macrophya albicincta (Schrank, 1776)	*		h	*1
Hymenoptera	Tenthredinidae	Macrophya albipuncta (Fallén, 1808)	V		mh	*1
Hymenoptera	Tenthredinidae	Macrophya alboannulata Costa, 1859	*		sh	*1
Hymenoptera	Tenthredinidae	Macrophya annulata (Geoffroy, 1785)	*		h	*1
Hymenoptera	Tenthredinidae	Macrophya blanda (Fabricius, 1775)	3		mh	*1
Hymenoptera	Tenthredinidae	Macrophya carinthiaca (Klug, 1817)	*		s	*1
Hymenoptera	Tenthredinidae	Macrophya chrysura (Klug, 1817)	0	1894	ex	*1
Hymenoptera	Tenthredinidae	Macrophya crassula (Klug, 1817)	*		s	*1
Hymenoptera	Tenthredinidae	Macrophya diversipes (Schrank, 1782)	G		mh	*1
Hymenoptera	Tenthredinidae	Macrophya duodecimpunctata (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Tenthredinidae	Macrophya erythrocnema Costa, 1859	*		s	*1
Hymenoptera	Tenthredinidae	Macrophya militaris (Klug, 1817)	*		mh	*1
Hymenoptera	Tenthredinidae	Macrophya montana (Scopoli, 1763)	*		sh	*1
Hymenoptera	Tenthredinidae	Macrophya parvula Konow, 1884	0	1940	ex	*1
Hymenoptera	Tenthredinidae	Macrophya punctumalbum (Linnaeus, 1767)	*		mh	*1
Hymenoptera	Tenthredinidae	Macrophya recognata Zombori, 1979	*		s	*1
Hymenoptera	Tenthredinidae	Macrophya ribis (Schrank, 1781)	*		mh	*1
Hymenoptera	Tenthredinidae	Macrophya rufipes (Linnaeus, 1758)	3		s	*1
Hymenoptera	Tenthredinidae	Macrophya sanguinolenta (Gmelin, 1790)	*		sh	*1
Hymenoptera	Tenthredinidae	Macrophya tenella Mocsáry, 1881	*		mh	*1
Hymenoptera	Tenthredinidae	Macrophya teutona (Panzer, 1799)	*		s	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Tenthredinidae	Mesoneura opaca (Fabricius, 1775)	*		mh	*1
Hymenoptera	Tenthredinidae	Metallus albipes (Cameron, 1875)	*		ss	*1
Hymenoptera	Tenthredinidae	Metallus lanceolatus (Thomson, 1870)	*		h	*1
Hymenoptera	Tenthredinidae	Metallus pumilus (Klug, 1816)	*		sh	*1
Hymenoptera	Tenthredinidae	Monardis plana (Klug, 1817)	G		ss	*1
Hymenoptera	Tenthredinidae	Monophadnoides rubi (Harris, 1845)	*		mh	*1
Hymenoptera	Tenthredinidae	Monophadnoides ruficruris (Brullé, 1832)	*		mh	*1
Hymenoptera	Tenthredinidae	Monophadnus alpicola Benson, 1954	0	1953	ex	*1
Hymenoptera	Tenthredinidae	Monophadnus latus auct.	V		s	*1
Hymenoptera	Tenthredinidae	Monophadnus monticola (Hartig, 1837)	*		mh	*1
Hymenoptera	Tenthredinidae	Monophadnus pallescens (Gmelin, 1790)	*		sh	*1
Hymenoptera	Tenthredinidae	Monophadnus spinolae (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Monostegia abdominalis (Fabricius, 1798)	*		h	*1
Hymenoptera	Tenthredinidae	Monostegia nigra (Konow, 1896)	D		s	*1
Hymenoptera	Tenthredinidae	Monsoma pulveratum (Retzius, 1783)	*		mh	*1
Hymenoptera	Tenthredinidae	Nematinus acuminatus (Thomson, 1871)	*		ss	*1
Hymenoptera	Tenthredinidae	Nematinus bilineatus (Klug, 1819)	*		mh	*1
Hymenoptera	Tenthredinidae	Nematinus caledonicus (Cameron, 1882)	*		ss	*1
Hymenoptera	Tenthredinidae	Nematinus fuscipennis (Serville, 1823)	*		h	*1
Hymenoptera	Tenthredinidae	Nematinus luteus (Panzer, 1804)	*		mh	*1
Hymenoptera	Tenthredinidae	Nematinus steini Blank, 1998	*		h	*1
Hymenoptera	Tenthredinidae	Nematus bergmanni Dahlbom, 1835	*		mh	*1
Hymenoptera	Tenthredinidae	Nematus bipartitus Serville, 1823	G		ss	*1
Hymenoptera	Tenthredinidae	Nematus brevivalvis Thomson, 1871	R		es	*1
Hymenoptera	Tenthredinidae	Nematus cadderensis Cameron, 1875	D		ss	*1
Hymenoptera	Tenthredinidae	Nematus caeruleocarpus Hartig, 1837	2		s	*1
Hymenoptera	Tenthredinidae	Nematus capito (Konow, 1903)	R		es	*1
Hymenoptera	Tenthredinidae	Nematus dispar Zaddach, 1876	D		s	*1
Hymenoptera	Tenthredinidae	Nematus dissimilis Foerster, 1854	D		s	*1
Hymenoptera	Tenthredinidae	Nematus fagi Zaddach, 1876	*		ss	*1
Hymenoptera	Tenthredinidae	Nematus fahraei Thomson, 1863	D		ss	*1
Hymenoptera	Tenthredinidae	Nematus ferrugineus Foerster, 1854	1		es	*1
Hymenoptera	Tenthredinidae	Nematus flavescens Stephens, 1835	V		s	*1
Hymenoptera	Tenthredinidae	Nematus frenalis Thomson, 1888	R		es	*1
Hymenoptera	Tenthredinidae	Nematus fuscomaculatus Foerster, 1854	D		s	*1
Hymenoptera	Tenthredinidae	Nematus glaphyropus Dalla Torre, 1882	R		es	*1
Hymenoptera	Tenthredinidae	Nematus gracilidentatus (Viitasaari, 1980)	R		es	*1
Hymenoptera	Tenthredinidae	Nematus hypoxanthus Foerster, 1854	3		s	*1
Hymenoptera	Tenthredinidae	Nematus incompletus Foerster, 1854	*		s	*1
Hymenoptera	Tenthredinidae	Nematus leionotus (Benson, 1933)	D		ss	*1
Hymenoptera	Tenthredinidae	Nematus leucotrochus Hartig, 1837	3		s	*1
Hymenoptera	Tenthredinidae	Nematus lonicerae (Weiffenbach, 1957)	R		es	*1
Hymenoptera	Tenthredinidae	Nematus lucens (Enslin, 1918)	D		ss	*1
Hymenoptera	Tenthredinidae	Nematus lucidus Panzer, 1801	*		sh	*1
Hymenoptera	Tenthredinidae	Nematus melanocephalus Hartig, 1837	2		ss	*1
Hymenoptera	Tenthredinidae	Nematus miliaris (Panzer, 1797)	*		ss	*1
Hymenoptera	Tenthredinidae	Nematus monticola Thomson, 1871	D		ss	*1
Hymenoptera	Tenthredinidae	Nematus myosotidis (Fabricius, 1804)	*		h	*1
Hymenoptera	Tenthredinidae	Nematus nigricornis Serville, 1823	*		s	*1
Hymenoptera	Tenthredinidae	Nematus notabilis (Konow, 1903)	R		es	*1
Hymenoptera	Tenthredinidae	Nematus olfaciens Benson, 1953	D		ss	*1
Hymenoptera	Tenthredinidae	Nematus oligospilus Foerster, 1854	*		mh	*1
Hymenoptera	Tenthredinidae	Nematus papillosus (Retzius, 1783)	2		s	*1
Hymenoptera	Tenthredinidae	Nematus pavidus Serville, 1823	*		s	*1
Hymenoptera	Tenthredinidae	Nematus poecilonotus Zaddach, 1876	D		ss	*1
Hymenoptera	Tenthredinidae	Nematus princeps Zaddach, 1876	R		es	*1
Hymenoptera	Tenthredinidae	Nematus putoni (Konow, 1903)	*		s	*1
Hymenoptera	Tenthredinidae	Nematus respondens Foerster, 1854	D		?	*1
Hymenoptera	Tenthredinidae	Nematus ribesii (Scopoli, 1763)	*		s	*1
Hymenoptera	Tenthredinidae	Nematus salicis (Linnaeus, 1758)	3		s	*1
Hymenoptera	Tenthredinidae	Nematus scotonotus Foerster, 1854	*		sh	*1
Hymenoptera	Tenthredinidae	Nematus similator Foerster, 1854	*		ss	*1
Hymenoptera	Tenthredinidae	Nematus spiraeae Zaddach, 1883	*		mh	*1
Hymenoptera	Tenthredinidae	Nematus stichi (Enslin, 1913)	1		es	*1
Hymenoptera	Tenthredinidae	Nematus sylvestris Cameron, 1884	D		ss	*1
Hymenoptera	Tenthredinidae	Nematus tibialis Newman, 1837	*		sh	*1
Hymenoptera	Tenthredinidae	Nematus togatus Zaddach, 1876	1		es	*1
Hymenoptera	Tenthredinidae	Nematus umbratus Thomson, 1871	G		s	*1
Hymenoptera	Tenthredinidae	Nematus vicinus Serville, 1823	*		s	*1
Hymenoptera	Tenthredinidae	Nematus viridis Stephens, 1835	*		s	*1
Hymenoptera	Tenthredinidae	Nematus viridissimus Möller, 1882	D		ss	*1
Hymenoptera	Tenthredinidae	Nematus wahlbergi Thomson, 1871	R		es	*1
Hymenoptera	Tenthredinidae	Neodineura arquata (Klug, 1816)	0	1891	ex	*1
Hymenoptera	Tenthredinidae	Neomessa steusloffi (Konow, 1891)	0	1885	ex	*1
Hymenoptera	Tenthredinidae	Nepionema helveticum Benson, 1960	R		es	*1
Hymenoptera	Tenthredinidae	Nesoselandria morio (Fabricius, 1781)	*		h	*1
Hymenoptera	Tenthredinidae	Pachynematus albipennis (Hartig, 1837)	G		s	*1
Hymenoptera	Tenthredinidae	Pachynematus annulatus (Gimmerthal, 1834)	V		s	*1
Hymenoptera	Tenthredinidae	Pachynematus calcicola Benson, 1948	D		?	*1
Hymenoptera	Tenthredinidae	Pachynematus clitellatus (Serville, 1823)	*		mh	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Tenthredinidae	Pachynematus fallax (Serville, 1823)	*		s	*1
Hymenoptera	Tenthredinidae	Pachynematus gehrsi (Konow, 1904)	0	1963	ex	*1
Hymenoptera	Tenthredinidae	Pachynematus imperfectus (Zaddach, 1876)	*		mh	*1
Hymenoptera	Tenthredinidae	Pachynematus infirmus (Foerster, 1854)	D		ss	*1
Hymenoptera	Tenthredinidae	Pachynematus insignis (Hartig, 1840)	R		es	*1
Hymenoptera	Tenthredinidae	Pachynematus kirbyi (Dahlbom, 1835)	*		mh	*1
Hymenoptera	Tenthredinidae	Pachynematus lichtwardti Konow, 1903	D		s	*1
Hymenoptera	Tenthredinidae	Pachynematus moerens (Foerster, 1854)	D		ss	*1
Hymenoptera	Tenthredinidae	Pachynematus montanus (Zaddach, 1883)	*		mh	*1
Hymenoptera	Tenthredinidae	Pachynematus obductus (Hartig, 1837)	*		s	*1
Hymenoptera	Tenthredinidae	Pachynematus pallescens (Hartig, 1837)	D		s	*1
Hymenoptera	Tenthredinidae	Pachynematus scutellatus (Hartig, 1837)	*		sh	*1
Hymenoptera	Tenthredinidae	Pachynematus styx Benson, 1958	R		es	*1
Hymenoptera	Tenthredinidae	Pachynematus vagus (Fabricius, 1781)	*		mh	*1
Hymenoptera	Tenthredinidae	Pachyprotasis antennata (Klug, 1817)	*		mh	*1
Hymenoptera	Tenthredinidae	Pachyprotasis nigronotata Kriechbaumer, 1874	0	1943	ex	*1
Hymenoptera	Tenthredinidae	Pachyprotasis rapae (Linnaeus, 1767)	*		sh	*1
Hymenoptera	Tenthredinidae	Pachyprotasis simulans (Klug, 1817)	*		mh	*1
Hymenoptera	Tenthredinidae	Pachyprotasis variegata (Fallén, 1808)	G		s	*1
Hymenoptera	Tenthredinidae	Paracharactus gracilicornis (Zaddach, 1859)	*		ss	*1
Hymenoptera	Tenthredinidae	Paracharactus hyalinus (Konow, 1886)	R		es	*1
Hymenoptera	Tenthredinidae	Pareophora pruni (Linnaeus, 1758)	*		mh	*1
Hymenoptera	Tenthredinidae	Parna apicalis (Brischke, 1888)	*		mh	*1
Hymenoptera	Tenthredinidae	Parna tenella (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Periclista albida (Klug, 1816)	*		s	*1
Hymenoptera	Tenthredinidae	Periclista albipennis (Zaddach, 1859)	D		ss	*1
Hymenoptera	Tenthredinidae	Periclista albiventris (Klug, 1816)	0	1940	ex	*1
Hymenoptera	Tenthredinidae	Periclista analis Konow, 1886	R		es	*1
Hymenoptera	Tenthredinidae	Periclista lineolata (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Periclista pubescens (Zaddach, 1859)	*		ss	*1
Hymenoptera	Tenthredinidae	Perineura rubi (Panzer, 1805)	*		h	*1
Hymenoptera	Tenthredinidae	Phyllocolpa alienata (Foerster, 1854)	D		s	*1
Hymenoptera	Tenthredinidae	Phyllocolpa carinifrons (Benson, 1940)	D		ss	*1
Hymenoptera	Tenthredinidae	Phyllocolpa erythropyga (Foerster, 1854)	D		?	*1
Hymenoptera	Tenthredinidae	Phyllocolpa leucapsis (Tischbein, 1846)	*		mh	*1
Hymenoptera	Tenthredinidae	Phyllocolpa leucosticta (Hartig, 1837)	*		h	*1
Hymenoptera	Tenthredinidae	Phyllocolpa oblita (Serville, 1823)	*		s	*1
Hymenoptera	Tenthredinidae	Phyllocolpa piliserra (Thomson, 1862)	D		?	*1
Hymenoptera	Tenthredinidae	Phyllocolpa polita (Zaddach, 1883)	D		mh	*1
Hymenoptera	Tenthredinidae	Phyllocolpa prussica (Zaddach, 1883)	D		?	*1
Hymenoptera	Tenthredinidae	Phyllocolpa scotaspis (Foerster, 1854)	D		ss	*1
Hymenoptera	Tenthredinidae	Phymatocera aterrima (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Platycampus luridiventris (Fallén, 1808)	*		sh	*1
Hymenoptera	Tenthredinidae	Platycampus obscuripes (Konow, 1896)	R		es	*1
Hymenoptera	Tenthredinidae	Pontania acutifoliae daphnoides Zinovjev, 1985	*		mh	*1
Hymenoptera	Tenthredinidae	Pontania anomaloptera (Foerster, 1854)	R		es	*1
Hymenoptera	Tenthredinidae	Pontania brevicornis (Foerster, 1854)	*		mh	*1
Hymenoptera	Tenthredinidae	Pontania bridgmanii (Cameron, 1883)	*		sh	*1
Hymenoptera	Tenthredinidae	Pontania collactanea (Foerster, 1854)	3		s	*1
Hymenoptera	Tenthredinidae	Pontania cyrnea Liston, 2005	G		s	*1
Hymenoptera	Tenthredinidae	Pontania elaeagnocola Kopelke, 1994	D		s	*1
Hymenoptera	Tenthredinidae	Pontania foetidae Kopelke, 1989	*		s	*1
Hymenoptera	Tenthredinidae	Pontania hastatae Vikberg, 1970	0	1926	ex	*1
Hymenoptera	Tenthredinidae	Pontania kriechbaumeri Konow, 1901	G		s	*1
Hymenoptera	Tenthredinidae	Pontania montivaga Kopelke, 1991	*		s	*1
Hymenoptera	Tenthredinidae	Pontania myrtilloidica Kopelke, 1991	1		es	*1
Hymenoptera	Tenthredinidae	Pontania obscura Kopelke, 2005	*		mh	*1
Hymenoptera	Tenthredinidae	Pontania pedunculi (Hartig, 1837)	*		sh	*1
Hymenoptera	Tenthredinidae	Pontania proxima (Serville, 1823)	*		sh	*1
Hymenoptera	Tenthredinidae	Pontania purpureae (Cameron, 1884)	*		mh	*1
Hymenoptera	Tenthredinidae	Pontania reticulatae Malaise, 1920	R		es	*1
Hymenoptera	Tenthredinidae	Pontania retusae Benson, 1960	D		s	*1
Hymenoptera	Tenthredinidae	Pontania salicisciniereae (Retzius, 1783)	*		mh	*1
Hymenoptera	Tenthredinidae	Pontania triandrae Benson, 1941	*		h	*1
Hymenoptera	Tenthredinidae	Pontania vesicator (Bremi, 1849)	*		sh	*1
Hymenoptera	Tenthredinidae	Pontania viminalis (Linnaeus, 1758)	*		sh	*1
Hymenoptera	Tenthredinidae	Pontania virilis Zirngiebl, 1955	*		h	*1
Hymenoptera	Tenthredinidae	Pristiphora abbreviata (Hartig, 1837)	*		mh	*1
Hymenoptera	Tenthredinidae	Pristiphora abietina (Christ, 1791)	*		sh	*1
Hymenoptera	Tenthredinidae	Pristiphora albilabris (Boheman, 1852)	0	1905	ex	*1
Hymenoptera	Tenthredinidae	Pristiphora albitibia (Costa, 1859)	G		ss	*1
Hymenoptera	Tenthredinidae	Pristiphora alpestris (Konow, 1903)	G		ss	*1
Hymenoptera	Tenthredinidae	Pristiphora anderschi (Zaddach, 1876)	R		es	*1
Hymenoptera	Tenthredinidae	Pristiphora aphantoneura (Foerster, 1854)	D		?	*1
Hymenoptera	Tenthredinidae	Pristiphora appendiculata (Hartig, 1837)	*		h	*1
Hymenoptera	Tenthredinidae	Pristiphora armata (Thomson, 1862)	*		h	*1
Hymenoptera	Tenthredinidae	Pristiphora bifida (Hellén, 1948)	D		s	*1
Hymenoptera	Tenthredinidae	Pristiphora biscalis (Foerster, 1854)	*		h	*1
Hymenoptera	Tenthredinidae	Pristiphora borea (Konow, 1904)	*		ss	*1
Hymenoptera	Tenthredinidae	Pristiphora breadalbanensis (Cameron, 1882)	D		?	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Tenthredinidae	Pristiphora brevis (Hartig, 1837)	R		es	*1
Hymenoptera	Tenthredinidae	Pristiphora bufo (Brischke, 1883)	G		ss	*1
Hymenoptera	Tenthredinidae	Pristiphora carinata (Hartig, 1837)	*		s	*1
Hymenoptera	Tenthredinidae	Pristiphora cincta Newman, 1837	*		s	*1
Hymenoptera	Tenthredinidae	Pristiphora coactula (Ruthe, 1859)	D		?	*1
Hymenoptera	Tenthredinidae	Pristiphora compressa (Hartig, 1837)	*		h	*1
Hymenoptera	Tenthredinidae	Pristiphora confusa Lindqvist, 1955	D		s	*1
Hymenoptera	Tenthredinidae	Pristiphora coniceps Lindqvist, 1955	D		s	*1
Hymenoptera	Tenthredinidae	Pristiphora conjugata (Dahlbom, 1835)	*		ss	*1
Hymenoptera	Tenthredinidae	Pristiphora decipiens (Enslin, 1916)	*		s	*1
Hymenoptera	Tenthredinidae	Pristiphora erichsonii (Hartig, 1837)	*		ss	*1
Hymenoptera	Tenthredinidae	Pristiphora fausta (Hartig, 1837)	*		s	*1
Hymenoptera	Tenthredinidae	Pristiphora friesei (Konow, 1904)	D		s	*1
Hymenoptera	Tenthredinidae	Pristiphora geniculata (Hartig, 1840)	*		s	*1
Hymenoptera	Tenthredinidae	Pristiphora gerula (Konow, 1904)	D		s	*1
Hymenoptera	Tenthredinidae	Pristiphora glauca Benson, 1954	*		ss	*1
Hymenoptera	Tenthredinidae	Pristiphora insularis Rohwer, 1910	D		mh	*1
Hymenoptera	Tenthredinidae	Pristiphora laricis (Hartig, 1837)	*		sh	*1
Hymenoptera	Tenthredinidae	Pristiphora lativentris (Thomson, 1871)	D		ss	*1
Hymenoptera	Tenthredinidae	Pristiphora leucopodia (Hartig, 1837)	*		mh	*1
Hymenoptera	Tenthredinidae	Pristiphora leucopus Hellén, 1948	*		mh	*1
Hymenoptera	Tenthredinidae	Pristiphora luteipes Lindqvist, 1955	D		?	*1
Hymenoptera	Tenthredinidae	Pristiphora maesta (Zaddach, 1876)	G		s	*1
Hymenoptera	Tenthredinidae	Pristiphora melanocarpa (Hartig, 1840)	D		mh	*1
Hymenoptera	Tenthredinidae	Pristiphora mollis (Hartig, 1837)	*		s	*1
Hymenoptera	Tenthredinidae	Pristiphora monogyniae (Hartig, 1840)	*		sh	*1
Hymenoptera	Tenthredinidae	Pristiphora nigriceps (Hartig, 1840)	*		mh	*1
Hymenoptera	Tenthredinidae	Pristiphora pallida (Konow, 1904)	R		es	*1
Hymenoptera	Tenthredinidae	Pristiphora pallidiventris (Fallén, 1808)	*		h	*1
Hymenoptera	Tenthredinidae	Pristiphora pseudodecipiens Beneš & Krístek, 1976	*		ss	*1
Hymenoptera	Tenthredinidae	Pristiphora punctifrons (Thomson, 1871)	*		mh	*1
Hymenoptera	Tenthredinidae	Pristiphora retusa (Thomson, 1871)	*		ss	*1
Hymenoptera	Tenthredinidae	Pristiphora ruficornis (Olivier, 1811)	*		s	*1
Hymenoptera	Tenthredinidae	Pristiphora rufipes Serville, 1823	*		mh	*1
Hymenoptera	Tenthredinidae	Pristiphora saxesenii (Hartig, 1837)	*		mh	*1
Hymenoptera	Tenthredinidae	Pristiphora staudingeri (Ruthe, 1859)	D		s	*1
Hymenoptera	Tenthredinidae	Pristiphora subbifida (Thomson, 1871)	*		s	*1
Hymenoptera	Tenthredinidae	Pristiphora tenuiserra (Lindqvist, 1958)	R		es	*1
Hymenoptera	Tenthredinidae	Pristiphora testacea (Jurine, 1807)	3		s	*1
Hymenoptera	Tenthredinidae	Pristiphora tetrica (Zaddach, 1883)	*		s	*1
Hymenoptera	Tenthredinidae	Pristiphora thalictri (Kriechbaumer, 1884)	1		es	*1
Hymenoptera	Tenthredinidae	Pristiphora viridana Konow, 1902	D		s	*1
Hymenoptera	Tenthredinidae	Pristiphora wesmaeli (Tischbein, 1853)	*		s	*1
Hymenoptera	Tenthredinidae	Profenusa pygmaea (Klug, 1816)	*		sh	*1
Hymenoptera	Tenthredinidae	Profenusa thomsoni (Konow, 1886)	D		s	*1
Hymenoptera	Tenthredinidae	Pseudodineura clematidis (Hering, 1932)	R		es	*1
Hymenoptera	Tenthredinidae	Pseudodineura clematidisrectae (Hering, 1935)	G		ss	*1
Hymenoptera	Tenthredinidae	Pseudodineura enslini (Hering, 1923)	G		s	*1
Hymenoptera	Tenthredinidae	Pseudodineura fuscula (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Pseudodineura heringi (Enslin, 1921)	G		ss	*1
Hymenoptera	Tenthredinidae	Pseudodineura mentiens (Thomson, 1871)	*		mh	*1
Hymenoptera	Tenthredinidae	Pseudodineura parvula (Klug, 1816)	0	1927	ex	*1
Hymenoptera	Tenthredinidae	Rhadinoceraea bensoni Beneš, 1961	0	1953	ex	*1
Hymenoptera	Tenthredinidae	Rhadinoceraea micans (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Rhadinoceraea nodicornis Konow, 1886	*		s	*1
Hymenoptera	Tenthredinidae	Rhadinoceraea reitteri Konow, 1890	0	1930	ex	*1
Hymenoptera	Tenthredinidae	Rhogogaster chambersi Benson, 1947	*		mh	*1
Hymenoptera	Tenthredinidae	Rhogogaster chlorosoma (Benson, 1943)	*		mh	*1
Hymenoptera	Tenthredinidae	Rhogogaster dryas (Benson, 1943)	*		ss	*1
Hymenoptera	Tenthredinidae	Rhogogaster genistae Benson, 1947	*		mh	*1
Hymenoptera	Tenthredinidae	Rhogogaster picta (Klug, 1817)	*		s	*1
Hymenoptera	Tenthredinidae	Rhogogaster punctulata (Klug, 1817)	*		mh	*1
Hymenoptera	Tenthredinidae	Rhogogaster viridis (Linnaeus, 1758)	*		mh	*1
Hymenoptera	Tenthredinidae	Sciapteryx consobrina (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Sciapteryx costalis (Fabricius, 1775)	G		s	*1
Hymenoptera	Tenthredinidae	Scolioneura betuleti (Klug, 1816)	*		mh	*1
Hymenoptera	Tenthredinidae	Scolioneura tirolensis (Enslin, 1914)	D		s	*1
Hymenoptera	Tenthredinidae	Scolioneura vicina Konow, 1894	D		mh	*1
Hymenoptera	Tenthredinidae	Selandria melanosterna (Serville, 1823)	2		ss	*1
Hymenoptera	Tenthredinidae	Selandria serva (Fabricius, 1793)	*		sh	*1
Hymenoptera	Tenthredinidae	Sharliphora amphibola (Foerster, 1854)	*		s	*1
Hymenoptera	Tenthredinidae	Sharliphora nigella (Foerster, 1854)	*		sh	*1
Hymenoptera	Tenthredinidae	Sharliphora parva (Hartig, 1837)	G		ss	*1
Hymenoptera	Tenthredinidae	Siobla sturmii (Klug, 1817)	*		mh	*1
Hymenoptera	Tenthredinidae	Stauronematus platycerus (Hartig, 1840)	*		h	*1
Hymenoptera	Tenthredinidae	Stethomostus fuliginosus (Schrank, 1781)	*		h	*1
Hymenoptera	Tenthredinidae	Stethomostus funereus (Klug, 1816)	*		s	*1
Hymenoptera	Tenthredinidae	Strombocerus delicatulus (Fallén, 1808)	*		mh	*1
Hymenoptera	Tenthredinidae	Strongylogaster filicis (Klug, 1817)	2		s	*1
Hymenoptera	Tenthredinidae	Strongylogaster macula (Klug, 1817)	*		mh	*1

Order	Family	Species	K	L	P	S
Hymenoptera	Tenthredinidae	Strongylogaster mixta (Klug, 1817)	*		mh	*1
Hymenoptera	Tenthredinidae	Strongylogaster multifasciata (Geoffroy, 1785)	*		sh	*1
Hymenoptera	Tenthredinidae	Strongylogaster xanthocera (Stephens, 1835)	*		mh	*1
Hymenoptera	Tenthredinidae	Taxonus agrorum (Fallén, 1808)	*		sh	*1
Hymenoptera	Tenthredinidae	Taxonus alboscutellatus Niezabitowski, 1899	R		es	*1
Hymenoptera	Tenthredinidae	Tenthredo aaliensis (Strand, 1898)	R		es	*1
Hymenoptera	Tenthredinidae	Tenthredo algoviensis Enslin, 1912	3		s	*1
Hymenoptera	Tenthredinidae	Tenthredo amoena Gravenhorst, 1807	*		h	*1
Hymenoptera	Tenthredinidae	Tenthredo amurica Dalla Torre, 1894	0	1934	ex	*1
Hymenoptera	Tenthredinidae	Tenthredo arcuata Forster, 1771	*		sh	*1
Hymenoptera	Tenthredinidae	Tenthredo atra Linnaeus, 1758	*		h	*1
Hymenoptera	Tenthredinidae	Tenthredo balteata Klug, 1817	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo bifasciata rossii (Panzer, 1804)	V		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo bipunctula Klug, 1817	2		s	*1
Hymenoptera	Tenthredinidae	Tenthredo brevicornis Konow, 1886	*		h	*1
Hymenoptera	Tenthredinidae	Tenthredo campestris Linnaeus, 1758	*		sh	*1
Hymenoptera	Tenthredinidae	Tenthredo caucasica cinctaria Enslin, 1912	0	1954	ex	*1
Hymenoptera	Tenthredinidae	Tenthredo colon Klug, 1817	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo crassa Scopoli, 1763	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo cunyi Konow, 1886	G		ss	*1
Hymenoptera	Tenthredinidae	Tenthredo distinguenda (R. v. Stein, 1885)	*		s	*1
Hymenoptera	Tenthredinidae	Tenthredo eburneifrons W.F. Kirby, 1882	0	1896	ex	*1
Hymenoptera	Tenthredinidae	Tenthredo fagi Panzer, 1798	2		ss	*1
Hymenoptera	Tenthredinidae	Tenthredo ferruginea Schrank, 1776	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo ignobilis Klug, 1817	3		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo korabica Taeger, 1985	G		s	*1
Hymenoptera	Tenthredinidae	Tenthredo livida Linnaeus, 1758	*		sh	*1
Hymenoptera	Tenthredinidae	Tenthredo maculata Geoffroy, 1785	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo mandibularis Fabricius, 1804	3		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo marginella Fabricius,1793	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo mesomela Linnaeus, 1758	*		sh	*1
Hymenoptera	Tenthredinidae	Tenthredo mioceras (Enslin, 1912)	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo moniliata Klug, 1817	D		ss	*1
Hymenoptera	Tenthredinidae	Tenthredo neobesa Zombori, 1980	1		es	*1
Hymenoptera	Tenthredinidae	Tenthredo notha Klug, 1817	*		sh	*1
Hymenoptera	Tenthredinidae	Tenthredo obsoleta Klug, 1817	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo olivacea Klug, 1817	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo omissa (Foerster, 1844)	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo procera Klug, 1817	D		s	*1
Hymenoptera	Tenthredinidae	Tenthredo propinqua Klug, 1817	0	1956	ex	*1
Hymenoptera	Tenthredinidae	Tenthredo rubricoxis (Enslin, 1912)	D		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo schaefferi Klug, 1817	G		s	*1
Hymenoptera	Tenthredinidae	Tenthredo scrophulariae Linnaeus, 1758	*		sh	*1
Hymenoptera	Tenthredinidae	Tenthredo segmentaria Fabricius, 1798	*		s	*1
Hymenoptera	Tenthredinidae	Tenthredo silensis Costa, 1859	G		ss	*1
Hymenoptera	Tenthredinidae	Tenthredo simplex Dalla Torre, 1882	*		s	*1
Hymenoptera	Tenthredinidae	Tenthredo solitaria Scopoli, 1763	*		h	*1
Hymenoptera	Tenthredinidae	Tenthredo sulphuripes (Kriechbaumer, 1869)	2		s	*1
Hymenoptera	Tenthredinidae	Tenthredo temula Scopoli, 1763	*		h	*1
Hymenoptera	Tenthredinidae	Tenthredo thompsoni (Curtis, 1839)	*		s	*1
Hymenoptera	Tenthredinidae	Tenthredo trabeata Klug, 1817	3		s	*1
Hymenoptera	Tenthredinidae	Tenthredo velox Fabricius, 1798	*		h	*1
Hymenoptera	Tenthredinidae	Tenthredo vespa Retzius, 1783	*		h	*1
Hymenoptera	Tenthredinidae	Tenthredo vespiformis Schrank, 1781	G		s	*1
Hymenoptera	Tenthredinidae	Tenthredo zona Klug, 1817	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredo zonula Klug, 1817	*		sh	*1
Hymenoptera	Tenthredinidae	Tenthredopsis coquebertii (Klug, 1817)	D		mh	*1
Hymenoptera	Tenthredinidae	Tenthredopsis friesei (Konow, 1884)	*		h	*1
Hymenoptera	Tenthredinidae	Tenthredopsis lactiflua (Klug, 1817)	2		s	*1
Hymenoptera	Tenthredinidae	Tenthredopsis litterata (Geoffroy, 1785)	*		h	*1
Hymenoptera	Tenthredinidae	Tenthredopsis nassata (Linnaeus, 1767)	*		sh	*1
Hymenoptera	Tenthredinidae	Tenthredopsis ornata (Serville, 1823)	*		h	*1
Hymenoptera	Tenthredinidae	Tenthredopsis scutellaris (Fabricius, 1804)	*		sh	*1
Hymenoptera	Tenthredinidae	Tenthredopsis sordida (Klug, 1817)	*		sh	*1
Hymenoptera	Tenthredinidae	Tenthredopsis stigma (Fabricius, 1798)	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredopsis tarsata (Fabricius, 1804)	3		s	*1
Hymenoptera	Tenthredinidae	Tenthredopsis tessellata (Klug, 1817)	*		mh	*1
Hymenoptera	Tenthredinidae	Tenthredopsis tischbeinii (Frivaldszky, 1877)	*		mh	*1
Hymenoptera	Tenthredinidae	Tomostethus nigritus (Fabricius, 1804)	*		h	*1
Hymenoptera	Tiphiidae	Meria tripunctata (Rossi, 1730)	0	1966	ex	*2
Hymenoptera	Tiphiidae	Metocha ichneumonides Latreille, 1805	*		mh	*2
Hymenoptera	Tiphiidae	Tiphia femorata (Fabricius 1775)	*		mh	*2
Hymenoptera	Tiphiidae	Tiphia minuta van der Linden 1827	*		mh	*2
Hymenoptera	Tiphiidae	Tiphia ruficornis (Klug 1810)	*		mh	*2
Hymenoptera	Tiphiidae	Tiphia villosa Fabricius 1793	1		es	*2
Hymenoptera	Vespidae	Dolichovespula adulterina (Buysson 1905)	*		mh	*2
Hymenoptera	Vespidae	Dolichovespula media (Retzius 1783)	*		mh	*2
Hymenoptera	Vespidae	Dolichovespula norwegica (Fabricius 1781)	*		mh	*2
Hymenoptera	Vespidae	Dolichovespula omissa (Bischoff 1931)	*		mh	*2
Hymenoptera	Vespidae	Dolichovespula saxonica (Fabricius 1793)	*		mh	*2

Order	Family	Species	K	L	P	S
Hymenoptera	Vespidae	Dolichovespula sylvestris (Scopoli 1763)	*		mh	*2
Hymenoptera	Vespidae	Polistes atrimandibularis Zimmerman 1930	0	1930	ex	*2
Hymenoptera	Vespidae	Polistes biglumis bimaculatus (Geoffroy 1785)	*		mh	*2
Hymenoptera	Vespidae	Polistes bischoffi Weyrauch, 1937	*		mh	*2
Hymenoptera	Vespidae	Polistes dominulus (Christ 1791)	*		mh	*2
Hymenoptera	Vespidae	Polistes nimpha (Christ 1791)	*		mh	*2
Hymenoptera	Vespidae	Vespa crabro Linné, 1758	*		mh	*2
Hymenoptera	Vespidae	Vespula austriaca (Panzer, 1799)	*		mh	*2
Hymenoptera	Vespidae	Vespula germanica (Fabricius 1793)	*		mh	*2
Hymenoptera	Vespidae	Vespula rufa (Linné, 1758)	*		mh	*2
Hymenoptera	Vespidae	Vespula vulgaris (Linné, 1758)	*		mh	*2
Hymenoptera	Xiphydriidae	Xiphydria betulae (Enslin, 1911)	*		s	*1
Hymenoptera	Xiphydriidae	Xiphydria camelus (Linnaeus, 1758)	*		mh	*1
Hymenoptera	Xiphydriidae	Xiphydria longicollis (Geoffroy, 1785)	*		mh	*1
Hymenoptera	Xiphydriidae	Xiphydria megapolitana (Brauns, 1884)	G		ss	*1
Hymenoptera	Xiphydriidae	Xiphydria prolongata (Geoffroy, 1785)	*		mh	*1
Hymenoptera	Xyelidae	Pleroneura coniferarum (Hartig, 1837)	*		ss	*1
Hymenoptera	Xyelidae	Pleroneura dahlii (Hartig, 1837)	*		ss	*1
Hymenoptera	Xyelidae	Xyela alpigena (Strobl,1895)	*		s	*1
Hymenoptera	Xyelidae	Xyela curva Benson, 1938	*		h	*1
Hymenoptera	Xyelidae	Xyela julii (Brébisson, 1818)	*		sh	*1
Hymenoptera	Xyelidae	Xyela longula Dalman, 1819	G		es	*1
Hymenoptera	Xyelidae	Xyela obscura (Strobl, 1895)	*		mh	*1
Lepidoptera	Brahmaeidae	Lemonia dumi (Linnaeus, 1761)	2		s	*1
Lepidoptera	Brahmaeidae	Lemonia taraxaci (Denis & Schiffermüller, 1775)	0	1995	ex	*1
Lepidoptera	Cossidae	Cossus cossus (Linnaeus, 1758)	*		h	*1
Lepidoptera	Cossidae	Dyspessa ulula (Borkhausen, 1790)	2		ss	*1
Lepidoptera	Cossidae	Lamellocossus terebra (Denis & Schiffermüller, 1775)	0	1900	ex	*1
Lepidoptera	Cossidae	Phragmataecia castaneae (Hübner, 1790)	*		h	*1
Lepidoptera	Cossidae	Zeuzera pyrina (Linnaeus, 1761)	*		h	*1
Lepidoptera	Crambidae	Acentria ephemerella (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Crambidae	Agriphila deliella (Hübner, 1813)	2		s	*1
Lepidoptera	Crambidae	Agriphila geniculea (Haworth, 1811)	*		mh	*1
Lepidoptera	Crambidae	Agriphila inquinatella (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Crambidae	Agriphila latistria (Haworth, 1811)	3		s	*1
Lepidoptera	Crambidae	Agriphila poliellus (Treitschke, 1832)	3		s	*1
Lepidoptera	Crambidae	Agriphila selasella (Hübner, 1813)	V		s	*1
Lepidoptera	Crambidae	Agriphila straminella (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Crambidae	Agriphila tristella (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Crambidae	Agrotera nemoralis (Scopoli, 1763)	V		s	*1
Lepidoptera	Crambidae	Anania coronata (Hufnagel, 1767)	*		h	*1
Lepidoptera	Crambidae	Anania crocealis (Hübner, 1796)	V		mh	*1
Lepidoptera	Crambidae	Anania funebris (Ström, 1768)	2		s	*1
Lepidoptera	Crambidae	Anania fuscalis (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Crambidae	Anania hortulata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Crambidae	Anania lancealis (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Crambidae	Anania perlucidalis (Hübner, 1809)	3		s	*1
Lepidoptera	Crambidae	Anania stachydalis (Germar, 1821)	*		s	*1
Lepidoptera	Crambidae	Anania terrealis (Treitschke, 1829)	3		s	*1
Lepidoptera	Crambidae	Anania verbascalis (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Crambidae	Atralata albofascialis (Treitschke, 1829)	2		ss	*1
Lepidoptera	Crambidae	Calamotropha aureliellus (Fischer v. Röslerstamm, 1841)	R		es	*1
Lepidoptera	Crambidae	Calamotropha paludella (Hübner, 1824)	*		mh	*1
Lepidoptera	Crambidae	Cataclysta lemnata (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Crambidae	Catoptria combinella (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Crambidae	Catoptria conchella (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Crambidae	Catoptria falsella (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Crambidae	Catoptria fulgidella (Hübner, 1813)	3		s	*1
Lepidoptera	Crambidae	Catoptria luctiferella (Hübner, 1813)	R		es	*1
Lepidoptera	Crambidae	Catoptria lythargyrella (Hübner, 1796)	3		s	*1
Lepidoptera	Crambidae	Catoptria maculalis (Zetterstedt, 1839)	D		?	*1
Lepidoptera	Crambidae	Catoptria margaritella (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Crambidae	Catoptria myella (Hübner, 1796)	*		mh	*1
Lepidoptera	Crambidae	Catoptria mytilella (Hübner, 1805)	*		s	*1
Lepidoptera	Crambidae	Catoptria osthelderi (de Lattin, 1950)	*		s	*1
Lepidoptera	Crambidae	Catoptria permutatellus (Herrich-Schäffer, 1848)	*		h	*1
Lepidoptera	Crambidae	Catoptria petrificella (Hübner, 1796)	*		s	*1
Lepidoptera	Crambidae	Catoptria pinella (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Crambidae	Catoptria pyramidellus (Treitschke, 1832)	*		h	*1
Lepidoptera	Crambidae	Catoptria radiella (Hübner, 1813)	R		es	*1
Lepidoptera	Crambidae	Catoptria speculalis (Hübner, 1825)	D		s	*1
Lepidoptera	Crambidae	Catoptria verellus (Zincken, 1817)	*		mh	*1
Lepidoptera	Crambidae	Chilo phragmitella (Hübner, 1805)	*		mh	*1
Lepidoptera	Crambidae	Chrysocrambus craterella (Scopoli, 1763)	2		es	*1
Lepidoptera	Crambidae	Chrysoteuchia culmella (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Crambidae	Crambus alienellus (Germar & Kaulfuss, 1817)	1		ss	*1
Lepidoptera	Crambidae	Crambus ericella (Hübner, 1813)	3		s	*1
Lepidoptera	Crambidae	Crambus hamella (Thunberg, 1788)	3		s	*1
Lepidoptera	Crambidae	Crambus heringiellus (Herrich-Schäffer, 1848)	2		ss	*1
Lepidoptera	Crambidae	Crambus lathoniellus (Zincken, 1817)	*		sh	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Crambidae	Crambus pascuella (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Crambidae	Crambus perlella (Scopoli, 1763)	*		sh	*1
Lepidoptera	Crambidae	Crambus pratella (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Crambidae	Crambus silvella (Hübner, 1813)	V		mh	*1
Lepidoptera	Crambidae	Crambus uliginosellus (Zeller, 1850)	3		s	*1
Lepidoptera	Crambidae	Cydalima perspectalis (Walker, 1859)	nb		nb	*1
Lepidoptera	Crambidae	Cynaeda dentalis (Denis & Schiffermüller, 1775)	*		s	*1
Lepidoptera	Crambidae	Diasemia reticularis (Linnaeus, 1761)	*		mh	*1
Lepidoptera	Crambidae	Diplopseustis perieresalis (Walker, 1859)	nb		nb	*1
Lepidoptera	Crambidae	Dolicharthria punctalis (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Crambidae	Donacaula forficella (Thunberg, 1794)	*		mh	*1
Lepidoptera	Crambidae	Donacaula mucronella (Denis & Schiffermüller, 1775)	*		s	*1
Lepidoptera	Crambidae	Duponchelia fovealis Zeller, 1847	nb		nb	*1
Lepidoptera	Crambidae	Ecpyrrhorrhoe rubiginalis (Hübner, 1796)	*		mh	*1
Lepidoptera	Crambidae	Elophila nymphaeata (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Crambidae	Epascestria pustulalis (Hübner, 1823)	3		ss	*1
Lepidoptera	Crambidae	Euchromius ocellea (Haworth, 1811)	nb		nb	*1
Lepidoptera	Crambidae	Eudonia delunella (Stainton, 1849)	3		s	*1
Lepidoptera	Crambidae	Eudonia lacustrata (Panzer, 1804)	*		sh	*1
Lepidoptera	Crambidae	Eudonia laetella (Zeller, 1846)	2		ss	*1
Lepidoptera	Crambidae	Eudonia mercurella (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Crambidae	Eudonia murana (Curtis, 1827)	V		s	*1
Lepidoptera	Crambidae	Eudonia pallida (Curtis, 1827)	*		mh	*1
Lepidoptera	Crambidae	Eudonia petrophila (Standfuss, 1848)	R		es	*1
Lepidoptera	Crambidae	Eudonia phaeoleuca (Zeller, 1846)	R		es	*1
Lepidoptera	Crambidae	Eudonia sudetica (Zeller, 1839)	V		s	*1
Lepidoptera	Crambidae	Eudonia truncicolella (Stainton, 1849)	*		sh	*1
Lepidoptera	Crambidae	Eudonia vallesialis (Duponchel, 1832)	R		es	*1
Lepidoptera	Crambidae	Eurrhypis pollinalis (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Crambidae	Evergestis aenealis (Denis & Schiffermüller, 1775)	nb		nb	*1
Lepidoptera	Crambidae	Evergestis extimalis (Scopoli, 1763)	V		s	*1
Lepidoptera	Crambidae	Evergestis forficalis (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Crambidae	Evergestis frumentalis (Linnaeus, 1761)	V		s	*1
Lepidoptera	Crambidae	Evergestis limbata (Linnaeus, 1767)	*		mh	*1
Lepidoptera	Crambidae	Evergestis pallidata (Hufnagel, 1767)	*		mh	*1
Lepidoptera	Crambidae	Evergestis sophialis (Fabricius, 1787)	*		s	*1
Lepidoptera	Crambidae	Friedlanderia cicatricella (Hübner, 1824)	2		es	*1
Lepidoptera	Crambidae	Gesneria centuriella (Denis & Schiffermüller, 1775)	D		?	*1
Lepidoptera	Crambidae	Heliothela wulfeniana (Scopoli, 1763)	G		ss	*1
Lepidoptera	Crambidae	Loxostege manualis (Geyer, 1832)	D		?	*1
Lepidoptera	Crambidae	Loxostege sticticalis (Linnaeus, 1761)	*		s	*1
Lepidoptera	Crambidae	Loxostege turbidalis (Treitschke, 1829)	2		s	*1
Lepidoptera	Crambidae	Mecyna auralis (Peyerimhoff, 1872)	R		es	*1
Lepidoptera	Crambidae	Mecyna flavalis (Denis & Schiffermüller, 1775)	G		s	*1
Lepidoptera	Crambidae	Mecyna lutealis (Duponchel, 1833)	2		es	*1
Lepidoptera	Crambidae	Mecyna trinalis (Denis & Schiffermüller, 1775)	D		?	*1
Lepidoptera	Crambidae	Metaxmeste phrygialis (Hübner, 1796)	*		h	*1
Lepidoptera	Crambidae	Metaxmeste schrankiana (Hochenwarth, 1785)	*		mh	*1
Lepidoptera	Crambidae	Nascia cilialis (Hübner, 1796)	*		ss	*1
Lepidoptera	Crambidae	Nomophila noctuella (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Crambidae	Nymphula nitidulata (Hufnagel, 1767)	3		s	*1
Lepidoptera	Crambidae	Orenaia alpestralis (Fabricius, 1787)	R		es	*1
Lepidoptera	Crambidae	Orenaia helveticalis (Herrich-Schäffer, 1851)	D		?	*1
Lepidoptera	Crambidae	Orenaia lugubralis (Lederer, 1857)	D		?	*1
Lepidoptera	Crambidae	Ostrinia nubilalis (Hübner, 1796)	*		sh	*1
Lepidoptera	Crambidae	Ostrinia palustralis (Hübner, 1796)	R		es	*1
Lepidoptera	Crambidae	Ostrinia quadripunctalis (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Crambidae	Palpita vitrealis (Rossi, 1794)	nb		nb	*1
Lepidoptera	Crambidae	Paracorsia repandalis (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Crambidae	Parapoynx nivalis (Denis & Schiffermüller, 1775)	0	1980	ex	*1
Lepidoptera	Crambidae	Parapoynx stratiotata (Linnaeus, 1758)	*		s	*1
Lepidoptera	Crambidae	Paratalanta hyalinalis (Hübner, 1796)	2		s	*1
Lepidoptera	Crambidae	Paratalanta pandalis (Hübner, 1825)	2		s	*1
Lepidoptera	Crambidae	Pediasia aridella (Thunberg, 1788)	3		ss	*1
Lepidoptera	Crambidae	Pediasia aridella ludovicellus (Marion, 1952)	1		es	*1
Lepidoptera	Crambidae	Pediasia contaminella (Hübner, 1796)	V		mh	*1
Lepidoptera	Crambidae	Pediasia fascelinella (Hübner, 1813)	G		s	*1
Lepidoptera	Crambidae	Pediasia luteella (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Crambidae	Pediasia pedriolellus (Duponchel, 1836)	R		es	*1
Lepidoptera	Crambidae	Platytes alpinella (Hübner, 1813)	*		mh	*1
Lepidoptera	Crambidae	Platytes cerussella (Denis & Schiffermüller, 1775)	G		s	*1
Lepidoptera	Crambidae	Pleuroptya ruralis (Scopoli, 1763)	*		sh	*1
Lepidoptera	Crambidae	Psammotis pulveralis (Hübner, 1796)	V		s	*1
Lepidoptera	Crambidae	Pyrausta aerealis (Hübner, 1793)	V		mh	*1
Lepidoptera	Crambidae	Pyrausta aurata (Scopoli, 1763)	*		mh	*1
Lepidoptera	Crambidae	Pyrausta cingulata (Linnaeus, 1758)	2		ss	*1
Lepidoptera	Crambidae	Pyrausta coracinalis Leraut, 1982	V		s	*1
Lepidoptera	Crambidae	Pyrausta despicata (Scopoli, 1763)	*		h	*1
Lepidoptera	Crambidae	Pyrausta falcatalis Guenée, 1854	2		ss	*1
Lepidoptera	Crambidae	Pyrausta nigrata (Scopoli, 1763)	3		s	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Crambidae	Pyrausta obfuscata (Scopoli, 1763)	1		es	*1
Lepidoptera	Crambidae	Pyrausta ostrinalis (Hübner, 1796)	D		?	*1
Lepidoptera	Crambidae	Pyrausta porphyralis (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Crambidae	Pyrausta purpuralis (Linnaeus, 1758)	V		h	*1
Lepidoptera	Crambidae	Pyrausta sanguinalis (Linnaeus, 1767)	1		es	*1
Lepidoptera	Crambidae	Schoenobius gigantella (Denis & Schiffermüller, 1775)	G		s	*1
Lepidoptera	Crambidae	Sclerocona acutellus (Eversmann, 1842)	R		es	*1
Lepidoptera	Crambidae	Scoparia ambigualis (Treitschke, 1829)	*		h	*1
Lepidoptera	Crambidae	Scoparia ancipitella (La Harpe, 1855)	*		s	*1
Lepidoptera	Crambidae	Scoparia basistrigalis Knaggs, 1866	*		sh	*1
Lepidoptera	Crambidae	Scoparia conicella (La Harpe, 1863)	*		ss	*1
Lepidoptera	Crambidae	Scoparia ingratella (Zeller, 1846)	R		es	*1
Lepidoptera	Crambidae	Scoparia manifestella (Herrich-Schäffer, 1848)	*		s	*1
Lepidoptera	Crambidae	Scoparia pyralella (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Crambidae	Scoparia subfusca Haworth, 1811	G		s	*1
Lepidoptera	Crambidae	Sitochroa palealis (Denis & Schiffermüller, 1775)	*		s	*1
Lepidoptera	Crambidae	Sitochroa verticalis (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Crambidae	Spoladea recurvalis (Fabricius, 1775)	nb		nb	*1
Lepidoptera	Crambidae	Thisanotia chrysonuchella (Scopoli, 1763)	*		mh	*1
Lepidoptera	Crambidae	Udea accolalis (Zeller, 1867)	*		s	*1
Lepidoptera	Crambidae	Udea alpinalis (Denis & Schiffermüller, 1775)	*		s	*1
Lepidoptera	Crambidae	Udea cyanalis (La Harpe, 1855)	3		s	*1
Lepidoptera	Crambidae	Udea decrepitalis (Herrich-Schäffer, 1848)	3		s	*1
Lepidoptera	Crambidae	Udea elutalis (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Crambidae	Udea ferrugalis (Hübner, 1796)	*		mh	*1
Lepidoptera	Crambidae	Udea fulvalis (Hübner, 1809)	3		s	*1
Lepidoptera	Crambidae	Udea hamalis (Thunberg, 1788)	2		es	*1
Lepidoptera	Crambidae	Udea inquinatalis (Lienig & Zeller, 1846)	R		es	*1
Lepidoptera	Crambidae	Udea institalis (Hübner, 1819)	2		es	*1
Lepidoptera	Crambidae	Udea lutealis (Hübner, 1809)	*		mh	*1
Lepidoptera	Crambidae	Udea murinalis (Fischer v. Röslerstamm, 1842)	D		?	*1
Lepidoptera	Crambidae	Udea nebulalis (Hübner, 1796)	*		mh	*1
Lepidoptera	Crambidae	Udea olivalis (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Crambidae	Udea prunalis (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Crambidae	Udea rhododendronalis (Duponchel, 1834)	D		?	*1
Lepidoptera	Crambidae	Udea uliginosalis (Stephens, 1834)	*		s	*1
Lepidoptera	Crambidae	Uresiphita gilvata (Fabricius, 1794)	G		mh	*1
Lepidoptera	Crambidae	Xanthocrambus lucellus (Herrich-Schäffer, 1848)	0	1980	ex	*1
Lepidoptera	Crambidae	Xanthocrambus saxonellus (Zincken, 1821)	2		es	*1
Lepidoptera	Drepanidae	Achlya flavicornis (Linnaeus, 1758)	*		h	*1
Lepidoptera	Drepanidae	Cilix glaucata (Scopoli, 1763)	*		mh	*1
Lepidoptera	Drepanidae	Cymatophorina diluta (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Drepanidae	Drepana curvatula (Borkhausen, 1790)	*		mh	*1
Lepidoptera	Drepanidae	Drepana falcataria (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Drepanidae	Falcaria lacertinaria (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Drepanidae	Habrosyne pyritoides (Hufnagel, 1766)	*		sh	*1
Lepidoptera	Drepanidae	Ochropacha duplaris (Linnaeus, 1761)	*		h	*1
Lepidoptera	Drepanidae	Polyploca ridens (Fabricius, 1787)	*		mh	*1
Lepidoptera	Drepanidae	Sabra harpagula (Esper, 1786)	V		s	*1
Lepidoptera	Drepanidae	Tethea ocularis (Linnaeus, 1767)	*		mh	*1
Lepidoptera	Drepanidae	Tethea or (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Drepanidae	Tetheella fluctuosa (Hübner, 1803)	*		h	*1
Lepidoptera	Drepanidae	Thyatira batis (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Drepanidae	Watsonalla binaria (Hufnagel, 1767)	*		h	*1
Lepidoptera	Drepanidae	Watsonalla cultraria (Fabricius, 1775)	*		h	*1
Lepidoptera	Endromidae	Endromis versicolora (Linnaeus, 1758)	*		h	*1
Lepidoptera	Erebidae	Amata phegea (Linnaeus, 1758)	3		s	*1
Lepidoptera	Erebidae	Arctia caja (Linnaeus, 1758)	V		h	*1
Lepidoptera	Erebidae	Arctia festiva (Hufnagel, 1766)	0	1970	ex	*1
Lepidoptera	Erebidae	Arctia villica (Linnaeus, 1758)	2		ss	*1
Lepidoptera	Erebidae	Arctornis l-nigrum (O. F. Müller, 1764)	*		h	*1
Lepidoptera	Erebidae	Atolmis rubricollis (Linnaeus, 1758)	*		h	*1
Lepidoptera	Erebidae	Callimorpha dominula (Linnaeus, 1758)	*		h	*1
Lepidoptera	Erebidae	Calliteara abietis ([Denis & Schiffermüller, 1775])	*		ss	*1
Lepidoptera	Erebidae	Calliteara pudibunda (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Erebidae	Calyptra thalictri (Borkhausen, 1790)	0	1920	ex	*1
Lepidoptera	Erebidae	Catephia alchymista (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Erebidae	Catocala electa (Vieweg, 1790)	2		ss	*1
Lepidoptera	Erebidae	Catocala elocata (Esper, 1787)	2		ss	*1
Lepidoptera	Erebidae	Catocala fraxini (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Erebidae	Catocala fulminea (Scopoli, 1763)	3		s	*1
Lepidoptera	Erebidae	Catocala nupta (Linnaeus, 1767)	*		h	*1
Lepidoptera	Erebidae	Catocala nymphaea (Esper, 1787)	nb		nb	*1
Lepidoptera	Erebidae	Catocala pacta (Linnaeus, 1758)	0	1953	ex	*1
Lepidoptera	Erebidae	Catocala promissa (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Erebidae	Catocala sponsa (Linnaeus, 1767)	*		h	*1
Lepidoptera	Erebidae	Chelis maculosa (Gerning, 1780)	1		es	*1
Lepidoptera	Erebidae	Colobochyla salicalis (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Erebidae	Coscinia cribraria (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Erebidae	Cybosia mesomella (Linnaeus, 1758)	*		h	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Erebidae	Cycnia sordida (Hübner, 1803)	0	1980	ex	*1
Lepidoptera	Erebidae	Diacrisia sannio (Linnaeus, 1758)	*		h	*1
Lepidoptera	Erebidae	Diaphora mendica (Clerck, 1759)	*		h	*1
Lepidoptera	Erebidae	Dicallomera fascelina (Linnaeus, 1758)	2		s	*1
Lepidoptera	Erebidae	Dysauxes ancilla (Linnaeus, 1767)	3		s	*1
Lepidoptera	Erebidae	Dysgonia algira (Linnaeus, 1767)	R		es	*1
Lepidoptera	Erebidae	Eilema caniola (Hübner, 1808)	*		s	*1
Lepidoptera	Erebidae	Eilema complana (Linnaeus, 1758)	*		h	*1
Lepidoptera	Erebidae	Eilema depressa (Esper, 1787)	*		h	*1
Lepidoptera	Erebidae	Eilema griseola (Hübner, 1803)	*		mh	*1
Lepidoptera	Erebidae	Eilema lurideola (Zincken, 1817)	*		h	*1
Lepidoptera	Erebidae	Eilema lutarella (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Erebidae	Eilema palliatella (Scopoli, 1763)	1		es	*1
Lepidoptera	Erebidae	Eilema pseudocomplana (Daniel, 1939)	R		es	*1
Lepidoptera	Erebidae	Eilema pygmaeola (Doubleday, 1847)	V		mh	*1
Lepidoptera	Erebidae	Eilema sororcula (Hufnagel, 1766)	*		h	*1
Lepidoptera	Erebidae	Eublemma minutata (Fabricius, 1794)	3		s	*1
Lepidoptera	Erebidae	Eublemma parva (Hübner, 1808)	D		?	*1
Lepidoptera	Erebidae	Eublemma purpurina (Denis & Schiffermüller, 1775)	nb		nb	*1
Lepidoptera	Erebidae	Euclidia glyphica (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Erebidae	Euplagia quadripunctaria (Poda, 1761)	*		h	*1
Lepidoptera	Erebidae	Euproctis chrysorrhoea (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Erebidae	Euproctis similis (Fuessly, 1775)	*		h	*1
Lepidoptera	Erebidae	Gynaephora selenitica (Esper, 1789)	2		ss	*1
Lepidoptera	Erebidae	Herminia grisealis (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Erebidae	Herminia tarsicrinalis (Knoch, 1782)	*		h	*1
Lepidoptera	Erebidae	Herminia tenuialis (Rebel, 1899)	2		es	*1
Lepidoptera	Erebidae	Hypena crassalis (Fabricius, 1787)	*		h	*1
Lepidoptera	Erebidae	Hypena lividalis (Hübner, 1796)	nb		nb	*1
Lepidoptera	Erebidae	Hypena obesalis Treitschke, 1829	2		s	*1
Lepidoptera	Erebidae	Hypena proboscidalis (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Erebidae	Hypena rostralis (Linnaeus, 1758)	*		h	*1
Lepidoptera	Erebidae	Hypenodes humidalis Doubleday, 1850	3		s	*1
Lepidoptera	Erebidae	Hyphantria cunea (Drury, 1773)	nb		nb	*1
Lepidoptera	Erebidae	Hyphoraia aulica (Linnaeus, 1758)	1		ss	*1
Lepidoptera	Erebidae	Idia calvaria (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Erebidae	Laelia coenosa (Hübner, 1808)	2		es	*1
Lepidoptera	Erebidae	Laspeyria flexula (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Erebidae	Leucoma salicis (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Erebidae	Lithosia quadra (Linnaeus, 1758)	3		mh	*1
Lepidoptera	Erebidae	Lygephila craccae (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Erebidae	Lygephila pastinum (Treitschke, 1826)	*		h	*1
Lepidoptera	Erebidae	Lygephila viciae (Hübner, 1822)	3		s	*1
Lepidoptera	Erebidae	Lymantria dispar (Linnaeus, 1758)	*		h	*1
Lepidoptera	Erebidae	Lymantria monacha (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Erebidae	Macrochilo cribrumalis (Hübner, 1793)	*		mh	*1
Lepidoptera	Erebidae	Miltochrista miniata (Forster, 1771)	*		h	*1
Lepidoptera	Erebidae	Minucia lunaris (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Erebidae	Nudaria mundana (Linnaeus, 1761)	3		s	*1
Lepidoptera	Erebidae	Ocneria rubea (Denis & Schiffermüller, 1775)	0	1898	ex	*1
Lepidoptera	Erebidae	Orgyia antiqua (Linnaeus, 1758)	*		h	*1
Lepidoptera	Erebidae	Orgyia antiquiodes (Hübner, 1822)	1		es	*1
Lepidoptera	Erebidae	Orgyia recens (Hübner, 1819)	1		es	*1
Lepidoptera	Erebidae	Paidia rica (Freyer, 1858)	1		es	*1
Lepidoptera	Erebidae	Paracolax tristalis (Fabricius, 1794)	*		mh	*1
Lepidoptera	Erebidae	Parascotia fuliginaria (Linnaeus, 1761)	*		mh	*1
Lepidoptera	Erebidae	Parasemia plantaginis (Linnaeus, 1758)	V		h	*1
Lepidoptera	Erebidae	Parocneria detrita (Esper, 1785)	1		es	*1
Lepidoptera	Erebidae	Pechipogo plumigeralis (Hübner, 1825)	0	1910	ex	*1
Lepidoptera	Erebidae	Pechipogo strigilata (Linnaeus, 1758)	*		h	*1
Lepidoptera	Erebidae	Pelosia muscerda (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Erebidae	Pelosia obtusa (Herrich-Schäffer, 1847)	3		s	*1
Lepidoptera	Erebidae	Penthophera morio (Linnaeus, 1767)	0	1963	ex	*1
Lepidoptera	Erebidae	Pericallia matronula (Linnaeus, 1758)	1		es	*1
Lepidoptera	Erebidae	Phragmatobia fuliginosa (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Erebidae	Phragmatobia luctifera (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Erebidae	Phytometra viridaria (Clerck, 1759)	3		mh	*1
Lepidoptera	Erebidae	Polypogon gryphalis (Herrich-Schäffer, 1851)	0	1940	ex	*1
Lepidoptera	Erebidae	Polypogon tentacularia (Linnaeus, 1758)	3		s	*1
Lepidoptera	Erebidae	Rhyparia purpurata (Linnaeus, 1758)	3		s	*1
Lepidoptera	Erebidae	Rhyparioides metelkana (Lederer, 1861)	0	1972	ex	*1
Lepidoptera	Erebidae	Rivula sericealis (Scopoli, 1763)	*		sh	*1
Lepidoptera	Erebidae	Schrankia costaestrigalis (Stephens, 1834)	*		mh	*1
Lepidoptera	Erebidae	Schrankia taenialis (Hübner, 1809)	D		ss	*1
Lepidoptera	Erebidae	Scoliopteryx libatrix (Linnaeus, 1758)	*		h	*1
Lepidoptera	Erebidae	Setema cereola (Hübner, 1803)	R		es	*1
Lepidoptera	Erebidae	Setina aurita (Esper, 1787)	R		es	*1
Lepidoptera	Erebidae	Setina irrorella (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Erebidae	Setina roscida kuhlweini (Hübner, 1827)	1		es	*1
Lepidoptera	Erebidae	Setina roscida roscida (Denis & Schiffermüller, 1775)	1		es	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Erebidae	Simplicia rectalis (Eversmann, 1842)	1		es	*1
Lepidoptera	Erebidae	Spilosoma lubricipeda (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Erebidae	Spilosoma lutea (Hufnagel, 1766)	*		sh	*1
Lepidoptera	Erebidae	Spilosoma urticae (Esper, 1789)	V		mh	*1
Lepidoptera	Erebidae	Spiris striata (Linnaeus, 1758)	V		s	*1
Lepidoptera	Erebidae	Thumatha senex (Hübner, 1808)	*		mh	*1
Lepidoptera	Erebidae	Trisateles emortualis (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Erebidae	Tyria jacobaeae (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Erebidae	Utetheisa pulchella (Linnaeus, 1758)	nb		nb	*1
Lepidoptera	Erebidae	Watsonarctia casta (Esper, 1785)	1		es	*1
Lepidoptera	Erebidae	Zanclognatha lunalis (Scopoli, 1763)	2		ss	*1
Lepidoptera	Erebidae	Zanclognatha zelleralis (Wocke, 1850)	R		es	*1
Lepidoptera	Geometridae	Abraxas grossulariata (Linnaeus, 1758)	3		mh	*1
Lepidoptera	Geometridae	Abraxas sylvata (Scopoli, 1763)	*		mh	*1
Lepidoptera	Geometridae	Acasis appensata (Eversmann, 1842)	3		s	*1
Lepidoptera	Geometridae	Acasis viretata (Hübner, 1799)	*		mh	*1
Lepidoptera	Geometridae	Aethalura punctulata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Agriopis aurantiaria (Hübner, 1799)	*		h	*1
Lepidoptera	Geometridae	Agriopis bajaria (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Agriopis leucophaearia (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Agriopis marginaria (Fabricius, 1777)	*		h	*1
Lepidoptera	Geometridae	Alcis bastelbergeri (Hirschke, 1908)	*		mh	*1
Lepidoptera	Geometridae	Alcis jubata (Thunberg, 1788)	1		es	*1
Lepidoptera	Geometridae	Alcis repandata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Aleucis distinctata (Herrich-Schäffer, 1839)	*		mh	*1
Lepidoptera	Geometridae	Alsophila aceraria (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Alsophila aescularia (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Geometridae	Angerona prunaria (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Anticlea badiata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Anticlea derivata (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Anticollix sparsata (Treitschke, 1828)	*		mh	*1
Lepidoptera	Geometridae	Apeira syringaria (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Aplasta ononaria (Fuessly, 1783)	3		s	*1
Lepidoptera	Geometridae	Aplocera efformata (Guenée, 1857)	*		mh	*1
Lepidoptera	Geometridae	Aplocera plagiata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Aplocera praeformata (Hübner, 1826)	*		h	*1
Lepidoptera	Geometridae	Apocheima hispidaria (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Apocheima pilosaria (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Geometridae	Archiearis notha (Hübner, 1803)	V		mh	*1
Lepidoptera	Geometridae	Archiearis parthenias (Linnaeus, 1761)	*		h	*1
Lepidoptera	Geometridae	Arichanna melanaria (Linnaeus, 1758)	2		s	*1
Lepidoptera	Geometridae	Artiora evonymaria (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Geometridae	Ascotis selenaria (Denis & Schiffermüller, 1775)	*		s	*1
Lepidoptera	Geometridae	Aspitates gilvaria (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Geometridae	Asthena albulata (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Asthena anseraria (Herrich-Schäffer, 1855)	V		s	*1
Lepidoptera	Geometridae	Baptria tibiale (Esper, 1791)	1		es	*1
Lepidoptera	Geometridae	Biston betularia (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Biston strataria (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Bupalus piniaria (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Cabera exanthemata (Scopoli, 1763)	*		sh	*1
Lepidoptera	Geometridae	Cabera leptographa Wehrli, 1936	0	1987	ex	*1
Lepidoptera	Geometridae	Cabera pusaria (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Campaea honoraria (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Geometridae	Campaea margaritata (Linnaeus, 1767)	*		sh	*1
Lepidoptera	Geometridae	Camptogramma bilineata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Carsia sororiata (Hübner, 1813)	1		ss	*1
Lepidoptera	Geometridae	Cataclysme riguata (Hübner, 1813)	3		s	*1
Lepidoptera	Geometridae	Catarhoe cuculata (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Catarhoe rubidata (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Geometridae	Cepphis advenaria (Hübner, 1790)	*		mh	*1
Lepidoptera	Geometridae	Chariaspilates formosaria (Eversmann, 1837)	1		es	*1
Lepidoptera	Geometridae	Charissa ambiguata (Duponchel, 1830)	3		mh	*1
Lepidoptera	Geometridae	Charissa glaucinaria (Hübner, 1799)	V		s	*1
Lepidoptera	Geometridae	Charissa intermedia Wehrli, 1917	V		s	*1
Lepidoptera	Geometridae	Charissa obscurata (Denis & Schiffermüller, 1775)	V		h	*1
Lepidoptera	Geometridae	Charissa pullata (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Geometridae	Chesias legatella (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Chesias rufata (Fabricius, 1775)	3		s	*1
Lepidoptera	Geometridae	Chiasmia aestimaria (Hübner, 1809)	nb		nb	*1
Lepidoptera	Geometridae	Chiasmia clathrata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Chlorissa cloraria (Hübner, 1813)	2		s	*1
Lepidoptera	Geometridae	Chlorissa viridata (Linnaeus, 1758)	3		mh	*1
Lepidoptera	Geometridae	Chloroclysta miata (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Geometridae	Chloroclysta siterata (Hufnagel, 1767)	*		sh	*1
Lepidoptera	Geometridae	Chloroclystis v-ata (Haworth, 1809)	*		h	*1
Lepidoptera	Geometridae	Cidaria fulvata (Forster, 1771)	*		h	*1
Lepidoptera	Geometridae	Cleora cinctaria (Denis & Schiffermüller, 1775)	3		mh	*1
Lepidoptera	Geometridae	Cleorodes lichenaria (Hufnagel, 1767)	1		es	*1
Lepidoptera	Geometridae	Coenocalpe lapidata (Hübner, 1809)	0	1960	ex	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Geometridae	Coenotephria tophaceata (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Geometridae	Colostygia aptata (Hübner, 1813)	3		mh	*1
Lepidoptera	Geometridae	Colostygia aqueata (Hübner, 1813)	*		s	*1
Lepidoptera	Geometridae	Colostygia austriacaria (Herrich-Schäffer, 1856)	0	1948	ex	*1
Lepidoptera	Geometridae	Colostygia kollariaria (Herrich-Schäffer, 1848)	*		ss	*1
Lepidoptera	Geometridae	Colostygia laetaria (de la Harpe, 1853)	1		es	*1
Lepidoptera	Geometridae	Colostygia multistrigaria (Haworth, 1809)	V		mh	*1
Lepidoptera	Geometridae	Colostygia olivata (Denis & Schiffermüller, 1775)	V		h	*1
Lepidoptera	Geometridae	Colostygia pectinataria (Knoch, 1781)	*		sh	*1
Lepidoptera	Geometridae	Colostygia puengeleri (Stertz, 1902)	R		es	*1
Lepidoptera	Geometridae	Colostygia turbata (Hübner, 1799)	*		s	*1
Lepidoptera	Geometridae	Colotois pennaria (Linnaeus, 1761)	*		h	*1
Lepidoptera	Geometridae	Comibaena bajularia (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Cosmorhoe ocellata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Costaconvexa polygrammata (Borkhausen, 1794)	V		mh	*1
Lepidoptera	Geometridae	Crocallis elinguaria (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Crocallis tusciaria (Borkhausen, 1793)	V		s	*1
Lepidoptera	Geometridae	Cyclophora albipunctata (Hufnagel, 1767)	*		mh	*1
Lepidoptera	Geometridae	Cyclophora annularia (Fabricius, 1775)	*		mh	*1
Lepidoptera	Geometridae	Cyclophora lennigiaria (Fuchs, 1883)	R		es	*1
Lepidoptera	Geometridae	Cyclophora linearia (Hübner, 1799)	*		sh	*1
Lepidoptera	Geometridae	Cyclophora pendularia (Clerck, 1759)	2		s	*1
Lepidoptera	Geometridae	Cyclophora porata (Linnaeus, 1767)	*		mh	*1
Lepidoptera	Geometridae	Cyclophora punctaria (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Cyclophora puppillaria (Hübner, 1799)	nb		nb	*1
Lepidoptera	Geometridae	Cyclophora quercimontaria (Bastelberger, 1897)	3		s	*1
Lepidoptera	Geometridae	Cyclophora ruficiliaria (Herrich-Schäffer, 1855)	3		s	*1
Lepidoptera	Geometridae	Deileptenia ribeata (Clerck, 1759)	*		h	*1
Lepidoptera	Geometridae	Dyscia fagaria (Thunberg, 1784)	1		ss	*1
Lepidoptera	Geometridae	Dysstroma citrata (Linnaeus, 1761)	*		h	*1
Lepidoptera	Geometridae	Dysstroma truncata (Hufnagel, 1767)	*		sh	*1
Lepidoptera	Geometridae	Ecliptopera capitata (Herrich-Schäffer, 1839)	*		mh	*1
Lepidoptera	Geometridae	Ecliptopera silaceata (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Geometridae	Ectropis crepuscularia (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Geometridae	Electrophaes corylata (Thunberg, 1792)	*		h	*1
Lepidoptera	Geometridae	Elophos caelibaria (Heydenreich, 1851)	*		ss	*1
Lepidoptera	Geometridae	Elophos dilucidaria (Denis & Schiffermüller, 1775)	3		mh	*1
Lepidoptera	Geometridae	Elophos serotinaria (Denis & Schiffermüller, 1775)	R		es	*1
Lepidoptera	Geometridae	Elophos vittaria (Thunberg, 1788)	V		s	*1
Lepidoptera	Geometridae	Elophos zelleraria (Freyer, 1836)	R		es	*1
Lepidoptera	Geometridae	Ematurga atomaria (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Ennomos alniaria (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Ennomos autumnaria (Werneburg, 1859)	V		mh	*1
Lepidoptera	Geometridae	Ennomos erosaria (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Ennomos fuscantaria (Haworth, 1809)	*		h	*1
Lepidoptera	Geometridae	Ennomos quercinaria (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Entephria caesiata (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Entephria cyanata (Hübner, 1809)	2		ss	*1
Lepidoptera	Geometridae	Entephria flavata (Osthelder, 1929)	*		s	*1
Lepidoptera	Geometridae	Entephria flavicinctata (Hübner, 1813)	3		ss	*1
Lepidoptera	Geometridae	Entephria infidaria (de la Harpe, 1853)	3		s	*1
Lepidoptera	Geometridae	Epione repandaria (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Epione vespertaria (Linnaeus, 1767)	1		ss	*1
Lepidoptera	Geometridae	Epirranthis diversata (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Geometridae	Epirrhoe alternata (O. F. Müller, 1764)	*		sh	*1
Lepidoptera	Geometridae	Epirrhoe galiata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Epirrhoe hastulata (Hübner, 1790)	1		ss	*1
Lepidoptera	Geometridae	Epirrhoe molluginata (Hübner, 1813)	*		h	*1
Lepidoptera	Geometridae	Epirrhoe pupillata (Thunberg, 1788)	1		ss	*1
Lepidoptera	Geometridae	Epirrhoe rivata (Hübner, 1813)	*		mh	*1
Lepidoptera	Geometridae	Epirrhoe tristata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Epirrita autumnata (Borkhausen, 1794)	*		h	*1
Lepidoptera	Geometridae	Epirrita christyi (Allen, 1906)	*		h	*1
Lepidoptera	Geometridae	Epirrita dilutata (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Geometridae	Erannis defoliaria (Clerck, 1759)	*		sh	*1
Lepidoptera	Geometridae	Euchoeca nebulata (Scopoli, 1763)	*		sh	*1
Lepidoptera	Geometridae	Eulithis mellinata (Fabricius, 1787)	*		mh	*1
Lepidoptera	Geometridae	Eulithis populata (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Eulithis prunata (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Eulithis pyraliata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Eulithis pyropata (Hübner, 1809)	0	1985	ex	*1
Lepidoptera	Geometridae	Eulithis testata (Linnaeus, 1761)	V		mh	*1
Lepidoptera	Geometridae	Euphyia adumbraria (Herrich-Schäffer, 1852)	R		es	*1
Lepidoptera	Geometridae	Euphyia biangulata (Haworth, 1809)	*		mh	*1
Lepidoptera	Geometridae	Euphyia frustata (Treitschke, 1828)	2		s	*1
Lepidoptera	Geometridae	Euphyia scripturata (Hübner, 1799)	*		ss	*1
Lepidoptera	Geometridae	Euphyia unangulata (Haworth, 1809)	*		mh	*1
Lepidoptera	Geometridae	Eupithecia abbreviata Stephens, 1831	*		h	*1
Lepidoptera	Geometridae	Eupithecia abietaria (Goeze, 1781)	*		h	*1
Lepidoptera	Geometridae	Eupithecia absinthiata (Clerck, 1759)	*		sh	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Geometridae	Eupithecia actaeata Walderdorff, 1869	3		s	*1
Lepidoptera	Geometridae	Eupithecia analoga Djakonov, 1926	*		mh	*1
Lepidoptera	Geometridae	Eupithecia assimilata Doubleday, 1856	*		h	*1
Lepidoptera	Geometridae	Eupithecia breviculata (Donzel, 1837)	0	1973	ex	*1
Lepidoptera	Geometridae	Eupithecia cauchiata (Duponchel, 1830)	1		ss	*1
Lepidoptera	Geometridae	Eupithecia centaureata (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Geometridae	Eupithecia conterminata (Lienig & Zeller, 1846)	D		?	*1
Lepidoptera	Geometridae	Eupithecia denotata (Hübner, 1813)	*		mh	*1
Lepidoptera	Geometridae	Eupithecia denticulata (Treitschke, 1828)	1		ss	*1
Lepidoptera	Geometridae	Eupithecia distinctaria Herrich-Schäffer, 1848	3		s	*1
Lepidoptera	Geometridae	Eupithecia dodoneata Guenée, 1857	*		mh	*1
Lepidoptera	Geometridae	Eupithecia egenaria Herrich-Schäffer, 1848	*		mh	*1
Lepidoptera	Geometridae	Eupithecia exiguata (Hübner, 1813)	*		h	*1
Lepidoptera	Geometridae	Eupithecia expallidata Doubleday, 1856	*		mh	*1
Lepidoptera	Geometridae	Eupithecia extraversaria Herrich-Schäffer, 1852	V		mh	*1
Lepidoptera	Geometridae	Eupithecia extremata (Fabricius, 1787)	0	1921	ex	*1
Lepidoptera	Geometridae	Eupithecia gelidata Möschler, 1860	1		es	*1
Lepidoptera	Geometridae	Eupithecia goossensiata Mabille, 1869	G		s	*1
Lepidoptera	Geometridae	Eupithecia haworthiata Doubleday, 1856	*		h	*1
Lepidoptera	Geometridae	Eupithecia icterata (de Villers, 1789)	*		h	*1
Lepidoptera	Geometridae	Eupithecia immundata (Lienig & Zeller, 1846)	2		s	*1
Lepidoptera	Geometridae	Eupithecia impurata (Hübner, 1813)	2		s	*1
Lepidoptera	Geometridae	Eupithecia indigata (Hübner, 1813)	*		h	*1
Lepidoptera	Geometridae	Eupithecia innotata (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Eupithecia insigniata (Hübner, 1790)	3		mh	*1
Lepidoptera	Geometridae	Eupithecia intricata (Zetterstedt, 1839)	*		h	*1
Lepidoptera	Geometridae	Eupithecia inturbata (Hübner, 1817)	*		h	*1
Lepidoptera	Geometridae	Eupithecia irriguata (Hübner, 1813)	1		ss	*1
Lepidoptera	Geometridae	Eupithecia lanceata (Hübner, 1825)	*		h	*1
Lepidoptera	Geometridae	Eupithecia laquaearia Herrich-Schäffer, 1848	1		ss	*1
Lepidoptera	Geometridae	Eupithecia lariciata (Freyer, 1842)	*		h	*1
Lepidoptera	Geometridae	Eupithecia linariata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Eupithecia millefoliata Rössler, 1866	3		s	*1
Lepidoptera	Geometridae	Eupithecia nanata (Hübner, 1813)	*		mh	*1
Lepidoptera	Geometridae	Eupithecia ochridata Pinker, 1968	D		?	*1
Lepidoptera	Geometridae	Eupithecia orphnata W. Petersen, 1909	R		es	*1
Lepidoptera	Geometridae	Eupithecia pauxillaria Boisduval, 1860	0	1993	ex	*1
Lepidoptera	Geometridae	Eupithecia pimpinellata (Hübner, 1813)	V		h	*1
Lepidoptera	Geometridae	Eupithecia plumbeolata (Haworth, 1809)	*		h	*1
Lepidoptera	Geometridae	Eupithecia pulchellata Stephens, 1831	*		mh	*1
Lepidoptera	Geometridae	Eupithecia pusillata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Eupithecia pygmaeata (Hübner, 1799)	V		mh	*1
Lepidoptera	Geometridae	Eupithecia pyreneata Mabille, 1871	3		s	*1
Lepidoptera	Geometridae	Eupithecia satyrata (Hübner, 1813)	*		h	*1
Lepidoptera	Geometridae	Eupithecia selinata Herrich-Schäffer, 1861	*		mh	*1
Lepidoptera	Geometridae	Eupithecia semigraphata Bruand, 1851	3		s	*1
Lepidoptera	Geometridae	Eupithecia silenata Assmann, 1848	*		s	*1
Lepidoptera	Geometridae	Eupithecia simpliciata (Haworth, 1809)	V		mh	*1
Lepidoptera	Geometridae	Eupithecia sinuosaria (Eversmann, 1848)	*		mh	*1
Lepidoptera	Geometridae	Eupithecia subfuscata (Haworth, 1809)	*		sh	*1
Lepidoptera	Geometridae	Eupithecia subumbrata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Eupithecia succenturiata (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Eupithecia tantillaria Boisduval, 1840	*		sh	*1
Lepidoptera	Geometridae	Eupithecia tenuiata (Hübner, 1813)	*		h	*1
Lepidoptera	Geometridae	Eupithecia tripunctaria Herrich-Schäffer, 1852	*		h	*1
Lepidoptera	Geometridae	Eupithecia trisignaria Herrich-Schäffer, 1848	*		mh	*1
Lepidoptera	Geometridae	Eupithecia undata (Freyer, 1840)	R		es	*1
Lepidoptera	Geometridae	Eupithecia valerianata (Hübner, 1813)	*		h	*1
Lepidoptera	Geometridae	Eupithecia venosata (Fabricius, 1787)	V		h	*1
Lepidoptera	Geometridae	Eupithecia veratraria Herrich-Schäffer, 1848	V		s	*1
Lepidoptera	Geometridae	Eupithecia virgaureata Doubleday, 1861	*		h	*1
Lepidoptera	Geometridae	Eupithecia vulgata (Haworth, 1809)	*		h	*1
Lepidoptera	Geometridae	Eustroma reticulata (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Fagivorina arenaria (Hufnagel, 1767)	1		ss	*1
Lepidoptera	Geometridae	Gagitodes sagittata (Fabricius, 1787)	2		ss	*1
Lepidoptera	Geometridae	Geometra papilionaria (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Glacies alpinata (Scopoli, 1763)	D		?	*1
Lepidoptera	Geometridae	Glacies canaliculata (Hochenwarth, 1785)	D		?	*1
Lepidoptera	Geometridae	Glacies coracina (Esper, 1805)	D		?	*1
Lepidoptera	Geometridae	Glacies noricana (F. Wagner, 1898)	D		?	*1
Lepidoptera	Geometridae	Gnophos dumetata (Treitschke, 1827)	1		es	*1
Lepidoptera	Geometridae	Gnophos furvata (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Geometridae	Gnophos obfuscata (Denis & Schiffermüller, 1775)	*		s	*1
Lepidoptera	Geometridae	Gymnoscelis rufifasciata (Haworth, 1809)	*		h	*1
Lepidoptera	Geometridae	Heliomata glarearia (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Geometridae	Hemistola chrysoprasaria (Esper, 1794)	*		mh	*1
Lepidoptera	Geometridae	Hemithea aestivaria (Hübner, 1789)	*		sh	*1
Lepidoptera	Geometridae	Horisme aemulata (Hübner, 1813)	D		ss	*1
Lepidoptera	Geometridae	Horisme aquata (Hübner, 1813)	1		ss	*1
Lepidoptera	Geometridae	Horisme calligraphata (Herrich-Schäffer, 1839)	R		es	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Geometridae	Horisme corticata (Treitschke, 1835)	*		s	*1
Lepidoptera	Geometridae	Horisme radicaria (de la Harpe, 1855)	D		?	*1
Lepidoptera	Geometridae	Horisme tersata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Horisme vitalbata (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Hydrelia flammeolaria (Hufnagel, 1767)	*		sh	*1
Lepidoptera	Geometridae	Hydrelia sylvata (Denis & Schiffermüller, 1775)	V		s	*1
Lepidoptera	Geometridae	Hydria cervinalis (Scopoli, 1763)	*		h	*1
Lepidoptera	Geometridae	Hydriomena furcata (Thunberg, 1784)	*		sh	*1
Lepidoptera	Geometridae	Hydriomena impluviata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Hydriomena ruberata (Freyer, 1831)	3		s	*1
Lepidoptera	Geometridae	Hylaea fasciaria (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Hypomecis punctinalis (Scopoli, 1763)	*		sh	*1
Lepidoptera	Geometridae	Hypomecis roboraria (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Hypoxystis pluviaria (Fabricius, 1787)	1		es	*1
Lepidoptera	Geometridae	Idaea aureolaria (Denis & Schiffermüller, 1775)	1		ss	*1
Lepidoptera	Geometridae	Idaea aversata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Idaea biselata (Hufnagel, 1767)	*		sh	*1
Lepidoptera	Geometridae	Idaea contiguaria (Hübner, 1799)	2		ss	*1
Lepidoptera	Geometridae	Idaea degeneraria (Hübner, 1799)	*		s	*1
Lepidoptera	Geometridae	Idaea deversaria (Herrich-Schäffer, 1847)	*		mh	*1
Lepidoptera	Geometridae	Idaea dilutaria (Hübner, 1799)	V		s	*1
Lepidoptera	Geometridae	Idaea dimidiata (Hufnagel, 1767)	*		sh	*1
Lepidoptera	Geometridae	Idaea emarginata (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Geometridae	Idaea fuscovenosa (Goeze, 1781)	*		h	*1
Lepidoptera	Geometridae	Idaea humiliata (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Idaea inquinata (Scopoli, 1763)	G		h	*1
Lepidoptera	Geometridae	Idaea laevigata (Scopoli, 1763)	2		s	*1
Lepidoptera	Geometridae	Idaea macilentaria (Herrich-Schäffer, 1847)	1		ss	*1
Lepidoptera	Geometridae	Idaea moniliata (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Geometridae	Idaea muricata (Hufnagel, 1767)	*		mh	*1
Lepidoptera	Geometridae	Idaea ochrata (Scopoli, 1763)	*		h	*1
Lepidoptera	Geometridae	Idaea pallidata (Denis & Schiffermüller, 1775)	1		ss	*1
Lepidoptera	Geometridae	Idaea rubraria (Staudinger, 1871)	*		s	*1
Lepidoptera	Geometridae	Idaea rufaria (Hübner, 1799)	3		mh	*1
Lepidoptera	Geometridae	Idaea rusticata (Denis & Schiffermüller, 1775)	*		s	*1
Lepidoptera	Geometridae	Idaea seriata (Schrank, 1802)	*		h	*1
Lepidoptera	Geometridae	Idaea serpentata (Hufnagel, 1767)	V		mh	*1
Lepidoptera	Geometridae	Idaea straminata (Borkhausen, 1794)	*		sh	*1
Lepidoptera	Geometridae	Idaea subsericeata (Haworth, 1809)	*		mh	*1
Lepidoptera	Geometridae	Idaea sylvestraria (Hübner, 1798)	*		mh	*1
Lepidoptera	Geometridae	Idaea trigeminata (Haworth, 1809)	2		ss	*1
Lepidoptera	Geometridae	Isturgia arenacearia (Denis & Schiffermüller, 1775)	nb		nb	*1
Lepidoptera	Geometridae	Isturgia famula (Esper, 1787)	1		ss	*1
Lepidoptera	Geometridae	Isturgia limbaria (Fabricius, 1775)	3		mh	*1
Lepidoptera	Geometridae	Isturgia murinaria (Denis & Schiffermüller, 1775)	1		ss	*1
Lepidoptera	Geometridae	Isturgia roraria (Fabricius, 1777)	2		s	*1
Lepidoptera	Geometridae	Jodis lactearia (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Jodis putata (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Geometridae	Lampropteryx otregiata (Metcalfe, 1917)	2		ss	*1
Lepidoptera	Geometridae	Lampropteryx suffumata (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Geometridae	Larentia clavaria (Haworth, 1809)	3		s	*1
Lepidoptera	Geometridae	Ligdia adustata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Lithostege farinata (Hufnagel, 1767)	2		ss	*1
Lepidoptera	Geometridae	Lithostege griseata (Denis & Schiffermüller, 1775)	3		ss	*1
Lepidoptera	Geometridae	Lobophora halterata (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Lomaspilis marginata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Lomaspilis opis (Butler, 1878)	nb		nb	*1
Lepidoptera	Geometridae	Lomographa bimaculata (Fabricius, 1775)	*		h	*1
Lepidoptera	Geometridae	Lomographa temerata (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Geometridae	Lycia alpina (Sulzer, 1776)	*		s	*1
Lepidoptera	Geometridae	Lycia hirtaria (Clerck, 1759)	*		h	*1
Lepidoptera	Geometridae	Lycia isabellae (Harrison, 1914)	R		es	*1
Lepidoptera	Geometridae	Lycia pomonaria (Hübner, 1790)	2		ss	*1
Lepidoptera	Geometridae	Lycia zonaria (Denis & Schiffermüller, 1775)	1		ss	*1
Lepidoptera	Geometridae	Lythria cruentaria (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Lythria purpuraria (Linnaeus, 1758)	V		s	*1
Lepidoptera	Geometridae	Macaria alternata (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Geometridae	Macaria artesiaria (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Geometridae	Macaria brunneata (Thunberg, 1784)	*		mh	*1
Lepidoptera	Geometridae	Macaria carbonaria (Clerck, 1759)	0	1949	ex	*1
Lepidoptera	Geometridae	Macaria fusca (Thunberg, 1792)	D		?	*1
Lepidoptera	Geometridae	Macaria liturata (Clerck, 1759)	*		sh	*1
Lepidoptera	Geometridae	Macaria notata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Macaria signaria (Hübner, 1809)	*		h	*1
Lepidoptera	Geometridae	Macaria wauaria (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Martania taeniata (Stephens, 1831)	D		?	*1
Lepidoptera	Geometridae	Melanthia alaudaria (Freyer, 1846)	R		es	*1
Lepidoptera	Geometridae	Melanthia procellata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Menophra abruptaria (Thunberg, 1792)	*		s	*1
Lepidoptera	Geometridae	Mesoleuca albicillata (Linnaeus, 1758)	*		h	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Geometridae	Mesotype didymata (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Geometridae	Mesotype parallelolineata (Retzius, 1783)	2		s	*1
Lepidoptera	Geometridae	Mesotype verberata (Scopoli, 1763)	3		s	*1
Lepidoptera	Geometridae	Minoa murinata (Scopoli, 1763)	*		h	*1
Lepidoptera	Geometridae	Narraga fasciolaria (Hufnagel, 1767)	3		s	*1
Lepidoptera	Geometridae	Nebula achromaria (de la Harpe, 1853)	D		?	*1
Lepidoptera	Geometridae	Nebula nebulata (Treitschke, 1828)	*		ss	*1
Lepidoptera	Geometridae	Nebula salicata (Denis & Schiffermüller, 1775)	G		mh	*1
Lepidoptera	Geometridae	Nothocasis sertata (Hübner, 1817)	V		h	*1
Lepidoptera	Geometridae	Nycterosea obstipata (Fabricius, 1794)	nb		nb	*1
Lepidoptera	Geometridae	Odezia atrata (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Odontopera bidentata (Clerck, 1759)	*		h	*1
Lepidoptera	Geometridae	Operophtera brumata (Linnaeus, 1775)	*		sh	*1
Lepidoptera	Geometridae	Operophtera fagata (Scharfenberg, 1805)	*		h	*1
Lepidoptera	Geometridae	Opisthograptis luteolata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Orthonama vittata (Borkhausen, 1794)	V		mh	*1
Lepidoptera	Geometridae	Ourapteryx sambucaria (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Pachycnemia hippocastanaria (Hübner, 1799)	V		mh	*1
Lepidoptera	Geometridae	Paradarisa consonaria (Hübner, 1799)	*		h	*1
Lepidoptera	Geometridae	Parectropis similaria (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Pareulype berberata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Pasiphila chloerata (Mabille, 1870)	*		mh	*1
Lepidoptera	Geometridae	Pasiphila debiliata (Hübner, 1817)	*		mh	*1
Lepidoptera	Geometridae	Pasiphila rectangulata (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Pelurga comitata (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Pennithera firmata (Hübner, 1822)	*		mh	*1
Lepidoptera	Geometridae	Perconia strigillaria (Hübner, 1787)	3		mh	*1
Lepidoptera	Geometridae	Peribatodes ilicaria (Geyer, 1833)	R		es	*1
Lepidoptera	Geometridae	Peribatodes rhomboidaria (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Geometridae	Peribatodes secundaria (Esper, 1794)	*		sh	*1
Lepidoptera	Geometridae	Perizoma affinitata (Stephens, 1831)	3		mh	*1
Lepidoptera	Geometridae	Perizoma albulata (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Geometridae	Perizoma alchemillata (Linnaeus, 1775)	*		sh	*1
Lepidoptera	Geometridae	Perizoma bifaciata (Haworth, 1809)	3		s	*1
Lepidoptera	Geometridae	Perizoma blandiata (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Geometridae	Perizoma flavofasciata (Thunberg, 1792)	*		mh	*1
Lepidoptera	Geometridae	Perizoma hydrata (Treitschke, 1829)	3		s	*1
Lepidoptera	Geometridae	Perizoma incultaria (Herrich-Schäffer, 1848)	*		ss	*1
Lepidoptera	Geometridae	Perizoma lugdunaria (Herrich-Schäffer, 1855)	1		ss	*1
Lepidoptera	Geometridae	Perizoma minorata (Treitschke, 1828)	2		s	*1
Lepidoptera	Geometridae	Perizoma obsoletata (Herrich-Schäffer, 1838)	*		s	*1
Lepidoptera	Geometridae	Petrophora chlorosata (Scopoli, 1763)	*		mh	*1
Lepidoptera	Geometridae	Phibalapteryx virgata (Hufnagel, 1767)	2		s	*1
Lepidoptera	Geometridae	Philereme transversata (Hufnagel, 1767)	*		mh	*1
Lepidoptera	Geometridae	Philereme vetulata (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Plagodis dolabraria (Linnaeus, 1767)	*		h	*1
Lepidoptera	Geometridae	Plagodis pulveraria (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Plemyria rubiginata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Pseudopanthera macularia (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Pseudoterpna pruinata (Hufnagel, 1767)	3		mh	*1
Lepidoptera	Geometridae	Psodos quadrifaria (Sulzer, 1776)	*		s	*1
Lepidoptera	Geometridae	Pterapherapteryx sexalata (Retzius, 1783)	*		mh	*1
Lepidoptera	Geometridae	Pungeleria capreolaria (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Rheumaptera hastata (Linnaeus, 1758)	3		s	*1
Lepidoptera	Geometridae	Rheumaptera subhastata (Nolcken, 1870)	2		s	*1
Lepidoptera	Geometridae	Rheumaptera undulata (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Geometridae	Rhodometra sacraria (Linnaeus, 1767)	nb		nb	*1
Lepidoptera	Geometridae	Rhodostrophia calabra (Petagna, 1786)	2		ss	*1
Lepidoptera	Geometridae	Rhodostrophia vibicaria (Clerck, 1759)	V		h	*1
Lepidoptera	Geometridae	Sciadia tenebraria (Esper, 1806)	D		?	*1
Lepidoptera	Geometridae	Scopula caricaria (Reutti, 1853)	1		ss	*1
Lepidoptera	Geometridae	Scopula corrivalaria (Kretschmar, 1862)	1		ss	*1
Lepidoptera	Geometridae	Scopula decorata (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Geometridae	Scopula emutaria (Hübner, 1809)	R		es	*1
Lepidoptera	Geometridae	Scopula floslactata (Haworth, 1809)	*		h	*1
Lepidoptera	Geometridae	Scopula imitaria (Hübner, 1799)	nb		nb	*1
Lepidoptera	Geometridae	Scopula immorata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Scopula immutata (Linnaeus, 1758)	*		h	*1
Lepidoptera	Geometridae	Scopula incanata (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Geometridae	Scopula marginepunctata (Goeze, 1781)	*		mh	*1
Lepidoptera	Geometridae	Scopula nemoraria (Hübner, 1799)	1		ss	*1
Lepidoptera	Geometridae	Scopula nigropunctata (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Scopula ornata (Scopoli, 1763)	V		mh	*1
Lepidoptera	Geometridae	Scopula rubiginata (Hufnagel, 1767)	V		mh	*1
Lepidoptera	Geometridae	Scopula subpunctaria (Herrich-Schäffer, 1847)	2		s	*1
Lepidoptera	Geometridae	Scopula ternata (Schrank, 1802)	*		mh	*1
Lepidoptera	Geometridae	Scopula tessellaria (Boisduval, 1840)	R		es	*1
Lepidoptera	Geometridae	Scopula umbelaria (Hübner, 1813)	1		ss	*1
Lepidoptera	Geometridae	Scopula virgulata (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Geometridae	Scotopteryx bipunctaria (Denis & Schiffermüller, 1775)	V		mh	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Geometridae	Scotopteryx chenopodiata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Scotopteryx coarctaria (Denis & Schiffermüller, 1775)	1		s	*1
Lepidoptera	Geometridae	Scotopteryx luridata (Hufnagel, 1767)	V		mh	*1
Lepidoptera	Geometridae	Scotopteryx moeniata (Scopoli, 1763)	2		s	*1
Lepidoptera	Geometridae	Scotopteryx mucronata (Scopoli, 1763)	2		s	*1
Lepidoptera	Geometridae	Selenia dentaria (Fabricius, 1775)	*		sh	*1
Lepidoptera	Geometridae	Selenia lunularia (Hübner, 1788)	*		h	*1
Lepidoptera	Geometridae	Selenia tetralunaria (Hufnagel, 1767)	*		h	*1
Lepidoptera	Geometridae	Selidosema brunnearia (de Villers, 1789)	2		ss	*1
Lepidoptera	Geometridae	Siona lineata (Scopoli, 1763)	*		mh	*1
Lepidoptera	Geometridae	Spargania luctuata (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Geometridae	Stegania cararia (Hübner, 1790)	2		s	*1
Lepidoptera	Geometridae	Stegania dilectaria (Hübner, 1790)	0	1902	ex	*1
Lepidoptera	Geometridae	Stegania trimaculata (de Villers, 1789)	*		s	*1
Lepidoptera	Geometridae	Synopsia sociaria (Hübner, 1799)	0	1966	ex	*1
Lepidoptera	Geometridae	Tephronia sepiaria (Hufnagel, 1767)	R		es	*1
Lepidoptera	Geometridae	Thalera fimbrialis (Scopoli, 1763)	V		mh	*1
Lepidoptera	Geometridae	Thera britannica (Turner, 1925)	D		mh	*1
Lepidoptera	Geometridae	Thera cembrae (Kitt, 1912)	R		es	*1
Lepidoptera	Geometridae	Thera cognata (Thunberg, 1792)	3		mh	*1
Lepidoptera	Geometridae	Thera cupressata (Geyer, 1831)	nb		nb	*1
Lepidoptera	Geometridae	Thera juniperata (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Geometridae	Thera obeliscata (Hübner, 1787)	*		sh	*1
Lepidoptera	Geometridae	Thera variata (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Geometridae	Thera vetustata (Denis & Schiffermüller, 1775)	V		s	*1
Lepidoptera	Geometridae	Theria primaria (Haworth, 1809)	*		mh	*1
Lepidoptera	Geometridae	Theria rupicapraria (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Geometridae	Thetidia smaragdaria (Fabricius, 1787)	3		s	*1
Lepidoptera	Geometridae	Timandra comae A. Schmidt, 1931	*		sh	*1
Lepidoptera	Geometridae	Trichopteryx carpinata (Borkhausen, 1794)	*		h	*1
Lepidoptera	Geometridae	Trichopteryx polycommata (Denis & Schiffermüller, 1775)	V		h	*1
Lepidoptera	Geometridae	Triphosa dubitata (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Geometridae	Triphosa sabaudiata (Duponchel, 1830)	2		s	*1
Lepidoptera	Geometridae	Venusia blomeri (Curtis, 1832)	3		s	*1
Lepidoptera	Geometridae	Venusia cambrica Curtis, 1839	3		s	*1
Lepidoptera	Geometridae	Xanthorhoe biriviata (Borkhausen, 1794)	*		h	*1
Lepidoptera	Geometridae	Xanthorhoe decoloraria (Esper, 1806)	D		ss	*1
Lepidoptera	Geometridae	Xanthorhoe designata (Hufnagel, 1767)	*		sh	*1
Lepidoptera	Geometridae	Xanthorhoe ferrugata (Clerck, 1759)	*		sh	*1
Lepidoptera	Geometridae	Xanthorhoe fluctuata (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Geometridae	Xanthorhoe incursata (Hübner, 1813)	V		s	*1
Lepidoptera	Geometridae	Xanthorhoe montanata (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Geometridae	Xanthorhoe quadrifasciata (Clerck, 1759)	*		sh	*1
Lepidoptera	Geometridae	Xanthorhoe spadicearia (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Hepialidae	Gazoryctra ganna (Hübner, 1804)	R		es	*1
Lepidoptera	Hepialidae	Hepialus humuli (Linnaeus, 1758)	*		h	*1
Lepidoptera	Hepialidae	Korscheltellus lupulina (Linnaeus, 1758)	*		h	*1
Lepidoptera	Hepialidae	Pharmacis carna (Denis & Schiffermüller, 1775)	R		es	*1
Lepidoptera	Hepialidae	Pharmacis fusconebulosa (DeGeer, 1778)	V		mh	*1
Lepidoptera	Hepialidae	Phymatopus hecta (Linnaeus, 1758)	*		h	*1
Lepidoptera	Hepialidae	Triodia sylvina (Linnaeus, 1761)	*		sh	*1
Lepidoptera	Hesperiidae	Carcharodus alceae (Esper, 1780)	*		mh	*1
Lepidoptera	Hesperiidae	Carcharodus floccifera (Zeller, 1847)	2		ss	*1
Lepidoptera	Hesperiidae	Carcharodus lavatherae (Esper, 1783)	1		es	*1
Lepidoptera	Hesperiidae	Carterocephalus palaemon (Pallas, 1771)	*		h	*1
Lepidoptera	Hesperiidae	Carterocephalus silvicola (Meigen, 1829)	2		s	*1
Lepidoptera	Hesperiidae	Erynnis tages (Linnaeus, 1758)	*		h	*1
Lepidoptera	Hesperiidae	Hesperia comma (Linnaeus, 1758)	3		h	*1
Lepidoptera	Hesperiidae	Heteropterus morpheus (Pallas, 1771)	*		mh	*1
Lepidoptera	Hesperiidae	Ochlodes sylvanus (Esper, [1778])	*		sh	*1
Lepidoptera	Hesperiidae	Pyrgus accretus (Verity, 1925)	1		es	*1
Lepidoptera	Hesperiidae	Pyrgus alveus (Hübner, 1803)	2		s	*1
Lepidoptera	Hesperiidae	Pyrgus andromedae (Wallengren, 1853)	R		es	*1
Lepidoptera	Hesperiidae	Pyrgus armoricanus (Oberthür, 1910)	3		ss	*1
Lepidoptera	Hesperiidae	Pyrgus cacaliae (Rambur, 1839)	R		es	*1
Lepidoptera	Hesperiidae	Pyrgus carthami (Hübner, 1813)	2		ss	*1
Lepidoptera	Hesperiidae	Pyrgus cirsii (Rambur, 1839)	1		es	*1
Lepidoptera	Hesperiidae	Pyrgus malvae (Linnaeus, 1758)	V		h	*1
Lepidoptera	Hesperiidae	Pyrgus malvoides (Elwes & Edwards, 1897)	R		es	*1
Lepidoptera	Hesperiidae	Pyrgus onopordi (Rambur, 1839)	0	1928	ex	*1
Lepidoptera	Hesperiidae	Pyrgus serratulae (Rambur, 1839)	2		s	*1
Lepidoptera	Hesperiidae	Pyrgus trebevicensis (Warren, 1926)	D		ss	*1
Lepidoptera	Hesperiidae	Pyrgus warrenensis (Verity, 1928)	R		es	*1
Lepidoptera	Hesperiidae	Spialia sertorius (Hoffmannsegg, 1804)	*		mh	*1
Lepidoptera	Hesperiidae	Thymelicus acteon (Rottemburg, 1775)	3		mh	*1
Lepidoptera	Hesperiidae	Thymelicus lineola (Ochsenheimer, 1808)	*		sh	*1
Lepidoptera	Hesperiidae	Thymelicus sylvestris (Poda, 1761)	*		sh	*1
Lepidoptera	Lasiocampidae	Cosmotriche lobulina (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Lasiocampidae	Dendrolimus pini (Linnaeus, 1758)	*		h	*1
Lepidoptera	Lasiocampidae	Eriogaster arbusculae Freyer, 1849	0	1980	ex	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Lasiocampidae	Eriogaster catax (Linnaeus, 1758)	1		es	*1
Lepidoptera	Lasiocampidae	Eriogaster lanestris (Linnaeus, 1758)	3		mh	*1
Lepidoptera	Lasiocampidae	Eriogaster rimicola (Denis & Schiffermüller, 1775)	0	1974	ex	*1
Lepidoptera	Lasiocampidae	Euthrix potatoria (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Lasiocampidae	Gastropacha populifolia (Denis & Schiffermüller, 1775)	1		ss	*1
Lepidoptera	Lasiocampidae	Gastropacha quercifolia (Linnaeus, 1758)	3		mh	*1
Lepidoptera	Lasiocampidae	Lasiocampa quercus (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Lasiocampidae	Lasiocampa trifolii (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Lasiocampidae	Macrothylacia rubi (Linnaeus, 1758)	*		h	*1
Lepidoptera	Lasiocampidae	Malacosoma alpicola Staudinger, 1870	R		es	*1
Lepidoptera	Lasiocampidae	Malacosoma castrensis (Linnaeus, 1758)	3		mh	*1
Lepidoptera	Lasiocampidae	Malacosoma franconica (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Lasiocampidae	Malacosoma neustria (Linnaeus, 1758)	*		h	*1
Lepidoptera	Lasiocampidae	Odonestis pruni (Linnaeus, 1758)	2		s	*1
Lepidoptera	Lasiocampidae	Phyllodesma ilicifolia (Linnaeus, 1758)	1		ss	*1
Lepidoptera	Lasiocampidae	Phyllodesma tremulifolia (Hübner, 1810)	3		s	*1
Lepidoptera	Lasiocampidae	Poecilocampa alpina (Frey & Wullschlegel, 1874)	R		es	*1
Lepidoptera	Lasiocampidae	Poecilocampa populi (Linnaeus, 1758)	*		h	*1
Lepidoptera	Lasiocampidae	Trichiura crataegi (Linnaeus, 1758)	*		h	*1
Lepidoptera	Limacodidae	Apoda limacodes (Hufnagel, 1766)	*		sh	*1
Lepidoptera	Limacodidae	Heterogenea asella (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Lycaenidae	Aricia agestis (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Lycaenidae	Aricia artaxerxes (Fabricius, 1793)	G		s	*1
Lepidoptera	Lycaenidae	Aricia eumedon (Esper, 1780)	3		s	*1
Lepidoptera	Lycaenidae	Cacyreus marshalli Butler, 1898	nb		nb	*1
Lepidoptera	Lycaenidae	Callophrys rubi (Linnaeus, 1758)	V		h	*1
Lepidoptera	Lycaenidae	Celastrina argiolus (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Lycaenidae	Cupido argiades (Pallas, 1771)	V		s	*1
Lepidoptera	Lycaenidae	Cupido minimus (Fuessly, 1775)	*		h	*1
Lepidoptera	Lycaenidae	Cupido osiris (Meigen, 1829)	0	1923	ex	*1
Lepidoptera	Lycaenidae	Glaucopsyche alexis (Poda, 1761)	3		mh	*1
Lepidoptera	Lycaenidae	Lampides boeticus (Linnaeus, 1767)	nb		nb	*1
Lepidoptera	Lycaenidae	Leptotes pirithous (Linnaeus, 1767)	nb		nb	*1
Lepidoptera	Lycaenidae	Lycaena alciphron (Rottemburg, 1775)	2		s	*1
Lepidoptera	Lycaenidae	Lycaena dispar (Haworth, 1803)	3		s	*1
Lepidoptera	Lycaenidae	Lycaena helle (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Lycaenidae	Lycaena hippothoe (Linnaeus, 1761)	3		mh	*1
Lepidoptera	Lycaenidae	Lycaena phlaeas (Linnaeus, 1761)	*		sh	*1
Lepidoptera	Lycaenidae	Lycaena tityrus (Poda, 1761)	*		h	*1
Lepidoptera	Lycaenidae	Lycaena virgaureae (Linnaeus, 1758)	V		h	*1
Lepidoptera	Lycaenidae	Maculinea alcon (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Lycaenidae	Maculinea arion (Linnaeus, 1758)	3		mh	*1
Lepidoptera	Lycaenidae	Maculinea nausithous (Bergsträsser, 1779)	V		mh	*1
Lepidoptera	Lycaenidae	Maculinea rebeli (Hirschke, 1904)	3		s	*1
Lepidoptera	Lycaenidae	Maculinea teleius (Bergsträsser, 1779)	2		s	*1
Lepidoptera	Lycaenidae	Neozephyrus quercus (Linnaeus, 1758)	*		h	*1
Lepidoptera	Lycaenidae	Plebeius argus (Linnaeus, 1758)	*		h	*1
Lepidoptera	Lycaenidae	Plebeius argyrognomon (Bergsträsser, 1779)	*		mh	*1
Lepidoptera	Lycaenidae	Plebeius glandon (Prunner, 1798)	R		es	*1
Lepidoptera	Lycaenidae	Plebeius idas (Linnaeus, 1761)	3		mh	*1
Lepidoptera	Lycaenidae	Plebeius optilete (Knoch, 1781)	2		s	*1
Lepidoptera	Lycaenidae	Plebeius orbitulus (Prunner, 1798)	R		es	*1
Lepidoptera	Lycaenidae	Polyommatus amandus (Schneider, 1792)	*		h	*1
Lepidoptera	Lycaenidae	Polyommatus bellargus (Rottemburg, 1775)	3		mh	*1
Lepidoptera	Lycaenidae	Polyommatus coridon (Poda, 1761)	*		h	*1
Lepidoptera	Lycaenidae	Polyommatus damon (Denis & Schiffermüller, 1775)	1		ss	*1
Lepidoptera	Lycaenidae	Polyommatus daphnis (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Lycaenidae	Polyommatus dorylas (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Lycaenidae	Polyommatus eros (Ochsenheimer, 1808)	R		es	*1
Lepidoptera	Lycaenidae	Polyommatus icarus (Rottemburg, 1775)	*		sh	*1
Lepidoptera	Lycaenidae	Polyommatus semiargus (Rottemburg, 1775)	*		h	*1
Lepidoptera	Lycaenidae	Polyommatus thersites (Cantener, 1835)	3		s	*1
Lepidoptera	Lycaenidae	Pseudophilotes baton (Bergsträsser, 1779)	2		s	*1
Lepidoptera	Lycaenidae	Pseudophilotes vicrama (Moore, 1865)	1		es	*1
Lepidoptera	Lycaenidae	Satyrium acaciae (Fabricius, 1787)	V		s	*1
Lepidoptera	Lycaenidae	Satyrium ilicis (Esper, 1779)	2		ss	*1
Lepidoptera	Lycaenidae	Satyrium pruni (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Lycaenidae	Satyrium spini (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Lycaenidae	Satyrium w-album (Knoch, 1782)	*		mh	*1
Lepidoptera	Lycaenidae	Scolitantides orion (Pallas, 1771)	2		ss	*1
Lepidoptera	Lycaenidae	Thecla betulae (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Abrostola asclepiadis (Denis & Schiffermüller, 1775)	*		s	*1
Lepidoptera	Noctuidae	Abrostola tripartita (Hufnagel, 1766)	*		h	*1
Lepidoptera	Noctuidae	Abrostola triplasia (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Acontia lucida (Hufnagel, 1766)	1		es	*1
Lepidoptera	Noctuidae	Acosmetia caliginosa (Hübner, 1813)	1		es	*1
Lepidoptera	Noctuidae	Acronicta aceris (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Acronicta alni (Linnaeus, 1767)	*		h	*1
Lepidoptera	Noctuidae	Acronicta auricoma (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Noctuidae	Acronicta cuspis (Hübner, 1813)	3		s	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Noctuidae	Acronicta euphorbiae (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Noctuidae	Acronicta leporina (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Acronicta megacephala (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Noctuidae	Acronicta menyanthidis (Esper, 1789)	2		ss	*1
Lepidoptera	Noctuidae	Acronicta psi (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Acronicta rumicis (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Acronicta strigosa (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Noctuidae	Acronicta tridens (Denis & Schiffermüller, 1775)	D		mh	*1
Lepidoptera	Noctuidae	Actebia fennica (Tauscher, 1837)	D		?	*1
Lepidoptera	Noctuidae	Actebia praecox (Linnaeus, 1758)	1		ss	*1
Lepidoptera	Noctuidae	Actinotia polyodon (Clerck, 1759)	*		mh	*1
Lepidoptera	Noctuidae	Actinotia radiosa (Esper, 1804)	1		es	*1
Lepidoptera	Noctuidae	Aedia funesta (Esper, 1786)	*		ss	*1
Lepidoptera	Noctuidae	Agrochola circellaris (Hufnagel, 1766)	*		sh	*1
Lepidoptera	Noctuidae	Agrochola helvola (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Agrochola humilis (Denis & Schiffermüller, 1775)	D		?	*1
Lepidoptera	Noctuidae	Agrochola laevis (Hübner, 1803)	2		ss	*1
Lepidoptera	Noctuidae	Agrochola litura (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Noctuidae	Agrochola lota (Clerck, 1759)	*		h	*1
Lepidoptera	Noctuidae	Agrochola lychnidis (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Agrochola macilenta (Hübner, 1809)	*		h	*1
Lepidoptera	Noctuidae	Agrochola nitida (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Noctuidae	Agrotis bigramma (Esper, 1790)	V		s	*1
Lepidoptera	Noctuidae	Agrotis cinerea (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Noctuidae	Agrotis clavis (Hufnagel, 1766)	*		h	*1
Lepidoptera	Noctuidae	Agrotis exclamationis (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Agrotis ipsilon (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Agrotis puta (Hübner, 1803)	*		s	*1
Lepidoptera	Noctuidae	Agrotis ripae (Hübner, 1823)	2		ss	*1
Lepidoptera	Noctuidae	Agrotis segetum (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Agrotis simplonia (Geyer, 1832)	R		es	*1
Lepidoptera	Noctuidae	Agrotis vestigialis (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Allophyes oxyacanthae (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Ammoconia caecimacula (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Ammoconia senex (Geyer, 1828)	1		es	*1
Lepidoptera	Noctuidae	Amphipoea crinanensis (Burrows, 1908)	R		es	*1
Lepidoptera	Noctuidae	Amphipoea fucosa (Freyer, 1830)	*		sh	*1
Lepidoptera	Noctuidae	Amphipoea lucens (Freyer, 1845)	3		s	*1
Lepidoptera	Noctuidae	Amphipoea oculea (Linnaeus, 1761)	*		mh	*1
Lepidoptera	Noctuidae	Amphipyra berbera Rungs, 1949	*		mh	*1
Lepidoptera	Noctuidae	Amphipyra livida (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Noctuidae	Amphipyra perflua (Fabricius, 1787)	3		ss	*1
Lepidoptera	Noctuidae	Amphipyra pyramidea (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Amphipyra tragopoginis (Clerck, 1759)	*		sh	*1
Lepidoptera	Noctuidae	Anaplectoides prasina (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Anarta myrtilli (Linnaeus, 1761)	V		mh	*1
Lepidoptera	Noctuidae	Antitype chi (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Noctuidae	Apamea anceps (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Apamea aquila (Donzel, 1837)	2		ss	*1
Lepidoptera	Noctuidae	Apamea crenata (Hufnagel, 1766)	*		h	*1
Lepidoptera	Noctuidae	Apamea epomidion (Haworth, 1809)	*		mh	*1
Lepidoptera	Noctuidae	Apamea furva (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Noctuidae	Apamea illyria Freyer, 1846	*		s	*1
Lepidoptera	Noctuidae	Apamea lateritia (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Apamea lithoxylaea (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Apamea maillardi (Geyer, 1834)	*		ss	*1
Lepidoptera	Noctuidae	Apamea monoglypha (Hufnagel, 1766)	*		sh	*1
Lepidoptera	Noctuidae	Apamea oblonga (Haworth, 1809)	3		s	*1
Lepidoptera	Noctuidae	Apamea ophiogramma (Esper, 1794)	*		mh	*1
Lepidoptera	Noctuidae	Apamea platinea (Treitschke, 1825)	2		ss	*1
Lepidoptera	Noctuidae	Apamea remissa (Hübner, 1809)	*		h	*1
Lepidoptera	Noctuidae	Apamea rubrirena (Treitschke, 1825)	V		s	*1
Lepidoptera	Noctuidae	Apamea scolopacina (Esper, 1788)	*		h	*1
Lepidoptera	Noctuidae	Apamea sordens (Hufnagel, 1766)	*		h	*1
Lepidoptera	Noctuidae	Apamea sublustris (Esper, 1788)	*		mh	*1
Lepidoptera	Noctuidae	Apamea unanimis (Hübner, 1813)	*		mh	*1
Lepidoptera	Noctuidae	Apamea zeta (Treitschke, 1825)	*		ss	*1
Lepidoptera	Noctuidae	Aporophyla lueneburgensis (Freyer, 1848)	1		es	*1
Lepidoptera	Noctuidae	Aporophyla lutulenta (Denis & Schiffermüller, 1775)	*		s	*1
Lepidoptera	Noctuidae	Aporophyla nigra (Haworth, 1809)	2		ss	*1
Lepidoptera	Noctuidae	Archanara algae (Esper, 1789)	2		ss	*1
Lepidoptera	Noctuidae	Archanara dissoluta (Treitschke, 1825)	*		mh	*1
Lepidoptera	Noctuidae	Archanara geminipuncta (Haworth, 1809)	*		h	*1
Lepidoptera	Noctuidae	Archanara neurica (Hübner, 1808)	*		ss	*1
Lepidoptera	Noctuidae	Archanara sparganii (Esper, 1790)	*		mh	*1
Lepidoptera	Noctuidae	Arenostola phragmitidis (Hübner, 1803)	*		h	*1
Lepidoptera	Noctuidae	Asteroscopus sphinx (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Atethmia ambusta (Denis & Schiffermüller, 1775)	3		ss	*1
Lepidoptera	Noctuidae	Atethmia centrago (Haworth, 1809)	*		mh	*1
Lepidoptera	Noctuidae	Athetis gluteosa (Treitschke, 1835)	2		ss	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Noctuidae	Athetis pallustris (Hübner, 1808)	2		ss	*1
Lepidoptera	Noctuidae	Atypha pulmonaris (Esper, 1790)	*		s	*1
Lepidoptera	Noctuidae	Auchmis detersa (Esper, 1787)	3		ss	*1
Lepidoptera	Noctuidae	Autographa aemula (Denis & Schiffermüller, 1775)	R		es	*1
Lepidoptera	Noctuidae	Autographa bractea (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Autographa buraetica (Staudinger, 1892)	D		?	*1
Lepidoptera	Noctuidae	Autographa gamma (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Autographa jota (Linnaeus, 1758)	D		s	*1
Lepidoptera	Noctuidae	Autographa pulchrina (Haworth, 1809)	*		h	*1
Lepidoptera	Noctuidae	Axylia putris (Linnaeus, 1761)	*		sh	*1
Lepidoptera	Noctuidae	Blepharita satura (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Brachionycha nubeculosa (Esper, 1785)	G		s	*1
Lepidoptera	Noctuidae	Brachylomia viminalis (Fabricius, 1776)	*		h	*1
Lepidoptera	Noctuidae	Calamia tridens (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Callierges ramosa (Esper, 1786)	*		s	*1
Lepidoptera	Noctuidae	Callistege mi (Clerck, 1759)	*		h	*1
Lepidoptera	Noctuidae	Callopistria juventina (Stoll, 1782)	*		s	*1
Lepidoptera	Noctuidae	Calophasia lunula (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Caradrina morpheus (Hufnagel, 1766)	*		sh	*1
Lepidoptera	Noctuidae	Celaena haworthii (Curtis, 1829)	2		s	*1
Lepidoptera	Noctuidae	Celaena leucostigma (Hübner, 1808)	*		mh	*1
Lepidoptera	Noctuidae	Cerapteryx graminis (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Cerastis leucographa (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Cerastis rubricosa (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Charanyca trigrammica (Hufnagel, 1766)	*		h	*1
Lepidoptera	Noctuidae	Chersotis cuprea (Denis & Schiffermüller, 1775)	V		s	*1
Lepidoptera	Noctuidae	Chersotis margaritacea (De Villers, 1789)	2		ss	*1
Lepidoptera	Noctuidae	Chersotis multangula (Hübner, 1803)	V		s	*1
Lepidoptera	Noctuidae	Chersotis ocellina (Denis & Schiffermüller, 1775)	*		ss	*1
Lepidoptera	Noctuidae	Chilodes maritima (Tauscher, 1806)	*		mh	*1
Lepidoptera	Noctuidae	Chloantha hyperici (Denis & Schiffermüller, 1775)	*		ss	*1
Lepidoptera	Noctuidae	Chortodes brevilinea (Fenn, 1864)	R		es	*1
Lepidoptera	Noctuidae	Chortodes elymi (Treitschke, 1825)	*		ss	*1
Lepidoptera	Noctuidae	Chortodes extrema (Hübner, 1809)	*		mh	*1
Lepidoptera	Noctuidae	Chortodes fluxa (Hübner, 1809)	*		h	*1
Lepidoptera	Noctuidae	Chortodes morrisii (Dale, 1837)	R		es	*1
Lepidoptera	Noctuidae	Chortodes pygmina (Haworth, 1809)	*		mh	*1
Lepidoptera	Noctuidae	Cleoceris scoriacea (Esper, 1789)	0	1961	ex	*1
Lepidoptera	Noctuidae	Coenobia rufa (Haworth, 1809)	*		mh	*1
Lepidoptera	Noctuidae	Coenophila subrosea (Stephens, 1829)	2		ss	*1
Lepidoptera	Noctuidae	Colocasia coryli (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Conisana luteago luteago (Denis & Schiffermüller, 1775)	R		es	*1
Lepidoptera	Noctuidae	Conisana luteago olbiena (Geyer, [1834])	2		ss	*1
Lepidoptera	Noctuidae	Conisania leineri (Freyer, 1836)	R		es	*1
Lepidoptera	Noctuidae	Conistra erythrocephala (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Conistra ligula (Esper, 1791)	*		s	*1
Lepidoptera	Noctuidae	Conistra rubiginea (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Conistra rubiginosa (Scopoli, 1763)	*		mh	*1
Lepidoptera	Noctuidae	Conistra vaccinii (Linnaeus, 1761)	*		sh	*1
Lepidoptera	Noctuidae	Conistra veronicae (Hübner, 1813)	0	1969	ex	*1
Lepidoptera	Noctuidae	Coranarta cordigera (Thunberg, 1788)	1		ss	*1
Lepidoptera	Noctuidae	Cosmia affinis (Linnaeus, 1767)	*		mh	*1
Lepidoptera	Noctuidae	Cosmia diffinis (Linnaeus, 1767)	2		ss	*1
Lepidoptera	Noctuidae	Cosmia pyralina (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Cosmia trapezina (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Craniophora ligustri (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Cryphia algae (Fabricius, 1775)	*		h	*1
Lepidoptera	Noctuidae	Cryphia domestica (Hufnagel, 1766)	V		s	*1
Lepidoptera	Noctuidae	Cryphia ereptricula (Treitschke, 1825)	2		es	*1
Lepidoptera	Noctuidae	Cryphia fraudatricula (Hübner, 1803)	*		s	*1
Lepidoptera	Noctuidae	Cryphia muralis (Forster, 1771)	3		s	*1
Lepidoptera	Noctuidae	Cryphia raptricula (Denis & Schiffermüller, 1775)	V		s	*1
Lepidoptera	Noctuidae	Cryphia ravula (Hübner, 1813)	3		ss	*1
Lepidoptera	Noctuidae	Cucullia absinthii (Linnaeus, 1761)	*		mh	*1
Lepidoptera	Noctuidae	Cucullia argentea (Hufnagel, 1766)	2		s	*1
Lepidoptera	Noctuidae	Cucullia artemisiae (Hufnagel, 1766)	*		h	*1
Lepidoptera	Noctuidae	Cucullia asteris (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Noctuidae	Cucullia campanulae Freyer, 1831	2		ss	*1
Lepidoptera	Noctuidae	Cucullia chamomillae (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Cucullia dracunculi (Hübner, 1813)	2		es	*1
Lepidoptera	Noctuidae	Cucullia fraudatrix Eversmann, 1837	*		mh	*1
Lepidoptera	Noctuidae	Cucullia gnaphalii (Hübner, 1813)	1		es	*1
Lepidoptera	Noctuidae	Cucullia lactucae (Denis & Schiffermüller, 1775)	V		s	*1
Lepidoptera	Noctuidae	Cucullia lucifuga (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Noctuidae	Cucullia tanaceti (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Noctuidae	Cucullia umbratica (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Cucullia xeranthemi Boisduval, 1840	1		es	*1
Lepidoptera	Noctuidae	Dasypolia templi (Thunberg, 1792)	*		ss	*1
Lepidoptera	Noctuidae	Deltote bankiana (Fabricius, 1775)	*		h	*1
Lepidoptera	Noctuidae	Deltote deceptoria (Scopoli, 1763)	*		sh	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Noctuidae	Deltote uncula (Clerck, 1759)	*		mh	*1
Lepidoptera	Noctuidae	Diachrysia chrysitis (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Diachrysia chryson (Esper, 1789)	G		s	*1
Lepidoptera	Noctuidae	Diachrysia tutti (Kostrowicki, 1961)	*		h	*1
Lepidoptera	Noctuidae	Diarsia brunnea (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Diarsia dahlii (Hübner, 1813)	1		ss	*1
Lepidoptera	Noctuidae	Diarsia florida (F. Schmidt, 1859)	3		ss	*1
Lepidoptera	Noctuidae	Diarsia mendica (Fabricius, 1775)	*		h	*1
Lepidoptera	Noctuidae	Diarsia rubi (Vieweg, 1790)	*		h	*1
Lepidoptera	Noctuidae	Dichagyris candelisequa (Denis & Schiffermüller, 1775)	3		ss	*1
Lepidoptera	Noctuidae	Dichonia aprilina (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Noctuidae	Dichonia convergens (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Noctuidae	Dicycla oo (Linnaeus, 1758)	3		ss	*1
Lepidoptera	Noctuidae	Diloba caeruleocephala (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Dryobotodes eremita (Fabricius, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Dypterygia scabriuscula (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Noctuidae	Egira conspicillaris (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Noctuidae	Elaphria venustula (Hübner, 1790)	*		h	*1
Lepidoptera	Noctuidae	Emmelia trabealis (Scopoli, 1763)	*		mh	*1
Lepidoptera	Noctuidae	Enargia paleacea (Esper, 1788)	*		h	*1
Lepidoptera	Noctuidae	Epilecta linogrisea (Denis & Schiffermüller, 1775)	V		s	*1
Lepidoptera	Noctuidae	Epipsilia grisescens (Fabricius, 1794)	2		es	*1
Lepidoptera	Noctuidae	Epipsilia latens (Hübner, 1809)	2		ss	*1
Lepidoptera	Noctuidae	Episema glaucina (Esper, 1789)	2		ss	*1
Lepidoptera	Noctuidae	Eremobia ochroleuca (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Noctuidae	Eremobina pabulatricula (Brahm, 1791)	1		es	*1
Lepidoptera	Noctuidae	Eremodrina gilva (Donzel, 1837)	*		ss	*1
Lepidoptera	Noctuidae	Eriopygodes imbecilla (Fabricius, 1794)	3		ss	*1
Lepidoptera	Noctuidae	Eublemma ostrina (Hübner, 1808)	D		?	*1
Lepidoptera	Noctuidae	Eucarta amethystina (Hübner, 1803)	2		ss	*1
Lepidoptera	Noctuidae	Eucarta virgo (Treitschke, 1835)	*		s	*1
Lepidoptera	Noctuidae	Euchalcia consona (Fabricius, 1787)	2		es	*1
Lepidoptera	Noctuidae	Euchalcia modestoides Poole, 1989	3		ss	*1
Lepidoptera	Noctuidae	Euchalcia variabilis (Piller & Mitterpacher, 1783)	V		s	*1
Lepidoptera	Noctuidae	Eugnorisma depuncta (Linnaeus, 1761)	*		s	*1
Lepidoptera	Noctuidae	Eugraphe sigma (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Noctuidae	Euplexia lucipara (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Eupsilia transversa (Hufnagel, 1766)	*		sh	*1
Lepidoptera	Noctuidae	Eurois occulta (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Noctuidae	Euxoa aquilina (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Euxoa birivia (Denis & Schiffermüller, 1775)	R		es	*1
Lepidoptera	Noctuidae	Euxoa cursoria (Hufnagel, 1766)	2		ss	*1
Lepidoptera	Noctuidae	Euxoa decora (Denis & Schiffermüller, 1775)	3		ss	*1
Lepidoptera	Noctuidae	Euxoa eruta (Hübner, 1827)	D		?	*1
Lepidoptera	Noctuidae	Euxoa hastifera (Donzel, 1847)	nb		nb	*1
Lepidoptera	Noctuidae	Euxoa lidia (Stoll, 1782)	0	1971	ex	*1
Lepidoptera	Noctuidae	Euxoa nigricans (Linnaeus, 1761)	3		s	*1
Lepidoptera	Noctuidae	Euxoa nigrofusca (Esper, 1788)	3		mh	*1
Lepidoptera	Noctuidae	Euxoa obelisca (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Noctuidae	Euxoa recussa (Hübner, 1817)	3		ss	*1
Lepidoptera	Noctuidae	Euxoa tritici (Linnaeus, 1761)	2		ss	*1
Lepidoptera	Noctuidae	Euxoa vitta (Esper, 1789)	R		es	*1
Lepidoptera	Noctuidae	Gortyna borelii (Pierret, 1837)	1		es	*1
Lepidoptera	Noctuidae	Gortyna flavago (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Graphiphora augur (Fabricius, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Hada plebeja (Linnaeus, 1761)	*		h	*1
Lepidoptera	Noctuidae	Hadena albimacula (Borkhausen, 1792)	2		ss	*1
Lepidoptera	Noctuidae	Hadena bicruris (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Hadena caesia (Denis & Schiffermüller, 1775)	*		ss	*1
Lepidoptera	Noctuidae	Hadena capsincola (Denis & Schiffermüller, 1775)	D		?	*1
Lepidoptera	Noctuidae	Hadena compta (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Noctuidae	Hadena confusa (Hufnagel, 1766)	3		s	*1
Lepidoptera	Noctuidae	Hadena filograna (Esper, 1788)	2		ss	*1
Lepidoptera	Noctuidae	Hadena irregularis (Hufnagel, 1766)	1		es	*1
Lepidoptera	Noctuidae	Hadena magnolii (Boisduval, 1829)	2		es	*1
Lepidoptera	Noctuidae	Hadena perplexa (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Hadena rivularis (Fabricius, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Hadena tephroleuca (Boisduval, 1833)	R		es	*1
Lepidoptera	Noctuidae	Hadula melanopa (Thunberg, 1791)	R		es	*1
Lepidoptera	Noctuidae	Hadula odontites (Boisduval, 1829)	V		s	*1
Lepidoptera	Noctuidae	Hadula trifolii (Hufnagel, 1766)	*		h	*1
Lepidoptera	Noctuidae	Hecatera bicolorata (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Hecatera dysodea (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Helicoverpa armigera (Hübner, 1808)	nb		nb	*1
Lepidoptera	Noctuidae	Heliophobus kitti (Schawerda, 1914)	1		es	*1
Lepidoptera	Noctuidae	Heliophobus reticulata (Goeze, 1781)	*		h	*1
Lepidoptera	Noctuidae	Heliothis maritima bulgarica (Draudt, 1938)	*		s	*1
Lepidoptera	Noctuidae	Heliothis maritima warneckei (Boursin, 1964)	2		es	*1
Lepidoptera	Noctuidae	Heliothis ononis (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Noctuidae	Heliothis peltigera (Denis & Schiffermüller, 1775)	nb		nb	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Noctuidae	Heliothis viriplaca (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Hoplodrina ambigua (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Noctuidae	Hoplodrina blanda (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Hoplodrina octogenaria (Goeze, 1781)	*		sh	*1
Lepidoptera	Noctuidae	Hoplodrina respersa (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Noctuidae	Hoplodrina superstes (Ochsenheimer, 1816)	V		s	*1
Lepidoptera	Noctuidae	Hydraecia micacea (Esper, 1789)	*		mh	*1
Lepidoptera	Noctuidae	Hydraecia petasitis Doubleday, 1847	3		s	*1
Lepidoptera	Noctuidae	Hydraecia ultima Holst, 1965	R		es	*1
Lepidoptera	Noctuidae	Hyppa rectilinea (Esper, 1788)	3		s	*1
Lepidoptera	Noctuidae	Ipimorpha contusa (Freyer, 1849)	0	1976	ex	*1
Lepidoptera	Noctuidae	Ipimorpha retusa (Linnaeus, 1761)	*		mh	*1
Lepidoptera	Noctuidae	Ipimorpha subtusa (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Jodia croceago (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Noctuidae	Lacanobia aliena (Hübner, 1808)	3		s	*1
Lepidoptera	Noctuidae	Lacanobia contigua (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Lacanobia oleracea (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Lacanobia splendens (Hübner, 1808)	3		s	*1
Lepidoptera	Noctuidae	Lacanobia suasa (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Lacanobia thalassina (Hufnagel, 1766)	*		h	*1
Lepidoptera	Noctuidae	Lacanobia w-latinum (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Lamprosticta culta (Denis & Schiffermüller, 1775)	0	1987	ex	*1
Lepidoptera	Noctuidae	Lamprotes c-aureum (Knoch, 1781)	2		s	*1
Lepidoptera	Noctuidae	Lasionycta proxima (Hübner, 1809)	3		ss	*1
Lepidoptera	Noctuidae	Lithomoia solidaginis (Hübner, 1803)	*		mh	*1
Lepidoptera	Noctuidae	Lithophane consocia (Borkhausen, 1792)	2		es	*1
Lepidoptera	Noctuidae	Lithophane furcifera (Hufnagel, 1766)	3		s	*1
Lepidoptera	Noctuidae	Lithophane lamda (Fabricius, 1787)	1		ss	*1
Lepidoptera	Noctuidae	Lithophane ornitopus (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Lithophane semibrunnea (Haworth, 1809)	3		ss	*1
Lepidoptera	Noctuidae	Lithophane socia (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Luperina dumerilii (Duponchel, 1826)	2		es	*1
Lepidoptera	Noctuidae	Luperina nickerlii (Freyer, 1845)	*		s	*1
Lepidoptera	Noctuidae	Luperina pozzii (Curo, 1883)	0	1964	ex	*1
Lepidoptera	Noctuidae	Luperina testacea (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Luperina zollikoferi (Freyer, 1836)	nb		nb	*1
Lepidoptera	Noctuidae	Lycophotia molothina (Esper, 1789)	3		ss	*1
Lepidoptera	Noctuidae	Lycophotia porphyrea (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Macdunnoughia confusa (Stephens, 1850)	*		h	*1
Lepidoptera	Noctuidae	Mamestra brassicae (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Meganephria bimaculosa (Linnaeus, 1767)	1		es	*1
Lepidoptera	Noctuidae	Melanchra persicariae (Linnaeus, 1761)	*		h	*1
Lepidoptera	Noctuidae	Melanchra pisi (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Mesapamea didyma (Esper, 1788)	D		h	*1
Lepidoptera	Noctuidae	Mesapamea remmi Rezbanyai-Reser, 1985	D		?	*1
Lepidoptera	Noctuidae	Mesapamea secalis (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Mesogona acetosellae (Denis & Schiffermüller, 1775)	1		ss	*1
Lepidoptera	Noctuidae	Mesogona oxalina (Hübner, 1803)	3		s	*1
Lepidoptera	Noctuidae	Mesoligia furuncula (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Noctuidae	Mesoligia literosa (Haworth, 1809)	*		mh	*1
Lepidoptera	Noctuidae	Mniotype adusta (Esper, 1790)	3		mh	*1
Lepidoptera	Noctuidae	Moma alpium (Osbeck, 1778)	*		h	*1
Lepidoptera	Noctuidae	Mormo maura (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Noctuidae	Mythimna albipuncta (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Mythimna andereggii (Boisduval, 1840)	*		ss	*1
Lepidoptera	Noctuidae	Mythimna comma (Linnaeus, 1761)	*		mh	*1
Lepidoptera	Noctuidae	Mythimna conigera (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Mythimna favicolor (Barrett, 1896)	2		es	*1
Lepidoptera	Noctuidae	Mythimna ferrago (Fabricius, 1787)	*		h	*1
Lepidoptera	Noctuidae	Mythimna flammea (Curtis, 1828)	*		mh	*1
Lepidoptera	Noctuidae	Mythimna impura (Hübner, 1808)	*		sh	*1
Lepidoptera	Noctuidae	Mythimna l-album (Linnaeus, 1767)	*		mh	*1
Lepidoptera	Noctuidae	Mythimna litoralis (Curtis, 1827)	R		es	*1
Lepidoptera	Noctuidae	Mythimna obsoleta (Hübner, 1803)	*		h	*1
Lepidoptera	Noctuidae	Mythimna pallens (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Mythimna pudorina (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Mythimna scirpi (Duponchel, 1836)	*		s	*1
Lepidoptera	Noctuidae	Mythimna sicula (Treitschke, 1835)	3		ss	*1
Lepidoptera	Noctuidae	Mythimna straminea (Treitschke, 1825)	*		mh	*1
Lepidoptera	Noctuidae	Mythimna turca (Linnaeus, 1761)	*		mh	*1
Lepidoptera	Noctuidae	Mythimna unipuncta (Haworth, 1809)	nb		nb	*1
Lepidoptera	Noctuidae	Mythimna vitellina (Hübner, 1808)	nb		nb	*1
Lepidoptera	Noctuidae	Naenia typica (Linnaeus, 1758)	V		s	*1
Lepidoptera	Noctuidae	Noctua comes Hübner, 1813	*		sh	*1
Lepidoptera	Noctuidae	Noctua fimbriata (Schreber, 1759)	*		sh	*1
Lepidoptera	Noctuidae	Noctua interjecta Hübner, 1803	*		mh	*1
Lepidoptera	Noctuidae	Noctua interposita (Hübner, 1790)	*		ss	*1
Lepidoptera	Noctuidae	Noctua janthe (Borkhausen, 1792)	*		sh	*1
Lepidoptera	Noctuidae	Noctua janthina (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Noctuidae	Noctua orbona (Hufnagel, 1766)	*		mh	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Noctuidae	Noctua pronuba Linnaeus, 1758	*		sh	*1
Lepidoptera	Noctuidae	Nonagria typhae (Thunberg, 1784)	*		h	*1
Lepidoptera	Noctuidae	Ochropleura flammatra (Denis & Schiffermüller, 1775)	nb		nb	*1
Lepidoptera	Noctuidae	Ochropleura musiva (Hübner, 1803)	0	1950	ex	*1
Lepidoptera	Noctuidae	Ochropleura plecta (Linnaeus, 1761)	*		sh	*1
Lepidoptera	Noctuidae	Oligia dubia (Heydemann, 1942)	R		es	*1
Lepidoptera	Noctuidae	Oligia fasciuncula fasciuncula (Haworth, 1809)	*		mh	*1
Lepidoptera	Noctuidae	Oligia fasciuncula marmorata Heydemann, 1942	*		ss	*1
Lepidoptera	Noctuidae	Oligia latruncula (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Noctuidae	Oligia strigilis (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Oligia versicolor (Borkhausen, 1792)	*		mh	*1
Lepidoptera	Noctuidae	Omphaloscelis lunosa (Haworth, 1809)	*		s	*1
Lepidoptera	Noctuidae	Opigena polygona (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Orbona fragariae (Vieweg, 1790)	0	1972	ex	*1
Lepidoptera	Noctuidae	Oria musculosa (Hübner, 1808)	2		ss	*1
Lepidoptera	Noctuidae	Orthosia cerasi (Fabricius, 1775)	*		sh	*1
Lepidoptera	Noctuidae	Orthosia cruda (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Noctuidae	Orthosia gothica (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Orthosia gracilis (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Orthosia incerta (Hufnagel, 1766)	*		sh	*1
Lepidoptera	Noctuidae	Orthosia miniosa (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Noctuidae	Orthosia munda (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Noctuidae	Orthosia opima (Hübner, 1809)	3		s	*1
Lepidoptera	Noctuidae	Orthosia populeti (Fabricius, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Pachetra sagittigera (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Panchrysia deaurata (Esper, 1787)	0	1949	ex	*1
Lepidoptera	Noctuidae	Panchrysia v-argenteum (Esper, 1798)	R		es	*1
Lepidoptera	Noctuidae	Panemeria tenebrata (Scopoli, 1763)	*		mh	*1
Lepidoptera	Noctuidae	Panolis flammea (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Noctuidae	Panthea coenobita (Esper, 1785)	*		mh	*1
Lepidoptera	Noctuidae	Papestra biren (Goeze, 1781)	V		mh	*1
Lepidoptera	Noctuidae	Paradiarsia glareosa (Esper, 1788)	*		mh	*1
Lepidoptera	Noctuidae	Paradiarsia punicea (Hübner, 1803)	1		es	*1
Lepidoptera	Noctuidae	Paradrina clavipalpis (Scopoli, 1763)	*		mh	*1
Lepidoptera	Noctuidae	Paradrina selini (Boisduval, 1840)	*		s	*1
Lepidoptera	Noctuidae	Parastichtis suspecta (Hübner, 1817)	*		mh	*1
Lepidoptera	Noctuidae	Parastichtis ypsillon (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Peridroma saucia (Hübner, 1808)	nb		nb	*1
Lepidoptera	Noctuidae	Periphanes delphinii (Linnaeus, 1758)	0	1984	ex	*1
Lepidoptera	Noctuidae	Phlogophora meticulosa (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Phlogophora scita (Hübner, 1790)	3		s	*1
Lepidoptera	Noctuidae	Photedes captiuncula (Treitschke, 1825)	2		ss	*1
Lepidoptera	Noctuidae	Photedes minima (Haworth, 1809)	*		mh	*1
Lepidoptera	Noctuidae	Phragmatiphila nexa (Hübner, 1808)	*		s	*1
Lepidoptera	Noctuidae	Platyperigea aspersa (Rambur, 1834)	R		es	*1
Lepidoptera	Noctuidae	Platyperigea ingrata (Staudinger, 1897)	R		es	*1
Lepidoptera	Noctuidae	Platyperigea kadenii (Freyer, 1836)	*		ss	*1
Lepidoptera	Noctuidae	Plusia festucae (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Noctuidae	Plusia putnami (Grote, 1873)	*		mh	*1
Lepidoptera	Noctuidae	Polia bombycina (Hufnagel, 1766)	*		h	*1
Lepidoptera	Noctuidae	Polia hepatica (Clerck, 1759)	V		mh	*1
Lepidoptera	Noctuidae	Polia nebulosa (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Polychrysia moneta (Fabricius, 1787)	*		mh	*1
Lepidoptera	Noctuidae	Polymixis flavicincta (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Noctuidae	Polymixis gemmea (Treitschke, 1825)	*		mh	*1
Lepidoptera	Noctuidae	Polymixis lichenea (Hübner, 1813)	nb		nb	*1
Lepidoptera	Noctuidae	Polymixis polymita (Linnaeus, 1761)	1		es	*1
Lepidoptera	Noctuidae	Polymixis xanthomista (Hübner, 1819)	2		ss	*1
Lepidoptera	Noctuidae	Polyphaenis sericata (Esper, 1787)	3		ss	*1
Lepidoptera	Noctuidae	Prodotis stolida (Fabricius, 1775)	nb		nb	*1
Lepidoptera	Noctuidae	Protodeltote pygarga (Hufnagel, 1766)	*		sh	*1
Lepidoptera	Noctuidae	Protolampra sobrina (Duponchel, 1843)	2		ss	*1
Lepidoptera	Noctuidae	Proxenus lepigone (Möschler, 1860)	nb		nb	*1
Lepidoptera	Noctuidae	Pseudeustrotia candidula (Denis & Schiffermüller, 1775)	*		s	*1
Lepidoptera	Noctuidae	Pseudohadena immunda (Eversmann, 1842)	nb		nb	*1
Lepidoptera	Noctuidae	Pyrois cinnamomea (Goeze, 1781)	0	1881	ex	*1
Lepidoptera	Noctuidae	Pyrrhia umbra (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Rhizedra lutosa (Hübner, 1803)	*		sh	*1
Lepidoptera	Noctuidae	Rhyacia helvetina (Boisduval, 1833)	*		ss	*1
Lepidoptera	Noctuidae	Rhyacia lucipeta (Denis & Schiffermüller, 1775)	3		ss	*1
Lepidoptera	Noctuidae	Rhyacia simulans (Hufnagel, 1766)	V		s	*1
Lepidoptera	Noctuidae	Rusina ferruginea (Esper, 1785)	*		h	*1
Lepidoptera	Noctuidae	Schinia cardui (Hübner, 1790)	0	1950	ex	*1
Lepidoptera	Noctuidae	Schinia scutosa (Denis & Schiffermüller, 1775)	nb		nb	*1
Lepidoptera	Noctuidae	Sedina buettneri (Hering, 1858)	*		s	*1
Lepidoptera	Noctuidae	Shargacucullia caninae (Rambur, 1833)	R		es	*1
Lepidoptera	Noctuidae	Shargacucullia lychnitis (Rambur, 1833)	*		s	*1
Lepidoptera	Noctuidae	Shargacucullia prenanthis (Boisduval, 1840)	3		ss	*1
Lepidoptera	Noctuidae	Shargacucullia scrophulariae (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Shargacucullia thapsiphaga (Treitschke, 1826)	0	1938	ex	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Noctuidae	Shargacucullia verbasci (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Noctuidae	Sideridis lampra (Schawerda, 1913)	R		es	*1
Lepidoptera	Noctuidae	Sideridis turbida (Esper, 1790)	3		s	*1
Lepidoptera	Noctuidae	Simyra albovenosa (Goeze, 1781)	*		mh	*1
Lepidoptera	Noctuidae	Simyra nervosa (Denis & Schiffermüller, 1775)	1		ss	*1
Lepidoptera	Noctuidae	Spaelotis ravida (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Noctuidae	Spaelotis suecica (Aurivillius, 1890)	nb		nb	*1
Lepidoptera	Noctuidae	Spodoptera exigua (Hübner, 1808)	nb		nb	*1
Lepidoptera	Noctuidae	Spodoptera littoralis (Boisduval, 1833)	nb		nb	*1
Lepidoptera	Noctuidae	Spodoptera litura (Fabricius, 1775)	nb		nb	*1
Lepidoptera	Noctuidae	Spudaea ruticilla (Esper, 1791)	1		es	*1
Lepidoptera	Noctuidae	Standfussiana lucernea (Linnaeus, 1758)	*		ss	*1
Lepidoptera	Noctuidae	Staurophora celsia (Linnaeus, 1758)	*		s	*1
Lepidoptera	Noctuidae	Stilbia anomala (Haworth, 1812)	R		es	*1
Lepidoptera	Noctuidae	Sympistis nigrita (Boisduval, 1840)	R		es	*1
Lepidoptera	Noctuidae	Syngrapha ain (Hochenwarth, 1785)	R		es	*1
Lepidoptera	Noctuidae	Syngrapha hochenwarthi (Hochenwarth, 1785)	R		es	*1
Lepidoptera	Noctuidae	Syngrapha interrogationis (Linnaeus, 1758)	R		es	*1
Lepidoptera	Noctuidae	Syngrapha microgamma (Hübner, 1823)	0	1900	ex	*1
Lepidoptera	Noctuidae	Thalpophila matura (Hufnagel, 1766)	*		mh	*1
Lepidoptera	Noctuidae	Tholera cespitis (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Tholera decimalis (Poda, 1761)	*		mh	*1
Lepidoptera	Noctuidae	Thysanoplusia orichalcea (Fabricius, 1775)	nb		nb	*1
Lepidoptera	Noctuidae	Trachea atriplicis (Linnaeus, 1758)	*		h	*1
Lepidoptera	Noctuidae	Trichoplusia ni (Hübner, 1803)	nb		nb	*1
Lepidoptera	Noctuidae	Trichosea ludifica (Linnaeus, 1758)	2		es	*1
Lepidoptera	Noctuidae	Tyta luctuosa (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Valeria jaspidea (Villers, 1789)	R		es	*1
Lepidoptera	Noctuidae	Valeria oleagina (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Noctuidae	Xanthia aurago (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Xanthia citrago (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Noctuidae	Xanthia gilvago (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Noctuidae	Xanthia icteritia (Hufnagel, 1766)	*		sh	*1
Lepidoptera	Noctuidae	Xanthia ocellaris (Borkhausen, 1792)	*		h	*1
Lepidoptera	Noctuidae	Xanthia sulphurago (Denis & Schiffermüller, 1775)	0	1964	ex	*1
Lepidoptera	Noctuidae	Xanthia togata (Esper, 1788)	*		h	*1
Lepidoptera	Noctuidae	Xestia agathina (Duponchel, 1827)	3		s	*1
Lepidoptera	Noctuidae	Xestia alpicola (Zetterstedt, 1839)	R		es	*1
Lepidoptera	Noctuidae	Xestia ashworthii (Doubleday, 1855)	2		ss	*1
Lepidoptera	Noctuidae	Xestia baja (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Noctuidae	Xestia c-nigrum (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Noctuidae	Xestia castanea (Esper, 1798)	3		s	*1
Lepidoptera	Noctuidae	Xestia collina (Boisduval, 1840)	*		ss	*1
Lepidoptera	Noctuidae	Xestia ditrapezium (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Noctuidae	Xestia lorezi (Staudinger, 1891)	R		es	*1
Lepidoptera	Noctuidae	Xestia ochreago (Hübner, 1809)	R		es	*1
Lepidoptera	Noctuidae	Xestia rhaetica (Staudinger, 1871)	R		es	*1
Lepidoptera	Noctuidae	Xestia sexstrigata (Haworth, 1809)	*		h	*1
Lepidoptera	Noctuidae	Xestia sincera (Herrich-Schäffer, 1851)	0	1953	ex	*1
Lepidoptera	Noctuidae	Xestia speciosa modesta Warnecke, 1962	3		ss	*1
Lepidoptera	Noctuidae	Xestia speciosa speciosa (Hübner, 1813)	2		es	*1
Lepidoptera	Noctuidae	Xestia stigmatica (Hübner, 1813)	*		mh	*1
Lepidoptera	Noctuidae	Xestia triangulum (Hufnagel, 1766)	*		sh	*1
Lepidoptera	Noctuidae	Xestia xanthographa (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Noctuidae	Xylena exsoleta (Linnaeus, 1758)	2		s	*1
Lepidoptera	Noctuidae	Xylena vetusta (Hübner, 1813)	*		mh	*1
Lepidoptera	Noctuidae	Xylocampa areola (Esper, 1789)	*		mh	*1
Lepidoptera	Noctuidae	Yigoga forcipula (Denis & Schiffermüller, 1775)	3		ss	*1
Lepidoptera	Noctuidae	Yigoga nigrescens (Höfner, 1888)	1		es	*1
Lepidoptera	Noctuidae	Zanclognatha tarsipennalis Treitschke, 1835	*		h	*1
Lepidoptera	Nolidae	Bena bicolorana (Fuessly, 1775)	*		mh	*1
Lepidoptera	Nolidae	Earias clorana (Linnaeus, 1761)	*		mh	*1
Lepidoptera	Nolidae	Earias vernana (Fabricius, 1787)	3		ss	*1
Lepidoptera	Nolidae	Meganola albula (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Nolidae	Meganola strigula (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Nolidae	Meganola togatulalis (Hübner, 1798)	1		es	*1
Lepidoptera	Nolidae	Nola aerugula (Hübner, 1793)	V		s	*1
Lepidoptera	Nolidae	Nola cicatricalis (Treitschke, 1835)	R		es	*1
Lepidoptera	Nolidae	Nola confusalis (Herrich-Schäffer, 1847)	*		h	*1
Lepidoptera	Nolidae	Nola cristatula (Hübner, 1793)	*		ss	*1
Lepidoptera	Nolidae	Nola cucullatella (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Nolidae	Nola holsatica Sauber, 1916	2		es	*1
Lepidoptera	Nolidae	Nola squalida Staudinger, 1871	nb		nb	*1
Lepidoptera	Nolidae	Nola subchlamydula Staudinger, 1871	R		es	*1
Lepidoptera	Nolidae	Nycteola asiatica (Krulikovsky, 1904)	D		ss	*1
Lepidoptera	Nolidae	Nycteola degenerana (Hübner, 1799)	3		ss	*1
Lepidoptera	Nolidae	Nycteola revayana (Scopoli, 1772)	*		mh	*1
Lepidoptera	Nolidae	Nycteola siculana (Fuchs, 1899)	0	1959	ex	*1
Lepidoptera	Nolidae	Pseudoips prasinanus (Linnaeus, 1758)	*		h	*1
Lepidoptera	Notodontidae	Cerura erminea (Esper, 1783)	*		mh	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Notodontidae	Cerura vinula (Linnaeus, 1758)	*		h	*1
Lepidoptera	Notodontidae	Clostera anachoreta (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Notodontidae	Clostera anastomosis (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Notodontidae	Clostera curtula (Linnaeus, 1758)	*		h	*1
Lepidoptera	Notodontidae	Clostera pigra (Hufnagel, 1766)	*		h	*1
Lepidoptera	Notodontidae	Drymonia dodonaea (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Notodontidae	Drymonia obliterata (Esper, 1785)	*		h	*1
Lepidoptera	Notodontidae	Drymonia querna (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Notodontidae	Drymonia ruficornis (Hufnagel, 1766)	*		h	*1
Lepidoptera	Notodontidae	Drymonia velitaris (Hufnagel, 1766)	V		s	*1
Lepidoptera	Notodontidae	Furcula bicuspis (Borkhausen, 1790)	*		h	*1
Lepidoptera	Notodontidae	Furcula bifida (Brahm, 1787)	*		h	*1
Lepidoptera	Notodontidae	Furcula furcula (Clerck, 1759)	*		h	*1
Lepidoptera	Notodontidae	Gluphisia crenata (Esper, 1785)	*		h	*1
Lepidoptera	Notodontidae	Harpyia milhauseri (Fabricius, 1775)	*		h	*1
Lepidoptera	Notodontidae	Leucodonta bicoloria (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Notodontidae	Notodonta dromedarius (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Notodontidae	Notodonta torva (Hübner, 1803)	V		mh	*1
Lepidoptera	Notodontidae	Notodonta tritophus (Denis & Schiffermüller, 1775)	V		mh	*1
Lepidoptera	Notodontidae	Notodonta ziczac (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Notodontidae	Odontosia carmelita (Esper, 1799)	V		mh	*1
Lepidoptera	Notodontidae	Peridea anceps (Goeze, 1781)	*		h	*1
Lepidoptera	Notodontidae	Phalera bucephala (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Notodontidae	Pheosia gnoma (Fabricius, 1776)	*		h	*1
Lepidoptera	Notodontidae	Pheosia tremula (Clerck, 1759)	*		h	*1
Lepidoptera	Notodontidae	Pterostoma palpina (Clerck, 1759)	*		sh	*1
Lepidoptera	Notodontidae	Ptilodon capucina (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Notodontidae	Ptilodon cucullina (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Notodontidae	Ptilophora plumigera (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Notodontidae	Spatalia argentina (Denis & Schiffermüller, 1775)	V		s	*1
Lepidoptera	Notodontidae	Stauropus fagi (Linnaeus, 1758)	*		h	*1
Lepidoptera	Notodontidae	Thaumetopoea pinivora (Treitschke, 1834)	*		s	*1
Lepidoptera	Notodontidae	Thaumetopoea processionea (Linnaeus, 1758)	*		h	*1
Lepidoptera	Nymphalidae	Aglais urticae (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Nymphalidae	Apatura ilia (Denis & Schiffermüller, 1775)	V		h	*1
Lepidoptera	Nymphalidae	Apatura iris (Linnaeus, 1758)	V		h	*1
Lepidoptera	Nymphalidae	Aphantopus hyperantus (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Nymphalidae	Araschnia levana (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Nymphalidae	Arethusana arethusa (Denis & Schiffermüller, 1775)	0	1977	ex	*1
Lepidoptera	Nymphalidae	Argynnis adippe (Denis & Schiffermüller, 1775)	3		mh	*1
Lepidoptera	Nymphalidae	Argynnis aglaja (Linnaeus, 1758)	V		h	*1
Lepidoptera	Nymphalidae	Argynnis laodice (Pallas, 1771)	1		es	*1
Lepidoptera	Nymphalidae	Argynnis niobe (Linnaeus, 1758)	2		ss	*1
Lepidoptera	Nymphalidae	Argynnis paphia (Linnaeus, 1758)	*		h	*1
Lepidoptera	Nymphalidae	Boloria aquilonaris (Stichel, 1908)	2		s	*1
Lepidoptera	Nymphalidae	Boloria dia (Linnaeus, 1767)	*		h	*1
Lepidoptera	Nymphalidae	Boloria eunomia (Esper, 1799)	2		mh	*1
Lepidoptera	Nymphalidae	Boloria euphrosyne (Linnaeus, 1758)	2		mh	*1
Lepidoptera	Nymphalidae	Boloria napaea (Hoffmannsegg, 1804)	R		es	*1
Lepidoptera	Nymphalidae	Boloria pales (Denis & Schiffermüller, 1775)	R		es	*1
Lepidoptera	Nymphalidae	Boloria selene (Denis & Schiffermüller, 1775)	V		h	*1
Lepidoptera	Nymphalidae	Boloria thore (Hübner, 1803)	G		ss	*1
Lepidoptera	Nymphalidae	Boloria titania (Esper, 1793)	V		s	*1
Lepidoptera	Nymphalidae	Brenthis daphne (Denis & Schiffermüller, 1775)	D		?	*1
Lepidoptera	Nymphalidae	Brenthis ino (Rottemburg, 1775)	*		h	*1
Lepidoptera	Nymphalidae	Brintesia circe (Fabricius, 1775)	3		ss	*1
Lepidoptera	Nymphalidae	Chazara briseis (Linnaeus, 1764)	1		ss	*1
Lepidoptera	Nymphalidae	Coenonympha arcania (Linnaeus, 1761)	*		h	*1
Lepidoptera	Nymphalidae	Coenonympha gardetta (Prunner, 1798)	R		es	*1
Lepidoptera	Nymphalidae	Coenonympha glycerion (Borkhausen, 1788)	V		h	*1
Lepidoptera	Nymphalidae	Coenonympha hero (Linnaeus, 1761)	2		ss	*1
Lepidoptera	Nymphalidae	Coenonympha oedippus (Fabricius, 1787)	1		es	*1
Lepidoptera	Nymphalidae	Coenonympha pamphilus (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Nymphalidae	Coenonympha tullia (Müller, 1764)	2		s	*1
Lepidoptera	Nymphalidae	Erebia aethiops (Esper, 1777)	3		mh	*1
Lepidoptera	Nymphalidae	Erebia epiphron (Knoch, 1783)	R		es	*1
Lepidoptera	Nymphalidae	Erebia eriphyle (Freyer, 1836)	R		es	*1
Lepidoptera	Nymphalidae	Erebia euryale (Esper, 1805)	*		s	*1
Lepidoptera	Nymphalidae	Erebia gorge (Hübner, 1804)	R		es	*1
Lepidoptera	Nymphalidae	Erebia ligea (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Nymphalidae	Erebia manto (Denis & Schiffermüller, 1775)	R		es	*1
Lepidoptera	Nymphalidae	Erebia medusa (Denis & Schiffermüller, 1775)	V		h	*1
Lepidoptera	Nymphalidae	Erebia melampus (Fuessly, 1775)	R		es	*1
Lepidoptera	Nymphalidae	Erebia meolans (Prunner, 1798)	3		s	*1
Lepidoptera	Nymphalidae	Erebia oeme (Hübner, 1804)	*		ss	*1
Lepidoptera	Nymphalidae	Erebia pandrose (Borkhausen, 1788)	R		es	*1
Lepidoptera	Nymphalidae	Erebia pharte (Hübner, 1804)	*		ss	*1
Lepidoptera	Nymphalidae	Erebia pluto (Prunner, 1798)	R		es	*1
Lepidoptera	Nymphalidae	Erebia pronoe (Esper, 1780)	V		mh	*1
Lepidoptera	Nymphalidae	Erebia styx (Freyer, 1834)	R		es	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Nymphalidae	Erebia tyndarus (Esper, 1781)	R		es	*1
Lepidoptera	Nymphalidae	Euphydryas aurinia (Rottemburg, 1775)	2		mh	*1
Lepidoptera	Nymphalidae	Euphydryas cynthia (Denis & Schiffermüller, 1775)	R		es	*1
Lepidoptera	Nymphalidae	Euphydryas intermedia (Ménétriés, 1859)	D		?	*1
Lepidoptera	Nymphalidae	Euphydryas maturna (Linnaeus, 1758)	1		es	*1
Lepidoptera	Nymphalidae	Hipparchia alcyone (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Nymphalidae	Hipparchia fagi (Scopoli, 1763)	2		es	*1
Lepidoptera	Nymphalidae	Hipparchia semele (Linnaeus, 1758)	3		mh	*1
Lepidoptera	Nymphalidae	Hipparchia statilinus (Hufnagel, 1766)	1		es	*1
Lepidoptera	Nymphalidae	Hyponephele lycaon (Rottemburg, 1775)	2		s	*1
Lepidoptera	Nymphalidae	Inachis io (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Nymphalidae	Issoria lathonia (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Nymphalidae	Lasiommata maera (Linnaeus, 1758)	V		h	*1
Lepidoptera	Nymphalidae	Lasiommata megera (Linnaeus, 1767)	*		sh	*1
Lepidoptera	Nymphalidae	Lasiommata petropolitana (Fabricius, 1787)	3		ss	*1
Lepidoptera	Nymphalidae	Limenitis camilla (Linnaeus, 1764)	V		h	*1
Lepidoptera	Nymphalidae	Limenitis populi (Linnaeus, 1758)	2		s	*1
Lepidoptera	Nymphalidae	Limenitis reducta Staudinger, 1901	1		ss	*1
Lepidoptera	Nymphalidae	Lopinga achine (Scopoli, 1763)	2		s	*1
Lepidoptera	Nymphalidae	Maniola jurtina (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Nymphalidae	Melanargia galathea (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Nymphalidae	Melitaea athalia (Rottemburg, 1775)	3		h	*1
Lepidoptera	Nymphalidae	Melitaea aurelia Nickerl, 1850	V		mh	*1
Lepidoptera	Nymphalidae	Melitaea britomartis Assmann, 1847	V		s	*1
Lepidoptera	Nymphalidae	Melitaea cinxia (Linnaeus, 1758)	3		mh	*1
Lepidoptera	Nymphalidae	Melitaea diamina (Lang, 1789)	3		mh	*1
Lepidoptera	Nymphalidae	Melitaea didyma (Esper, 1778)	2		s	*1
Lepidoptera	Nymphalidae	Melitaea neglecta Pfau, 1962	1		es	*1
Lepidoptera	Nymphalidae	Melitaea parthenoides Keferstein, 1851	2		ss	*1
Lepidoptera	Nymphalidae	Melitaea phoebe (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Nymphalidae	Minois dryas (Scopoli, 1763)	2		s	*1
Lepidoptera	Nymphalidae	Nymphalis antiopa (Linnaeus, 1758)	V		h	*1
Lepidoptera	Nymphalidae	Nymphalis polychloros (Linnaeus, 1758)	V		mh	*1
Lepidoptera	Nymphalidae	Nymphalis xanthomelas (Esper, 1781)	D		?	*1
Lepidoptera	Nymphalidae	Oeneis glacialis (Moll, 1783)	R		es	*1
Lepidoptera	Nymphalidae	Pararge aegeria (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Nymphalidae	Polygonia c-album (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Nymphalidae	Pyronia tithonus (Linnaeus, 1767)	*		h	*1
Lepidoptera	Nymphalidae	Vanessa atalanta (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Nymphalidae	Vanessa cardui (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Papilionidae	Iphiclides podalirius (Linnaeus, 1758)	3		s	*1
Lepidoptera	Papilionidae	Papilio machaon Linnaeus, 1758	*		sh	*1
Lepidoptera	Papilionidae	Parnassius apollo (Linnaeus, 1758)	2		ss	*1
Lepidoptera	Papilionidae	Parnassius mnemosyne (Linnaeus, 1758)	2		ss	*1
Lepidoptera	Papilionidae	Parnassius sacerdos Stichel, 1906	D		?	*1
Lepidoptera	Papilionidae	Zerynthia polyxena (Denis & Schiffermüller, 1775)	0	1888	ex	*1
Lepidoptera	Pieridae	Anthocharis cardamines (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Pieridae	Aporia crataegi (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Pieridae	Colias alfacariensis Ribbe, 1905	*		mh	*1
Lepidoptera	Pieridae	Colias croceus (Fourcroy, 1785)	*		sh	*1
Lepidoptera	Pieridae	Colias erate (Esper, 1805)	nb		nb	*1
Lepidoptera	Pieridae	Colias hyale (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Pieridae	Colias myrmidone (Esper, 1780)	0	2000	ex	*1
Lepidoptera	Pieridae	Colias palaeno (Linnaeus, 1761)	2		s	*1
Lepidoptera	Pieridae	Colias phicomone (Esper, 1780)	*		ss	*1
Lepidoptera	Pieridae	Gonepteryx rhamni (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Pieridae	Leptidea reali Reissinger, 1989	D		?	*1
Lepidoptera	Pieridae	Leptidea sinapis (Linnaeus, 1758)	D		?	*1
Lepidoptera	Pieridae	Pieris brassicae (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Pieridae	Pieris bryoniae (Hübner, 1806)	*		ss	*1
Lepidoptera	Pieridae	Pieris mannii (Mayer, 1851)	nb		nb	*1
Lepidoptera	Pieridae	Pieris napi (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Pieridae	Pieris rapae (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Pieridae	Pontia callidice (Hübner, 1800)	R		es	*1
Lepidoptera	Pieridae	Pontia edusa (Fabricius, 1777)	*		mh	*1
Lepidoptera	Psychidae	Acanthopsyche atra (Linnaeus, 1767)	2		s	*1
Lepidoptera	Psychidae	Apterona helicoidella (Vallot, 1827) (parth. Form)	*		h	*1
Lepidoptera	Psychidae	Bacotia claustrella (Bruand, 1845)	*		mh	*1
Lepidoptera	Psychidae	Bankesia conspurcatella (Zeller, 1850)	R		es	*1
Lepidoptera	Psychidae	Bijugis bombycella (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Psychidae	Bijugis pectinella (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Psychidae	Bruandia comitella (Bruand, 1853)	2		ss	*1
Lepidoptera	Psychidae	Canephora hirsuta (Poda, 1761)	*		h	*1
Lepidoptera	Psychidae	Dahlica charlottae (Meier, 1957)	V		s	*1
Lepidoptera	Psychidae	Dahlica fumosella (Heinemann, 1870)	V		mh	*1
Lepidoptera	Psychidae	Dahlica lichenella (Linnaeus, 1761)	*		h	*1
Lepidoptera	Psychidae	Dahlica nickerlii (Heinemann, 1870)	R		es	*1
Lepidoptera	Psychidae	Dahlica sauteri (Hättenschwiler, 1977)	V		s	*1
Lepidoptera	Psychidae	Dahlica triquetrella (Hübner, 1813) (bisex. Form)	1		es	*1
Lepidoptera	Psychidae	Dahlica triquetrella (Hübner, 1813) (parth. Form)	*		sh	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Psychidae	Dahlica wockei (Heinemann, 1870)	1		es	*1
Lepidoptera	Psychidae	Diplodoma adspersella Heinemann, 1870	0	1935	ex	*1
Lepidoptera	Psychidae	Diplodoma laichartingella (Goeze, 1783)	*		mh	*1
Lepidoptera	Psychidae	Epichnopterix heringi Heinemann, 1859	1		es	*1
Lepidoptera	Psychidae	Epichnopterix plumella (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Psychidae	Epichnopterix sieboldi (Reutti, 1853)	3		mh	*1
Lepidoptera	Psychidae	Eumasia parietariella (Heydenreich, 1851)	3		ss	*1
Lepidoptera	Psychidae	Leptopterix hirsutella (Denis & Schiffermüller, 1775)	R		es	*1
Lepidoptera	Psychidae	Luffia ferchaultella (Stephens, 1850) (parth. Form)	3		ss	*1
Lepidoptera	Psychidae	Megalophanes stetinensis stetinensis (E. Hering, 1846)	1		es	*1
Lepidoptera	Psychidae	Megalophanes stetinensis viadrina (Staudinger, 1871)	1		es	*1
Lepidoptera	Psychidae	Megalophanes viciella (Denis & Schiffermüller, 1775)	2		ss	*1
Lepidoptera	Psychidae	Narycia astrella (Herrich-Schäffer, 1851)	2		ss	*1
Lepidoptera	Psychidae	Narycia duplicella (Goeze, 1783)	*		h	*1
Lepidoptera	Psychidae	Pachythelia villosella (Ochsenheimer, 1810)	2		s	*1
Lepidoptera	Psychidae	Phalacropteryx graslinella (Boisduval, 1852)	1		ss	*1
Lepidoptera	Psychidae	Proutia betulina (Zeller, 1839)	*		h	*1
Lepidoptera	Psychidae	Proutia rotunda Suomalainen, 1990	D		?	*1
Lepidoptera	Psychidae	Psyche casta (Pallas, 1767)	*		sh	*1
Lepidoptera	Psychidae	Psyche crassiorella (Bruand, 1851)	*		mh	*1
Lepidoptera	Psychidae	Ptilocephala albida (Esper, 1786)	0	1976	ex	*1
Lepidoptera	Psychidae	Ptilocephala muscella (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Psychidae	Ptilocephala plumifera (Ochsenheimer, 1810)	2		ss	*1
Lepidoptera	Psychidae	Rebelia bavarica Wehrli, 1926	2		es	*1
Lepidoptera	Psychidae	Rebelia plumella (Ochsenheimer, 1810)	2		ss	*1
Lepidoptera	Psychidae	Reisseronia tarnierella (Bruand, 1851)	0	1977	ex	*1
Lepidoptera	Psychidae	Siederia pineti (Zeller, 1852)	*		h	*1
Lepidoptera	Psychidae	Siederia rupicolella (Sauter, 1954)	1		es	*1
Lepidoptera	Psychidae	Sterrhopterix fusca (Haworth, 1809)	*		h	*1
Lepidoptera	Psychidae	Sterrhopterix standfussi (Wocke, 1851)	2		ss	*1
Lepidoptera	Psychidae	Taleporia tubulosa (Retzius, 1783)	*		sh	*1
Lepidoptera	Psychidae	Typhonia beatricis Hättenschwiler, 2000	1		es	*1
Lepidoptera	Psychidae	Typhonia ciliaris (Ochsenheimer, 1810)	0	1971	ex	*1
Lepidoptera	Psychidae	Whittleia retiella (Newmann, 1847)	R		es	*1
Lepidoptera	Pyralidae	Achroia grisella (Fabricius, 1794)	G		mh	*1
Lepidoptera	Pyralidae	Acrobasis advenella (Zincken, 1818)	*		h	*1
Lepidoptera	Pyralidae	Acrobasis consociella (Hübner, 1813)	*		mh	*1
Lepidoptera	Pyralidae	Acrobasis glaucella Staudinger, 1859	0	1961	ex	*1
Lepidoptera	Pyralidae	Acrobasis legatea (Haworth, 1811)	1		es	*1
Lepidoptera	Pyralidae	Acrobasis marmorea (Haworth, 1811)	*		mh	*1
Lepidoptera	Pyralidae	Acrobasis obtusella (Hübner, 1796)	3		ss	*1
Lepidoptera	Pyralidae	Acrobasis repandana (Fabricius, 1798)	*		mh	*1
Lepidoptera	Pyralidae	Acrobasis sodalella Zeller, 1848	3		ss	*1
Lepidoptera	Pyralidae	Acrobasis suavella (Zincken, 1818)	3		s	*1
Lepidoptera	Pyralidae	Acrobasis tumidana (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Pyralidae	Aglossa caprealis (Hübner, 1809)	*		s	*1
Lepidoptera	Pyralidae	Aglossa pinguinalis (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Pyralidae	Ancylosis cinnamomella (Duponchel, 1836)	*		ss	*1
Lepidoptera	Pyralidae	Ancylosis oblitella (Zeller, 1848)	V		s	*1
Lepidoptera	Pyralidae	Anerastia lotella (Hübner, 1813)	*		mh	*1
Lepidoptera	Pyralidae	Aphomia sociella (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Pyralidae	Aphomia zelleri Joannis, 1932	*		s	*1
Lepidoptera	Pyralidae	Apomyelois bistriatella (Hulst, 1887)	3		s	*1
Lepidoptera	Pyralidae	Apomyelois ceratoniae (Zeller, 1839)	nb		nb	*1
Lepidoptera	Pyralidae	Asalebria florella (Mann, 1862)	1		es	*1
Lepidoptera	Pyralidae	Asarta aethiopella (Duponchel, 1836)	R		es	*1
Lepidoptera	Pyralidae	Assara terebrella (Zincken, 1818)	*		mh	*1
Lepidoptera	Pyralidae	Cadra calidella (Guenée, 1845)	nb		nb	*1
Lepidoptera	Pyralidae	Cadra cautella (Walker, 1863)	nb		nb	*1
Lepidoptera	Pyralidae	Cadra figulilella (Gregson, 1871)	nb		nb	*1
Lepidoptera	Pyralidae	Catastia marginea (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Pyralidae	Corcyra cephalonica (Stainton, 1866)	nb		nb	*1
Lepidoptera	Pyralidae	Cremnophila sedakovella (Eversmann, 1851)	R		es	*1
Lepidoptera	Pyralidae	Cryptoblabes bistriga (Haworth, 1811)	*		mh	*1
Lepidoptera	Pyralidae	Cryptoblabes gnidiella (Millière, 1867)	R		es	*1
Lepidoptera	Pyralidae	Delplanqueia dilutella (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Pyralidae	Dioryctria abietella (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Pyralidae	Dioryctria schuetzeella Fuchs, 1899	*		mh	*1
Lepidoptera	Pyralidae	Dioryctria simplicella Heinemann, 1863	*		mh	*1
Lepidoptera	Pyralidae	Dioryctria sylvestrella (Ratzeburg, 1840)	*		mh	*1
Lepidoptera	Pyralidae	Eccopisa effractella Zeller, 1848	*		s	*1
Lepidoptera	Pyralidae	Elegia similella (Zincken, 1818)	*		s	*1
Lepidoptera	Pyralidae	Endotricha flammealis (Denis & Schiffermüller, 1775)	*		sh	*1
Lepidoptera	Pyralidae	Ephestia elutella (Hübner, 1796)	nb		nb	*1
Lepidoptera	Pyralidae	Ephestia kuehniella Zeller, 1879	nb		nb	*1
Lepidoptera	Pyralidae	Ephestia mistralella (Millière, 1874)	1		es	*1
Lepidoptera	Pyralidae	Ephestia unicolorella Staudinger, 1881	*		s	*1
Lepidoptera	Pyralidae	Ephestia welseriella (Zeller, 1848)	1		es	*1
Lepidoptera	Pyralidae	Epischnia prodromella (Hübner, 1799)	1		es	*1
Lepidoptera	Pyralidae	Episcythrastis tetricella (Denis & Schiffermüller, 1775)	*		ss	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Pyralidae	Etiella zinckenella (Treitschke, 1832)	nb		nb	*1
Lepidoptera	Pyralidae	Eucarphia vinetella (Fabricius, 1787)	0	1900	ex	*1
Lepidoptera	Pyralidae	Eurhodope cirrigerella (Zincken, 1818)	2		ss	*1
Lepidoptera	Pyralidae	Eurhodope rosella (Scopoli, 1763)	1		es	*1
Lepidoptera	Pyralidae	Euzophera bigella (Zeller, 1848)	D		ss	*1
Lepidoptera	Pyralidae	Euzophera cinerosella (Zeller, 1839)	2		s	*1
Lepidoptera	Pyralidae	Euzophera fuliginosella (Heinemann, 1865)	3		s	*1
Lepidoptera	Pyralidae	Euzophera pinguis (Haworth, 1811)	*		mh	*1
Lepidoptera	Pyralidae	Galleria mellonella (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Pyralidae	Glyptoteles leucacrinella Zeller, 1848	*		s	*1
Lepidoptera	Pyralidae	Gymnancyla canella (Denis & Schiffermüller, 1775)	R		es	*1
Lepidoptera	Pyralidae	Gymnancyla hornigii (Lederer, 1852)	*		s	*1
Lepidoptera	Pyralidae	Homoeosoma nebulella (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Pyralidae	Homoeosoma nimbella (Duponchel, 1837)	2		ss	*1
Lepidoptera	Pyralidae	Homoeosoma sinuella (Fabricius, 1794)	V		s	*1
Lepidoptera	Pyralidae	Hypochalcia ahenella (Denis & Schiffermüller, 1775)	*		mh	*1
Lepidoptera	Pyralidae	Hypochalcia lignella (Hübner, 1796)	V		mh	*1
Lepidoptera	Pyralidae	Hypsopygia costalis (Fabricius, 1775)	*		h	*1
Lepidoptera	Pyralidae	Hypsopygia glaucinalis (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Pyralidae	Isauria dilucidella (Duponchel, 1836)	D		?	*1
Lepidoptera	Pyralidae	Khorassania compositella (Treitschke, 1835)	2		ss	*1
Lepidoptera	Pyralidae	Lamoria anella (Denis & Schiffermüller, 1775)	R		es	*1
Lepidoptera	Pyralidae	Laodamia faecella (Zeller, 1839)	3		s	*1
Lepidoptera	Pyralidae	Matilella fusca (Haworth, 1811)	G		s	*1
Lepidoptera	Pyralidae	Merulempista cingillella (Zeller, 1846)	0	1980	ex	*1
Lepidoptera	Pyralidae	Moitrelia obductella Zeller, 1839	3		s	*1
Lepidoptera	Pyralidae	Myelois circumvoluta (Fourcroy, 1785)	G		s	*1
Lepidoptera	Pyralidae	Nephopterix angustella (Hübner, 1796)	*		mh	*1
Lepidoptera	Pyralidae	Nyctegretis lineana (Scopoli, 1786)	*		mh	*1
Lepidoptera	Pyralidae	Oncocera semirubella (Scopoli, 1763)	*		mh	*1
Lepidoptera	Pyralidae	Ortholepis betulae (Goeze, 1778)	*		mh	*1
Lepidoptera	Pyralidae	Ortholepis vacciniella (Lienig & Zeller, 1846)	2		ss	*1
Lepidoptera	Pyralidae	Paralipsa gularis (Zeller, 1877)	nb		nb	*1
Lepidoptera	Pyralidae	Pempelia palumbella (Denis & Schiffermüller, 1775)	3		mh	*1
Lepidoptera	Pyralidae	Pempeliella ornatella (Denis & Schiffermüller, 1775)	3		mh	*1
Lepidoptera	Pyralidae	Phycita roborella (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Pyralidae	Phycitodes albatella (Ragonot, 1887)	*		mh	*1
Lepidoptera	Pyralidae	Phycitodes binaevella (Hübner, 1813)	*		mh	*1
Lepidoptera	Pyralidae	Phycitodes inquinatella (Ragonot, 1887)	2		es	*1
Lepidoptera	Pyralidae	Phycitodes lacteella (Rothschild, 1915)	0	1960	ex	*1
Lepidoptera	Pyralidae	Phycitodes maritima (Tengström, 1848)	3		s	*1
Lepidoptera	Pyralidae	Phycitodes saxicola (Vaughan, 1870)	3		ss	*1
Lepidoptera	Pyralidae	Pima boisduvaliella (Guenée, 1845)	1		es	*1
Lepidoptera	Pyralidae	Plodia interpunctella (Hübner, 1813)	nb		nb	*1
Lepidoptera	Pyralidae	Pyralis farinalis (Linnaeus, 1758)	*		mh	*1
Lepidoptera	Pyralidae	Pyralis regalis (Denis & Schiffermüller, 1775)	D		?	*1
Lepidoptera	Pyralidae	Rhodophaea formosa (Haworth, 1811)	*		s	*1
Lepidoptera	Pyralidae	Salebriopsis albicilla (Herrich-Schäffer, 1849)	3		ss	*1
Lepidoptera	Pyralidae	Sciota adelphella (Fischer v. Röslerstamm, 1836)	3		s	*1
Lepidoptera	Pyralidae	Sciota hostilis (Stephens, 1834)	3		s	*1
Lepidoptera	Pyralidae	Sciota rhenella (Zincken, 1818)	3		s	*1
Lepidoptera	Pyralidae	Selagia argyrella (Denis & Schiffermüller, 1775)	2		s	*1
Lepidoptera	Pyralidae	Selagia spadicella (Hübner, 1796)	G		mh	*1
Lepidoptera	Pyralidae	Synaphe punctalis (Fabricius, 1775)	*		h	*1
Lepidoptera	Pyralidae	Trachonitis cristella (Denis & Schiffermüller, 1775)	0	1907	ex	*1
Lepidoptera	Pyralidae	Vitula biviella (Zeller, 1848)	3		s	*1
Lepidoptera	Pyralidae	Vitula edmandsii (Packard, 1864)	nb		nb	*1
Lepidoptera	Pyralidae	Zophodia grossulariella (Hübner, 1809)	3		s	*1
Lepidoptera	Riodinidae	Hamearis lucina (Linnaeus, 1758)	3		mh	*1
Lepidoptera	Saturniidae	Aglia tau (Linnaeus, 1758)	*		h	*1
Lepidoptera	Saturniidae	Saturnia pavonia (Linnaeus, 1758)	*		h	*1
Lepidoptera	Saturniidae	Saturnia pavoniella (Scopoli, 1763)	0	1980	ex	*1
Lepidoptera	Saturniidae	Saturnia pyri (Denis & Schiffermüller, 1775)	1		es	*1
Lepidoptera	Sesiidae	Bembecia albanensis (Rebel, 1918)	3		s	*1
Lepidoptera	Sesiidae	Bembecia ichneumoniformis (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Sesiidae	Bembecia megillaeformis (Hübner, 1813)	0	1950	ex	*1
Lepidoptera	Sesiidae	Chamaesphecia aerifrons (Zeller, 1847)	2		ss	*1
Lepidoptera	Sesiidae	Chamaesphecia annellata (Zeller, 1847)	0	1950	ex	*1
Lepidoptera	Sesiidae	Chamaesphecia dumonti Le Cerf, 1922	2		es	*1
Lepidoptera	Sesiidae	Chamaesphecia empiformis (Esper, 1783)	*		h	*1
Lepidoptera	Sesiidae	Chamaesphecia leucopsiformis (Esper, 1800)	2		es	*1
Lepidoptera	Sesiidae	Chamaesphecia nigrifrons (Le Cerf, 1911)	2		ss	*1
Lepidoptera	Sesiidae	Chamaesphecia tenthrediniformis (Denis & Schiffermüller, 1775)	3		s	*1
Lepidoptera	Sesiidae	Paranthrene insolita Le Cerf, 1914	*		s	*1
Lepidoptera	Sesiidae	Paranthrene tabaniformis (Rottemburg, 1775)	*		h	*1
Lepidoptera	Sesiidae	Pennisetia hylaeiformis (Laspeyres, 1801)	*		h	*1
Lepidoptera	Sesiidae	Pyropteron chrysidiformis (Esper, 1782)	*		mh	*1
Lepidoptera	Sesiidae	Sesia apiformis (Clerck, 1759)	*		h	*1
Lepidoptera	Sesiidae	Sesia bembeciformis (Hübner, 1806)	*		s	*1
Lepidoptera	Sesiidae	Sesia melanocephala Dalman, 1816	*		mh	*1

Order	Family	Species	K	L	P	S
Lepidoptera	Sesiidae	Synansphecia affinis (Staudinger, 1856)	3		s	*1
Lepidoptera	Sesiidae	Synansphecia muscaeformis (Esper, 1783)	2		s	*1
Lepidoptera	Sesiidae	Synansphecia triannuliformis (Freyer, 1845)	*		mh	*1
Lepidoptera	Sesiidae	Synanthedon andrenaeformis (Laspeyres, 1801)	*		mh	*1
Lepidoptera	Sesiidae	Synanthedon cephiformis (Ochsenheimer, 1808)	2		s	*1
Lepidoptera	Sesiidae	Synanthedon conopiformis (Esper, 1782)	V		mh	*1
Lepidoptera	Sesiidae	Synanthedon culiciformis (Linnaeus, 1758)	*		h	*1
Lepidoptera	Sesiidae	Synanthedon flaviventris (Staudinger, 1883)	V		mh	*1
Lepidoptera	Sesiidae	Synanthedon formicaeformis (Esper, 1783)	*		h	*1
Lepidoptera	Sesiidae	Synanthedon loranthi (Králicek, 1966)	V		s	*1
Lepidoptera	Sesiidae	Synanthedon myopaeformis (Borkhausen, 1789)	*		sh	*1
Lepidoptera	Sesiidae	Synanthedon scoliaeformis (Borkhausen, 1789)	V		mh	*1
Lepidoptera	Sesiidae	Synanthedon soffneri Spatenka, 1983	V		s	*1
Lepidoptera	Sesiidae	Synanthedon spheciformis (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Sesiidae	Synanthedon spuleri (Fuchs, 1908)	3		s	*1
Lepidoptera	Sesiidae	Synanthedon stomoxiformis (Hübner, 1790)	3		s	*1
Lepidoptera	Sesiidae	Synanthedon tipuliformis (Clerck, 1759)	*		sh	*1
Lepidoptera	Sesiidae	Synanthedon vespiformis (Linnaeus, 1761)	*		h	*1
Lepidoptera	Sphingidae	Acherontia atropos (Linnaeus, 1758)	nb		nb	*1
Lepidoptera	Sphingidae	Agrius convolvuli (Linnaeus, 1758)	nb		nb	*1
Lepidoptera	Sphingidae	Daphnis nerii (Linnaeus, 1758)	nb		nb	*1
Lepidoptera	Sphingidae	Deilephila elpenor (Linnaeus, 1758)	*		sh	*1
Lepidoptera	Sphingidae	Deilephila porcellus (Linnaeus, 1758)	*		h	*1
Lepidoptera	Sphingidae	Hemaris fuciformis (Linnaeus, 1758)	*		h	*1
Lepidoptera	Sphingidae	Hemaris tityus (Linnaeus, 1758)	2		s	*1
Lepidoptera	Sphingidae	Hippotion celerio (Linnaeus, 1758)	nb		nb	*1
Lepidoptera	Sphingidae	Hyles euphorbiae (Linnaeus, 1758)	3		mh	*1
Lepidoptera	Sphingidae	Hyles gallii (Rottemburg, 1775)	*		s	*1
Lepidoptera	Sphingidae	Hyles hippophaes (Esper, 1793)	nb		nb	*1
Lepidoptera	Sphingidae	Hyles livornica (Esper, 1779)	nb		nb	*1
Lepidoptera	Sphingidae	Hyles vespertilio (Esper, 1779)	0	1987	ex	*1
Lepidoptera	Sphingidae	Hyloicus pinastri (Linnaeus, 1758)	*		h	*1
Lepidoptera	Sphingidae	Laothoe populi (Linnaeus, 1758)	*		h	*1
Lepidoptera	Sphingidae	Macroglossum stellatarum (Linnaeus, 1758)	*		h	*1
Lepidoptera	Sphingidae	Mimas tiliae (Linnaeus, 1758)	*		h	*1
Lepidoptera	Sphingidae	Proserpinus proserpina (Pallas, 1772)	*		mh	*1
Lepidoptera	Sphingidae	Smerinthus ocellata (Linnaeus, 1758)	*		h	*1
Lepidoptera	Sphingidae	Sphinx ligustri Linnaeus, 1758	*		h	*1
Lepidoptera	Thyrididae	Thyris fenestrella (Scopoli, 1763)	*		mh	*1
Lepidoptera	Zygaenidae	Adscita geryon (Hübner, 1813)	3		mh	*1
Lepidoptera	Zygaenidae	Adscita mannii (Lederer, 1853)	1		es	*1
Lepidoptera	Zygaenidae	Adscita statices (Linnaeus, 1758)	V		h	*1
Lepidoptera	Zygaenidae	Aglaope infausta (Linnaeus, 1767)	R		es	*1
Lepidoptera	Zygaenidae	Antherea yamamai (Guérin-Méneville, 1861)	nb		nb	*1
Lepidoptera	Zygaenidae	Jordanita chloros (Hübner, 1813)	1		es	*1
Lepidoptera	Zygaenidae	Jordanita globulariae (Hübner, 1793)	2		s	*1
Lepidoptera	Zygaenidae	Jordanita notata (Zeller, 1847)	2		ss	*1
Lepidoptera	Zygaenidae	Jordanita subsolana (Staudinger, 1862)	1		ss	*1
Lepidoptera	Zygaenidae	Rhagades pruni (Denis & Schiffermüller, 1775)	3		mh	*1
Lepidoptera	Zygaenidae	Zygaena angelicae elegans Burgeff, 1913	1		es	*1
Lepidoptera	Zygaenidae	Zygaena angelicae Ochsenheimer, 1808 [nicht-elegans-Formen]	2		ss	*1
Lepidoptera	Zygaenidae	Zygaena carniolica (Scopoli, 1763)	V		h	*1
Lepidoptera	Zygaenidae	Zygaena cynarae franconica Holik, 1936	0	1957	ex	*1
Lepidoptera	Zygaenidae	Zygaena ephialtes (Linnaeus, 1767)	*		mh	*1
Lepidoptera	Zygaenidae	Zygaena exulans (Hohenwarth, 1792)	1		es	*1
Lepidoptera	Zygaenidae	Zygaena fausta (Linnaeus, 1767)	3		s	*1
Lepidoptera	Zygaenidae	Zygaena filipendulae (Linnaeus, 1758)	*		h	*1
Lepidoptera	Zygaenidae	Zygaena lonicerae (Scheven, 1777)	V		h	*1
Lepidoptera	Zygaenidae	Zygaena loti (Denis & Schiffermüller, 1775)	*		h	*1
Lepidoptera	Zygaenidae	Zygaena minos (Denis & Schiffermüller, 1775)	3		mh	*1
Lepidoptera	Zygaenidae	Zygaena osterodensis Reiss, 1921	2		s	*1
Lepidoptera	Zygaenidae	Zygaena purpuralis (Brünnich, 1763)	V		h	*1
Lepidoptera	Zygaenidae	Zygaena transalpina (Esper, 1780)	V		mh	*1
Lepidoptera	Zygaenidae	Zygaena transalpina (Esper, 1780) [hippocrepidoide Formen]	V		mh	*1
Lepidoptera	Zygaenidae	Zygaena transalpina (Esper, 1780) [transalpinoide Formen]	V		mh	*1
Lepidoptera	Zygaenidae	Zygaena trifolii (Esper, 1783)	3		h	*1
Lepidoptera	Zygaenidae	Zygaena viciae (Denis & Schiffermüller, 1775)	*		h	*1
Megaloptera	Sialidae	Sialis fuliginosa Pictet, 1836	D		s	*3
Megaloptera	Sialidae	Sialis lutaria (Linnaeus, 1758)	D		mh	*3
Megaloptera	Sialidae	Sialis nigripes Pictet, 1865	D		ss	*3
Neuroptera	Ascalaphidae	Libelloides coccajus (Denis & Schiffermüller, 1775)	D		ss	*3
Neuroptera	Ascalaphidae	Libelloides longicornis (Linnaeus, 1764)	D		?	*3
Neuroptera	Chrysopidae	Chrysopa abbreviata Curtis, 1834	D		ss	*3
Neuroptera	Chrysopidae	Chrysopa commata Kis & Újhelyi, 1965	D		mh	*3
Neuroptera	Chrysopidae	Chrysopa dorsalis Burmeister, 1839	D		mh	*3
Neuroptera	Chrysopidae	Chrysopa formosa Brauer, 1850	D		?	*3
Neuroptera	Chrysopidae	Chrysopa nigricostata Brauer, 1850	D		ss	*3
Neuroptera	Chrysopidae	Chrysopa pallens (Rambur, 1838)	D		mh	*3
Neuroptera	Chrysopidae	Chrysopa perla (Linnaeus, 1758)	D		h	*3
Neuroptera	Chrysopidae	Chrysopa phyllochroma Wesmael, 1841	D		ss	*3

Order	Family	Species	K	L	P	S
Neuroptera	Chrysopidae	Chrysopa viridana Schneider, 1845	D		ss	*3
Neuroptera	Chrysopidae	Chrysopa walkeri McLachlan, 1893	D		?	*3
Neuroptera	Chrysopidae	Chrysoperla carnea (Stephens, 1836)	D		sh	*3
Neuroptera	Chrysopidae	Chrysoperla lucasina (Lacroix, 1912)	D		h	*3
Neuroptera	Chrysopidae	Chrysoperla mediterranea (Hölzel, 1972)	R		es	*3
Neuroptera	Chrysopidae	Chrysoperla pallida Henry, Brooks, Duelli & Johnson, 2002	D		mh	*3
Neuroptera	Chrysopidae	Chrysotropia ciliata (Wesmael, 1841)	D		mh	*3
Neuroptera	Chrysopidae	Cunctochrysa albolineata (Killington, 1935)	D		mh	*3
Neuroptera	Chrysopidae	Hypochrysa elegans (Burmeister, 1839)	D		mh	*3
Neuroptera	Chrysopidae	Nineta flava (Scopoli, 1763)	D		mh	*3
Neuroptera	Chrysopidae	Nineta inpunctata (Reuter, 1894)	D		ss	*3
Neuroptera	Chrysopidae	Nineta pallida (Schneider, 1846)	D		mh	*3
Neuroptera	Chrysopidae	Nineta principiae Monserrat, 1980	D		ss	*3
Neuroptera	Chrysopidae	Nineta vittata (Wesmael, 1841)	D		mh	*3
Neuroptera	Chrysopidae	Nothochrysa capitata (Fabricius, 1793)	D		s	*3
Neuroptera	Chrysopidae	Nothochrysa fulviceps (Stephens, 1836)	D		mh	*3
Neuroptera	Chrysopidae	Peyerimhoffina gracilis (Schneider, 1851)	D		h	*3
Neuroptera	Chrysopidae	Pseudomallada abdominalis (Brauer, 1856)	D		mh	*3
Neuroptera	Chrysopidae	Pseudomallada flavifrons (Brauer, 1850)	D		mh	*3
Neuroptera	Chrysopidae	Pseudomallada inornatus (Navás, 1901)	D		?	*3
Neuroptera	Chrysopidae	Pseudomallada prasinus (Burmeister, 1839)	D		mh	*3
Neuroptera	Chrysopidae	Pseudomallada ventralis (Curtis, 1834)	D		mh	*3
Neuroptera	Coniopterygidae	Aleuropteryx juniperi Ohm, 1968	D		ss	*3
Neuroptera	Coniopterygidae	Aleuropteryx loewii Klapálek, 1894	D		ss	*3
Neuroptera	Coniopterygidae	Coniopteryx arcuata Kis, 1965	D		?	*3
Neuroptera	Coniopterygidae	Coniopteryx aspoecki Kis, 1967	D		ss	*3
Neuroptera	Coniopterygidae	Coniopteryx borealis Tjeder, 1930	D		mh	*3
Neuroptera	Coniopterygidae	Coniopteryx drammonti Rousset, 1964	D		?	*3
Neuroptera	Coniopterygidae	Coniopteryx esbenpeterseni Tjeder, 1930	D		h	*3
Neuroptera	Coniopterygidae	Coniopteryx haematica McLachlan, 1868	D		s	*3
Neuroptera	Coniopterygidae	Coniopteryx hoelzeli H. Aspöck, 1964	D		ss	*3
Neuroptera	Coniopterygidae	Coniopteryx lentiae H. Aspöck & U. Aspöck, 1964	D		ss	*3
Neuroptera	Coniopterygidae	Coniopteryx pygmaea Enderlein, 1906	D		h	*3
Neuroptera	Coniopterygidae	Coniopteryx tineiformis Curtis, 1834	D		mh	*3
Neuroptera	Coniopterygidae	Coniopteryx tjederi Kimmins, 1934	R		es	*3
Neuroptera	Coniopterygidae	Conwentzia pineticola Enderlein, 1905	D		mh	*3
Neuroptera	Coniopterygidae	Conwentzia psociformis (Curtis, 1834)	D		mh	*3
Neuroptera	Coniopterygidae	Helicoconis eglini Ohm, 1965	0	1919	ex	*3
Neuroptera	Coniopterygidae	Helicoconis hirtinervis Tjeder, 1960	D		ss	*3
Neuroptera	Coniopterygidae	Helicoconis lutea (Wallengren, 1871)	D		s	*3
Neuroptera	Coniopterygidae	Helicoconis pseudolutea Ohm, 1965	D		ss	*3
Neuroptera	Coniopterygidae	Parasemidalis fuscipennis (Reuter, 1894)	D		s	*3
Neuroptera	Coniopterygidae	Semidalis aleyrodiformis (Stephens, 1836)	D		mh	*3
Neuroptera	Coniopterygidae	Semidalis pseudouncinata Meinander, 1963	D		ss	*3
Neuroptera	Hemerobiidae	Drepanepteryx algida (Erichson in Middendorff, 1851)	D		s	*3
Neuroptera	Hemerobiidae	Drepanepteryx phalaenoides (Linnaeus, 1758)	D		mh	*3
Neuroptera	Hemerobiidae	Hemerobius atrifrons McLachlan, 1868	D		mh	*3
Neuroptera	Hemerobiidae	Hemerobius contumax Tjeder, 1932	D		s	*3
Neuroptera	Hemerobiidae	Hemerobius fenestratus Tjeder, 1932	D		mh	*3
Neuroptera	Hemerobiidae	Hemerobius gilvus Stein, 1863	R		es	*3
Neuroptera	Hemerobiidae	Hemerobius handschini Tjeder, 1957	D		s	*3
Neuroptera	Hemerobiidae	Hemerobius humulinus Linnaeus, 1758	D		h	*3
Neuroptera	Hemerobiidae	Hemerobius lutescens Fabricius, 1793	D		mh	*3
Neuroptera	Hemerobiidae	Hemerobius marginatus Stephens, 1836	D		s	*3
Neuroptera	Hemerobiidae	Hemerobius micans Olivier, 1792	D		h	*3
Neuroptera	Hemerobiidae	Hemerobius nitidulus Fabricius, 1777	D		mh	*3
Neuroptera	Hemerobiidae	Hemerobius perelegans Stephens, 1836	D		ss	*3
Neuroptera	Hemerobiidae	Hemerobius pini Stephens, 1836	D		mh	*3
Neuroptera	Hemerobiidae	Hemerobius schedli Hölzel, 1970	R		es	*3
Neuroptera	Hemerobiidae	Hemerobius simulans Walker, 1853	D		s	*3
Neuroptera	Hemerobiidae	Hemerobius stigma Stephens, 1836	D		mh	*3
Neuroptera	Hemerobiidae	Megalomus hirtus (Linnaeus, 1761)	D		ss	*3
Neuroptera	Hemerobiidae	Megalomus tortricoides Rambur, 1842	D		s	*3
Neuroptera	Hemerobiidae	Micromus angulatus (Stephens, 1836)	D		mh	*3
Neuroptera	Hemerobiidae	Micromus lanosus (Zelený, 1962)	D		s	*3
Neuroptera	Hemerobiidae	Micromus paganus (Linnaeus, 1767)	D		mh	*3
Neuroptera	Hemerobiidae	Micromus variegatus (Fabricius, 1793)	D		h	*3
Neuroptera	Hemerobiidae	Psectra diptera (Burmeister, 1839)	D		s	*3
Neuroptera	Hemerobiidae	Sympherobius elegans (Stephens, 1836)	D		mh	*3
Neuroptera	Hemerobiidae	Sympherobius fuscescens (Wallengren, 1863)	D		ss	*3
Neuroptera	Hemerobiidae	Sympherobius klapaleki Zelený, 1963	D		s	*3
Neuroptera	Hemerobiidae	Sympherobius pellucidus (Walker, 1853)	D		mh	*3
Neuroptera	Hemerobiidae	Sympherobius pygmaeus (Rambur, 1842)	D		mh	*3
Neuroptera	Hemerobiidae	Wesmaelius balticus (Tjeder, 1931)	D		?	*3
Neuroptera	Hemerobiidae	Wesmaelius concinnus (Stephens, 1836)	D		s	*3
Neuroptera	Hemerobiidae	Wesmaelius cunctatus (Ohm, 1967)	D		?	*3
Neuroptera	Hemerobiidae	Wesmaelius fassnidgei (Killington, 1933)	D		ss	*3
Neuroptera	Hemerobiidae	Wesmaelius malladai (Navás, 1925)	D		ss	*3
Neuroptera	Hemerobiidae	Wesmaelius mortoni (McLachlan, 1899)	D		ss	*3
Neuroptera	Hemerobiidae	Wesmaelius nervosus (Fabricius, 1793)	D		mh	*3

Order	Family	Species	K	L	P	S
Neuroptera	Hemerobiidae	Wesmaelius quadrifasciatus (Reuter, 1894)	D		mh	*3
Neuroptera	Hemerobiidae	Wesmaelius ravus (Withycombe, 1923)	D		ss	*3
Neuroptera	Hemerobiidae	Wesmaelius subnebulosus (Stephens, 1836)	D		mh	*3
Neuroptera	Hemerobiidae	Wesmaelius tjederi (Kimmins, 1963)	D		ss	*3
Neuroptera	Mantispidae	Mantispa styriaca (Poda, 1761)	0	1978	ex	*3
Neuroptera	Myrmeleontidae	Dendroleon pantherinus (Fabricius, 1787)	D		?	*3
Neuroptera	Myrmeleontidae	Distoleon tetragrammicus (Fabricius, 1798)	D		ss	*3
Neuroptera	Myrmeleontidae	Euroleon nostras (Geoffroy in Fourcroy, 1785)	D		mh	*3
Neuroptera	Myrmeleontidae	Myrmeleon bore (Tjeder, 1941)	D		ss	*3
Neuroptera	Myrmeleontidae	Myrmeleon formicarius Linnaeus, 1767	D		s	*3
Neuroptera	Osmylidae	Osmylus fulvicephalus (Scopoli, 1763)	D		mh	*3
Neuroptera	Sisyridae	Sisyra bureschi Rausch & Weissmair, 2007	R		es	*3
Neuroptera	Sisyridae	Sisyra dalii McLachlan, 1866	D		ss	*3
Neuroptera	Sisyridae	Sisyra jutlandica Esben-Petersen, 1915	D		?	*3
Neuroptera	Sisyridae	Sisyra nigra (Retzius, 1783)	D		mh	*3
Neuroptera	Sisyridae	Sisyra terminalis Curtis, 1854	D		mh	*3
Odonata	Aeshnidae	Aeshna affinis Vander Linden, 1820	*		mh	*3
Odonata	Aeshnidae	Aeshna caerulea (Ström, 1783)	1		es	*3
Odonata	Aeshnidae	Aeshna cyanea (Müller, 1764)	*		sh	*3
Odonata	Aeshnidae	Aeshna grandis (Linnaeus, 1758)	*		h	*3
Odonata	Aeshnidae	Aeshna isoceles (Müller, 1767)	*		mh	*3
Odonata	Aeshnidae	Aeshna juncea (Linnaeus, 1758)	V		mh	*3
Odonata	Aeshnidae	Aeshna mixta Latreille, 1805	*		h	*3
Odonata	Aeshnidae	Aeshna subarctica elisabethae Djakonov, 1922	1		s	*3
Odonata	Aeshnidae	Aeshna viridis Eversmann, 1836	2		s	*3
Odonata	Aeshnidae	Anax imperator Leach, 1815	*		sh	*3
Odonata	Aeshnidae	Anax parthenope Selys, 1839	*		mh	*3
Odonata	Aeshnidae	Boyeria irene (Fonscolombe, 1838)	R		es	*3
Odonata	Aeshnidae	Brachytron pratense (Müller, 1764)	*		mh	*3
Odonata	Calopterygidae	Calopteryx splendens (Harris, 1780)	*		sh	*3
Odonata	Calopterygidae	Calopteryx virgo (Linnaeus, 1758)	*		h	*3
Odonata	Coenagrionidae	Ceriagrion tenellum (de Villers, 1789)	V		s	*3
Odonata	Coenagrionidae	Coenagrion armatum (Charpentier, 1840)	1		es	*3
Odonata	Coenagrionidae	Coenagrion hastulatum (Charpentier, 1825)	2		mh	*3
Odonata	Coenagrionidae	Coenagrion hylas (Trybom, 1889)	0	1967	ex	*3
Odonata	Coenagrionidae	Coenagrion lunulatum (Charpentier, 1840)	1		s	*3
Odonata	Coenagrionidae	Coenagrion mercuriale (Charpentier, 1840)	2		s	*3
Odonata	Coenagrionidae	Coenagrion ornatum (Selys, 1850)	1		es	*3
Odonata	Coenagrionidae	Coenagrion puella (Linnaeus, 1758)	*		sh	*3
Odonata	Coenagrionidae	Coenagrion pulchellum (Vander Linden, 1825)	*		h	*3
Odonata	Coenagrionidae	Coenagrion scitulum (Rambur, 1842)	R		es	*3
Odonata	Coenagrionidae	Enallagma cyathigerum (Charpentier, 1840)	*		sh	*3
Odonata	Coenagrionidae	Erythromma lindenii (Selys, 1840)	*		mh	*3
Odonata	Coenagrionidae	Erythromma najas (Hansemann, 1823)	*		h	*3
Odonata	Coenagrionidae	Erythromma viridulum (Charpentier, 1840)	*		h	*3
Odonata	Coenagrionidae	Ischnura elegans (Vander Linden, 1820)	*		sh	*3
Odonata	Coenagrionidae	Ischnura pumilio (Charpentier, 1825)	V		mh	*3
Odonata	Coenagrionidae	Nehalennia speciosa (Charpentier, 1840)	1		es	*3
Odonata	Coenagrionidae	Pyrrhosoma nymphula (Sulzer, 1776)	*		sh	*3
Odonata	Cordulegastridae	Cordulegaster bidentata Selys, 1843	3		s	*3
Odonata	Cordulegastridae	Cordulegaster boltonii (Donovan, 1807)	*		mh	*3
Odonata	Corduliidae	Cordulia aenea (Linnaeus, 1758)	*		h	*3
Odonata	Corduliidae	Epitheca bimaculata (Charpentier, 1825)	*		s	*3
Odonata	Corduliidae	Oxygastra curtisii (Dale, 1834)	R		es	*3
Odonata	Corduliidae	Somatochlora alpestris (Selys, 1840)	1		es	*3
Odonata	Corduliidae	Somatochlora arctica (Zetterstedt, 1840)	2		s	*3
Odonata	Corduliidae	Somatochlora flavomaculata (Vander Linden, 1825)	3		mh	*3
Odonata	Corduliidae	Somatochlora metallica (Vander Linden, 1825)	*		h	*3
Odonata	Gomphidae	Gomphus flavipes (Charpentier, 1825)	*		s	*3
Odonata	Gomphidae	Gomphus pulchellus Selys, 1840	*		mh	*3
Odonata	Gomphidae	Gomphus simillimus Selys, 1840	R		es	*3
Odonata	Gomphidae	Gomphus vulgatissimus (Linnaeus, 1758)	V		mh	*3
Odonata	Gomphidae	Onychogomphus forcipatus (Linnaeus, 1758)	V		s	*3
Odonata	Gomphidae	Onychogomphus uncatus (Charpentier, 1840)	0	1970	ex	*3
Odonata	Gomphidae	Ophiogomphus cecilia (Fourcroy, 1785)	*		mh	*3
Odonata	Lestidae	Chalcolestes viridis (Vander Linden, 1825)	*		h	*3
Odonata	Lestidae	Lestes barbarus (Fabricius, 1798)	*		mh	*3
Odonata	Lestidae	Lestes dryas Kirby, 1890	3		mh	*3
Odonata	Lestidae	Lestes sponsa (Hansemann, 1823)	*		h	*3
Odonata	Lestidae	Lestes virens vestalis Rambur, 1842	*		mh	*3
Odonata	Lestidae	Sympecma fusca (Vander Linden, 1820)	*		h	*3
Odonata	Lestidae	Sympecma paedisca (Brauer, 1877)	1		ss	*3
Odonata	Libellulidae	Crocothemis erythraea (Brullé, 1832)	*		mh	*3
Odonata	Libellulidae	Leucorrhinia albifrons (Burmeister, 1839)	2		ss	*3
Odonata	Libellulidae	Leucorrhinia caudalis (Charpentier, 1840)	3		ss	*3
Odonata	Libellulidae	Leucorrhinia dubia (Vander Linden, 1825)	3		mh	*3
Odonata	Libellulidae	Leucorrhinia pectoralis (Charpentier, 1825)	3		mh	*3
Odonata	Libellulidae	Leucorrhinia rubicunda (Linnaeus, 1758)	3		mh	*3
Odonata	Libellulidae	Libellula depressa Linnaeus, 1758	*		sh	*3
Odonata	Libellulidae	Libellula fulva Müller, 1764	*		mh	*3

Order	Family	Species	K	L	P	S
Odonata	Libellulidae	Libellula quadrimaculata Linnaeus, 1758	*		sh	*3
Odonata	Libellulidae	Orthetrum albistylum (Selys, 1848)	R		es	*3
Odonata	Libellulidae	Orthetrum brunneum (Fonscolombe, 1837)	*		mh	*3
Odonata	Libellulidae	Orthetrum cancellatum (Linnaeus, 1758)	*		sh	*3
Odonata	Libellulidae	Orthetrum coerulescens (Fabricius, 1798)	V		mh	*3
Odonata	Libellulidae	Sympetrum danae (Sulzer, 1776)	*		h	*3
Odonata	Libellulidae	Sympetrum depressiusculum (Selys, 1841)	1		ss	*3
Odonata	Libellulidae	Sympetrum flaveolum (Linnaeus, 1758)	3		h	*3
Odonata	Libellulidae	Sympetrum fonscolombii (Selys, 1840)	*		mh	*3
Odonata	Libellulidae	Sympetrum meridionale (Selys, 1841)	*		ss	*3
Odonata	Libellulidae	Sympetrum pedemontanum (Müller in Allioni, 1766)	2		s	*3
Odonata	Libellulidae	Sympetrum sanguineum (Müller, 1764)	*		sh	*3
Odonata	Libellulidae	Sympetrum striolatum (Charpentier, 1840)	*		h	*3
Odonata	Libellulidae	Sympetrum vulgatum (Linnaeus, 1758)	*		h	*3
Odonata	Platycnemididae	Platycnemis pennipes (Pallas, 1771)	*		h	*3
Orthoptera	Acrididae	Acrotylus patruelis (Herrich-Schäffer, 1838)	nb		nb	*1
Orthoptera	Acrididae	Aiolopus thalassinus (Fabricius, 1781)	2		ss	*1
Orthoptera	Acrididae	Arcyptera fusca (Pallas, 1773)	1		es	*1
Orthoptera	Acrididae	Arcyptera microptera (Fischer von Waldheim, 1833)	0	1957	ex	*1
Orthoptera	Acrididae	Bryodemella tuberculata (Fabricius, 1775)	1		ss	*1
Orthoptera	Acrididae	Calliptamus italicus (Linnaeus, 1758)	2		ss	*1
Orthoptera	Acrididae	Chorthippus albomarginatus (De Geer, 1773)	*		h	*1
Orthoptera	Acrididae	Chorthippus apricarius (Linnaeus, 1758)	*		h	*1
Orthoptera	Acrididae	Chorthippus biguttulus (Linnaeus, 1758)	*		sh	*1
Orthoptera	Acrididae	Chorthippus brunneus (Thunberg, 1815)	*		sh	*1
Orthoptera	Acrididae	Chorthippus dorsatus (Zetterstedt, 1821)	*		h	*1
Orthoptera	Acrididae	Chorthippus mollis (Charpentier, 1825)	*		h	*1
Orthoptera	Acrididae	Chorthippus montanus (Charpentier, 1825)	V		h	*1
Orthoptera	Acrididae	Chorthippus parallelus (Zetterstedt, 1821)	*		sh	*1
Orthoptera	Acrididae	Chorthippus pullus (Philippi, 1830)	1		ss	*1
Orthoptera	Acrididae	Chorthippus vagans (Eversmann, 1848)	3		s	*1
Orthoptera	Acrididae	Chrysochraon dispar (Germar, 1834)	*		h	*1
Orthoptera	Acrididae	Epacromius tergestinus (Charpentier, 1825)	0	1941	ex	*1
Orthoptera	Acrididae	Euthystira brachyptera (Ocskay, 1826)	*		mh	*1
Orthoptera	Acrididae	Gomphocerippus rufus (Linnaeus, 1758)	*		mh	*1
Orthoptera	Acrididae	Gomphocerus sibiricus (Linnaeus, 1767)	*		ss	*1
Orthoptera	Acrididae	Locusta migratoria Linnaeus, 1758	nb		nb	*1
Orthoptera	Acrididae	Mecostethus parapleurus (Hagenbach, 1822)	3		ss	*1
Orthoptera	Acrididae	Miramella alpina (Kollar, 1833)	V		s	*1
Orthoptera	Acrididae	Myrmeleotettix maculatus (Thunberg, 1815)	*		h	*1
Orthoptera	Acrididae	Oedipoda caerulescens (Linnaeus, 1758)	V		mh	*1
Orthoptera	Acrididae	Oedipoda germanica (Latreille, 1804)	1		ss	*1
Orthoptera	Acrididae	Omocestus haemorrhoidalis (Charpentier, 1825)	3		mh	*1
Orthoptera	Acrididae	Omocestus rufipes (Zetterstedt, 1821)	2		s	*1
Orthoptera	Acrididae	Omocestus viridulus (Linnaeus, 1758)	*		h	*1
Orthoptera	Acrididae	Podisma pedestris (Linnaeus, 1758)	2		ss	*1
Orthoptera	Acrididae	Psophus stridulus (Linnaeus, 1758)	2		s	*1
Orthoptera	Acrididae	Sphingonotus caerulans (Linnaeus, 1767)	2		s	*1
Orthoptera	Acrididae	Stauroderus scalaris (Fischer von Waldheim, 1846)	2		ss	*1
Orthoptera	Acrididae	Stenobothrus crassipes (Charpentier, 1825)	R		es	*1
Orthoptera	Acrididae	Stenobothrus lineatus (Panzer, 1796)	*		h	*1
Orthoptera	Acrididae	Stenobothrus nigromaculatus (Herrich-Schäffer, 1840)	2		ss	*1
Orthoptera	Acrididae	Stenobothrus stigmaticus (Rambur, 1838)	3		s	*1
Orthoptera	Acrididae	Stethophyma grossum (Linnaeus, 1758)	*		h	*1
Orthoptera	Gryllidae	Acheta domesticus (Linnaeus, 1758)	*		mh	*1
Orthoptera	Gryllidae	Eumodicogryllus bordigalensis (Latreille, 1804)	nb		nb	*1
Orthoptera	Gryllidae	Gryllodes sigillatus (Walker, 1869)	nb		nb	*1
Orthoptera	Gryllidae	Gryllus bimaculatus De Geer, 1773	nb		nb	*1
Orthoptera	Gryllidae	Gryllus campestris Linnaeus, 1758	*		mh	*1
Orthoptera	Gryllidae	Modicogryllus frontalis (Fieber, 1844)	1		es	*1
Orthoptera	Gryllidae	Myrmecophilus acervorum (Panzer, 1799)	D		ss	*1
Orthoptera	Gryllidae	Nemobius sylvestris (Bosc, 1792)	*		mh	*1
Orthoptera	Gryllidae	Oecanthus pellucens (Scopoli, 1763)	*		s	*1
Orthoptera	Gryllidae	Pteronemobius heydenii (Fischer, 1853)	2		ss	*1
Orthoptera	Gryllotalpidae	Gryllotalpa gryllotalpa (Linnaeus, 1758)	G		mh	*1
Orthoptera	Raphidophoridae	Tachycines asynamorus Adelung, 1902	nb		nb	*1
Orthoptera	Raphidophoridae	Troglophilus neglectus Krauss, 1879	R		es	*1
Orthoptera	Tetrigidae	Tetrix bipunctata (Linnaeus, 1758)	2		s	*1
Orthoptera	Tetrigidae	Tetrix ceperoi (Bolívar, 1887)	2		ss	*1
Orthoptera	Tetrigidae	Tetrix subulata (Linnaeus, 1758)	*		h	*1
Orthoptera	Tetrigidae	Tetrix tenuicornis (Sahlberg, 1893)	*		mh	*1
Orthoptera	Tetrigidae	Tetrix tuerki (Krauss, 1876)	1		es	*1
Orthoptera	Tetrigidae	Tetrix undulata (Sowerby, 1806)	*		h	*1
Orthoptera	Tettigoniidae	Barbitistes constrictus Brunner von Wattenwyl, 1878	*		s	*1
Orthoptera	Tettigoniidae	Barbitistes serricauda (Fabricius, 1798)	*		s	*1
Orthoptera	Tettigoniidae	Conocephalus dorsalis (Latreille, 1804)	*		h	*1
Orthoptera	Tettigoniidae	Conocephalus fuscus (Fabricius, 1793)	*		h	*1
Orthoptera	Tettigoniidae	Decticus verrucivorus (Linnaeus, 1758)	3		mh	*1
Orthoptera	Tettigoniidae	Ephippiger ephippiger (Fiebig, 1784)	2		ss	*1
Orthoptera	Tettigoniidae	Gampsocleis glabra (Herbst, 1786)	1		es	*1

Order	Family	Species	K	L	P	S
Orthoptera	Tettigoniidae	Isophya kraussii Brunner von Wattenwyl, 1878	V		s	*1
Orthoptera	Tettigoniidae	Leptophyes albovittata (Kollar, 1833)	*		s	*1
Orthoptera	Tettigoniidae	Leptophyes punctatissima (Bosc, 1792)	*		mh	*1
Orthoptera	Tettigoniidae	Meconema meridionale A. Costa, 1860	*		ss	*1
Orthoptera	Tettigoniidae	Meconema thalassinum (De Geer, 1773)	*		h	*1
Orthoptera	Tettigoniidae	Metrioptera bicolor (Philippi, 1830)	*		mh	*1
Orthoptera	Tettigoniidae	Metrioptera brachyptera (Linnaeus, 1761)	*		h	*1
Orthoptera	Tettigoniidae	Metrioptera roeselii (Hagenbach, 1822)	*		sh	*1
Orthoptera	Tettigoniidae	Phaneroptera falcata (Poda, 1761)	*		mh	*1
Orthoptera	Tettigoniidae	Phaneroptera nana Fieber, 1853	*		ss	*1
Orthoptera	Tettigoniidae	Pholidoptera aptera (Fabricius, 1793)	*		ss	*1
Orthoptera	Tettigoniidae	Pholidoptera griseoaptera (De Geer, 1773)	*		h	*1
Orthoptera	Tettigoniidae	Platycleis albopunctata (Goeze, 1778)	*		mh	*1
Orthoptera	Tettigoniidae	Platycleis montana (Kollar, 1833)	1		es	*1
Orthoptera	Tettigoniidae	Platycleis tessellata (Charpentier, 1825)	1		es	*1
Orthoptera	Tettigoniidae	Polysarcus denticauda (Charpentier, 1825)	2		ss	*1
Orthoptera	Tettigoniidae	Ruspolia nitidula (Scopoli, 1786)	R		es	*1
Orthoptera	Tettigoniidae	Tettigonia cantans (Fuessly, 1775)	*		h	*1
Orthoptera	Tettigoniidae	Tettigonia caudata (Charpentier, 1842)	*		ss	*1
Orthoptera	Tettigoniidae	Tettigonia viridissima Linnaeus, 1758	*		sh	*1
Plecoptera	Capniidae	Capnia nigra (Pictet, 1833)	3		ss	*3
Plecoptera	Capniidae	Capnia vidua Klapálek, 1904	*		h	*3
Plecoptera	Capniidae	Capnioneura mitis Despax, 1932	1		es	*3
Plecoptera	Capniidae	Capnioneura nemuroides Ris, 1905	3		ss	*3
Plecoptera	Capniidae	Capnopsis schilleri (Rostock, 1892)	3		s	*3
Plecoptera	Capniidae	Zwicknia acuta Murányi & Orci, 2014	D		?	*3
Plecoptera	Capniidae	Zwicknia bifrons (Newman, 1839)	D		?	*3
Plecoptera	Capniidae	Zwicknia rupprechti Murányi, Orci & Gamboa, 2014	D		?	*3
Plecoptera	Capniidae	Zwicknia westermanni Boumans & Murányi, 2014	D		?	*3
Plecoptera	Chloroperlidae	Chloroperla susemicheli Zwick, 1967	3		s	*3
Plecoptera	Chloroperlidae	Chloroperla tripunctata (Scopoli, 1763)	*		mh	*3
Plecoptera	Chloroperlidae	Isoptena sericornis (Pictet, 1841)	2		s	*3
Plecoptera	Chloroperlidae	Siphonoperla burmeisteri (Pictet, 1841)	0	1839	ex	*3
Plecoptera	Chloroperlidae	Siphonoperla montana (Pictet, 1841)	3		ss	*3
Plecoptera	Chloroperlidae	Siphonoperla neglecta (Rostock & Kolbe, 1888)	V		s	*3
Plecoptera	Chloroperlidae	Siphonoperla taurica (Pictet, 1841)	2		ss	*3
Plecoptera	Chloroperlidae	Siphonoperla torrentium (Pictet, 1841)	*		sh	*3
Plecoptera	Chloroperlidae	Xanthoperla apicalis (Newman, 1836)	2		es	*3
Plecoptera	Leuctridae	Leuctra albida Kempny, 1899	*		sh	*3
Plecoptera	Leuctridae	Leuctra alpina Kühtreiber, 1934	3		s	*3
Plecoptera	Leuctridae	Leuctra armata Kempny, 1899	3		ss	*3
Plecoptera	Leuctridae	Leuctra aurita Navas, 1919	*		h	*3
Plecoptera	Leuctridae	Leuctra autumnalis Aubert, 1948	3		s	*3
Plecoptera	Leuctridae	Leuctra braueri Kempny, 1898	V		h	*3
Plecoptera	Leuctridae	Leuctra cingulata Kempny, 1899	3		s	*3
Plecoptera	Leuctridae	Leuctra dalmoni Vinçon & Murányi, 2007	D		?	*3
Plecoptera	Leuctridae	Leuctra digitata Kempny, 1899	*		h	*3
Plecoptera	Leuctridae	Leuctra fusca (Linnaeus, 1758)	*		sh	*3
Plecoptera	Leuctridae	Leuctra geniculata (Stephens, 1836)	*		h	*3
Plecoptera	Leuctridae	Leuctra handlirschi Kempny, 1898	D		?	*3
Plecoptera	Leuctridae	Leuctra helvetica Aubert, 1956	3		ss	*3
Plecoptera	Leuctridae	Leuctra hippopus Kempny, 1899	*		sh	*3
Plecoptera	Leuctridae	Leuctra inermis Kempny, 1899	*		sh	*3
Plecoptera	Leuctridae	Leuctra leptogaster Aubert, 1949	3		s	*3
Plecoptera	Leuctridae	Leuctra major Brinck, 1949	*		mh	*3
Plecoptera	Leuctridae	Leuctra mortoni Kempny, 1899	2		es	*3
Plecoptera	Leuctridae	Leuctra moselyi Morton, 1929	V		s	*3
Plecoptera	Leuctridae	Leuctra nigra (Olivier, 1811)	*		sh	*3
Plecoptera	Leuctridae	Leuctra niveola Schmid, 1947	2		es	*3
Plecoptera	Leuctridae	Leuctra prima Kempny, 1899	*		sh	*3
Plecoptera	Leuctridae	Leuctra pseudocingulata Mendl, 1968	*		mh	*3
Plecoptera	Leuctridae	Leuctra pseudorosinae Aubert, 1954	3		ss	*3
Plecoptera	Leuctridae	Leuctra pseudosignifera Aubert, 1954	*		sh	*3
Plecoptera	Leuctridae	Leuctra rauscheri Aubert, 1957	3		mh	*3
Plecoptera	Leuctridae	Leuctra rosinae Kempny, 1900	2		ss	*3
Plecoptera	Leuctridae	Leuctra subalpina Vinçon, Ravizza & Aubert, 1995	2		es	*3
Plecoptera	Leuctridae	Leuctra teriolensis Kempny, 1900	3		ss	*3
Plecoptera	Nemouridae	Amphinemura borealis (Morton, 1894)	3		ss	*3
Plecoptera	Nemouridae	Amphinemura standfussi (Ris, 1902)	*		sh	*3
Plecoptera	Nemouridae	Amphinemura sulcicollis (Stephens, 1836)	*		h	*3
Plecoptera	Nemouridae	Amphinemura triangularis (Ris, 1902)	3		s	*3
Plecoptera	Nemouridae	Nemoura avicularis Morton, 1894	*		h	*3
Plecoptera	Nemouridae	Nemoura cambrica Stephens, 1836	*		sh	*3
Plecoptera	Nemouridae	Nemoura cinerea (Retzius, 1783)	*		sh	*3
Plecoptera	Nemouridae	Nemoura dubitans Morton, 1894	*		h	*3
Plecoptera	Nemouridae	Nemoura flexuosa Aubert, 1949	*		sh	*3
Plecoptera	Nemouridae	Nemoura marginata Pictet, 1835	*		sh	*3
Plecoptera	Nemouridae	Nemoura minima Aubert, 1946	2		ss	*3
Plecoptera	Nemouridae	Nemoura mortoni Ris, 1902	3		mh	*3
Plecoptera	Nemouridae	Nemoura obtusa Ris, 1902	3		ss	*3

Order	Family	Species	K	L	P	S
Plecoptera	Nemouridae	Nemoura sciurus Aubert, 1949	V		mh	*3
Plecoptera	Nemouridae	Nemoura sinuata Ris, 1902	3		ss	*3
Plecoptera	Nemouridae	Nemoura uncinata Despax, 1934	3		mh	*3
Plecoptera	Nemouridae	Nemoura undulata Ris, 1902	R		es	*3
Plecoptera	Nemouridae	Nemurella pictetii Klapálek, 1900	*		sh	*3
Plecoptera	Nemouridae	Protonemura algovia Mendl, 1968	2		es	*3
Plecoptera	Nemouridae	Protonemura auberti Illies, 1954	*		sh	*3
Plecoptera	Nemouridae	Protonemura austriaca Theischinger, 1976	2		ss	*3
Plecoptera	Nemouridae	Protonemura brevistyla (Ris, 1902)	2		ss	*3
Plecoptera	Nemouridae	Protonemura hrabei Raušer,1956	3		s	*3
Plecoptera	Nemouridae	Protonemura intricata (Ris, 1902)	*		sh	*3
Plecoptera	Nemouridae	Protonemura lateralis (Pictet, 1835)	3		s	*3
Plecoptera	Nemouridae	Protonemura meyeri (Pictet, 1841)	*		sh	*3
Plecoptera	Nemouridae	Protonemura montana Kimmins, 1941	2		s	*3
Plecoptera	Nemouridae	Protonemura nimborella (Mosely, 1930)	3		ss	*3
Plecoptera	Nemouridae	Protonemura nimborum (Ris, 1902)	V		s	*3
Plecoptera	Nemouridae	Protonemura nitida (Pictet, 1835)	*		h	*3
Plecoptera	Nemouridae	Protonemura praecox (Morton, 1894)	*		h	*3
Plecoptera	Nemouridae	Protonemura risi (Jacobson & Bianchi, 1905)	V		h	*3
Plecoptera	Perlidae	Agnetina elegantula (Klapálek, 1905)	0	1966	ex	*3
Plecoptera	Perlidae	Dinocras cephalotes (Curtis, 1827)	*		sh	*3
Plecoptera	Perlidae	Dinocras megacephala (Klapálek, 1907)	2		es	*3
Plecoptera	Perlidae	Marthamea selysii (Pictet, 1841)	0	1958	ex	*3
Plecoptera	Perlidae	Marthamea vitripennis (Burmeister, 1839)	0	1893	ex	*3
Plecoptera	Perlidae	Perla abdominalis Burmeister, 1839	*		mh	*3
Plecoptera	Perlidae	Perla bipunctata Pictet, 1833	D		ss	*3
Plecoptera	Perlidae	Perla grandis Rambur, 1842	3		ss	*3
Plecoptera	Perlidae	Perla marginata (Panzer, 1799)	*		h	*3
Plecoptera	Perlodidae	Arcynopteryx dichroa (McLachlan, 1872)	2		es	*3
Plecoptera	Perlodidae	Besdolus imhoffi (Pictet, 1841)	2		ss	*3
Plecoptera	Perlodidae	Besdolus ventralis (Pictet, 1841)	0	1913	ex	*3
Plecoptera	Perlodidae	Dictyogenus alpinum (Pictet, 1841)	3		ss	*3
Plecoptera	Perlodidae	Dictyogenus fontium (Ris, 1896)	3		ss	*3
Plecoptera	Perlodidae	Diura bicaudata (Linnaeus, 1758)	*		h	*3
Plecoptera	Perlodidae	Isogenus nubecula Newman, 1833	0	1973	ex	*3
Plecoptera	Perlodidae	Isoperla albanica Aubert, 1964	3		ss	*3
Plecoptera	Perlodidae	Isoperla difformis (Klapálek, 1909)	3		s	*3
Plecoptera	Perlodidae	Isoperla goertzi Illies, 1952	V		h	*3
Plecoptera	Perlodidae	Isoperla grammatica (Poda, 1761)	*		sh	*3
Plecoptera	Perlodidae	Isoperla lugens (Klapálek, 1923)	2		es	*3
Plecoptera	Perlodidae	Isoperla obscura (Zetterstedt, 1840)	1		es	*3
Plecoptera	Perlodidae	Isoperla oxylepis (Despax, 1936)	*		h	*3
Plecoptera	Perlodidae	Isoperla pawlowskii Wojtas, 1961	1		es	*3
Plecoptera	Perlodidae	Isoperla rivulorum (Pictet, 1841)	V		mh	*3
Plecoptera	Perlodidae	Isoperla silesica Illies, 1952	2		es	*3
Plecoptera	Perlodidae	Isoperla sudetica (Kolenati, 1859)	2		ss	*3
Plecoptera	Perlodidae	Perlodes dispar (Rambur, 1842)	3		s	*3
Plecoptera	Perlodidae	Perlodes intricatus (Pictet, 1841)	2		es	*3
Plecoptera	Perlodidae	Perlodes microcephalus (Pictet, 1833)	*		sh	*3
Plecoptera	Taeniopterygidae	Brachyptera braueri (Klapálek, 1900)	*		s	*3
Plecoptera	Taeniopterygidae	Brachyptera monilicornis (Pictet, 1841)	3		ss	*3
Plecoptera	Taeniopterygidae	Brachyptera risi (Morton, 1896)	*		sh	*3
Plecoptera	Taeniopterygidae	Brachyptera seticornis (Klapálek, 1902)	*		sh	*3
Plecoptera	Taeniopterygidae	Brachyptera starmachi Sowa, 1966	2		es	*3
Plecoptera	Taeniopterygidae	Brachyptera trifasciata (Pictet, 1832)	1		es	*3
Plecoptera	Taeniopterygidae	Oemopteryx loewii (Albarda, 1889)	0	1900	ex	*3
Plecoptera	Taeniopterygidae	Rhabdiopteryx acuminata Klapálek, 1905	*		ss	*3
Plecoptera	Taeniopterygidae	Rhabdiopteryx alpina Kühtreiber, 1934	2		es	*3
Plecoptera	Taeniopterygidae	Rhabdiopteryx neglecta (Albarda, 1889)	3		ss	*3
Plecoptera	Taeniopterygidae	Taeniopteryx araneoides Klapálek, 1902	0	1877	ex	*3
Plecoptera	Taeniopterygidae	Taeniopteryx auberti Kis & Sowa, 1964	*		mh	*3
Plecoptera	Taeniopterygidae	Taeniopteryx hubaulti Aubert, 1946	3		ss	*3
Plecoptera	Taeniopterygidae	Taeniopteryx kuehtreiberi Aubert, 1950	3		ss	*3
Plecoptera	Taeniopterygidae	Taeniopteryx nebulosa (Linnaeus, 1758)	*		mh	*3
Plecoptera	Taeniopterygidae	Taeniopteryx schoenemundi (Mertens, 1923)	*		s	*3
Raphidioptera	Inocelliidae	Inocellia crassicornis (Schummel, 1832)	D		s	*3
Raphidioptera	Raphidiidae	Atlantoraphidia maculicollis (Stephens, 1836)	R		es	*3
Raphidioptera	Raphidiidae	Dichrostigma flavipes (Stein, 1863)	D		mh	*3
Raphidioptera	Raphidiidae	Phaeostigma majus (Burmeister, 1839)	D		s	*3
Raphidioptera	Raphidiidae	Phaeostigma notatum (Fabricius, 1781)	D		h	*3
Raphidioptera	Raphidiidae	Puncha ratzeburgi (Brauer, 1876)	D		mh	*3
Raphidioptera	Raphidiidae	Raphidia ophiopsis Linnaeus, 1758	D		s	*3
Raphidioptera	Raphidiidae	Subilla confinis (Stephens, 1836)	D		mh	*3
Raphidioptera	Raphidiidae	Venustoraphidia nigricollis (Albarda, 1891)	D		ss	*3
Raphidioptera	Raphidiidae	Xanthostigma xanthostigma (Schummel, 1832)	D		mh	*3
Thysanoptera	Aeolothripidae	Aeolothrips albicinctus Haliday, 1836	*		mh	*1
Thysanoptera	Aeolothripidae	Aeolothrips astutus Priesner, 1926	*		s	*1
Thysanoptera	Aeolothripidae	Aeolothrips collaris Priesner, 1919	G		ss	*1
Thysanoptera	Aeolothripidae	Aeolothrips ericae Bagnall, 1920	*		h	*1
Thysanoptera	Aeolothripidae	Aeolothrips fasciatus (Linnaeus, 1758)	*		s	*1

Order	Family	Species	K	L	P	S
Thysanoptera	Aeolothripidae	Aeolothrips intermedius Bagnall, 1934	*		sh	*1
Thysanoptera	Aeolothripidae	Aeolothrips melaleucus Haliday, 1852	*		h	*1
Thysanoptera	Aeolothripidae	Aeolothrips propinquus Bagnall, 1924	*		mh	*1
Thysanoptera	Aeolothripidae	Aeolothrips tenuicornis Bagnall, 1926	*		mh	*1
Thysanoptera	Aeolothripidae	Aeolothrips versicolor Uzel, 1895	*		mh	*1
Thysanoptera	Aeolothripidae	Aeolothrips vittatus Haliday, 1836	*		mh	*1
Thysanoptera	Aeolothripidae	Ankothrips niezabitowskii (Schille, 1910)	*		s	*1
Thysanoptera	Aeolothripidae	Melanthrips acetosellae John, 1927	*		s	*1
Thysanoptera	Aeolothripidae	Melanthrips ficalbii Buffa, 1907	*		mh	*1
Thysanoptera	Aeolothripidae	Melanthrips fuscus (Sulzer, 1776)	*		h	*1
Thysanoptera	Aeolothripidae	Melanthrips pallidior Priesner, 1919	*		h	*1
Thysanoptera	Aeolothripidae	Rhipidothrips gratiosus Uzel, 1895	*		s	*1
Thysanoptera	Fauriellidae	Ropotamothrips buresi Pelikán, 1958	R		es	*1
Thysanoptera	Phlaeothripidae	Acanthothrips nodicornis (O. M. Reuter, 1880)	*		mh	*1
Thysanoptera	Phlaeothripidae	Apterygothrips pinicolus Pelikán & Schliephake, 1994	D		ss	*1
Thysanoptera	Phlaeothripidae	Bolothrips bicolor (Heeger, 1852)	D		s	*1
Thysanoptera	Phlaeothripidae	Bolothrips cingulatus (Karny, 1916)	D		s	*1
Thysanoptera	Phlaeothripidae	Bolothrips dentipes (O. M. Reuter, 1880)	*		s	*1
Thysanoptera	Phlaeothripidae	Bolothrips icarus (Uzel, 1895)	*		mh	*1
Thysanoptera	Phlaeothripidae	Cephalothrips coxalis Bagnall, 1926	D		ss	*1
Thysanoptera	Phlaeothripidae	Cephalothrips monilicornis (O. M. Reuter, 1880)	*		h	*1
Thysanoptera	Phlaeothripidae	Cryptothrips nigripes (O. M. Reuter, 1880)	*		mh	*1
Thysanoptera	Phlaeothripidae	Haplothrips acanthoscelis (Karny, 1910)	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips aculeatus (Fabricius, 1803)	*		sh	*1
Thysanoptera	Phlaeothripidae	Haplothrips alpester Priesner, 1914	*		mh	*1
Thysanoptera	Phlaeothripidae	Haplothrips alpicola Priesner, 1950	*		mh	*1
Thysanoptera	Phlaeothripidae	Haplothrips angusticornis Priesner, 1921	D		mh	*1
Thysanoptera	Phlaeothripidae	Haplothrips arenarius Priesner, 1920	*		mh	*1
Thysanoptera	Phlaeothripidae	Haplothrips armeriae Maltbaek, 1931	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips cerealis Priesner, 1939	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips corticinus Priesner, 1964	D		ss	*1
Thysanoptera	Phlaeothripidae	Haplothrips crassicornis (John, 1924)	D		mh	*1
Thysanoptera	Phlaeothripidae	Haplothrips dianthinus Priesner, 1924	*		mh	*1
Thysanoptera	Phlaeothripidae	Haplothrips distinguendus (Uzel, 1895)	*		h	*1
Thysanoptera	Phlaeothripidae	Haplothrips flavitibia Williams, 1916	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips helianthemi Von Oettingen, 1942	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips hukkineni Priesner, 1939	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips jasionis Priesner, 1950	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips juncorum Bagnall, 1913	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips kurdjumovi Karny, 1913	*		mh	*1
Thysanoptera	Phlaeothripidae	Haplothrips leucanthemi (Schrank, 1781)	*		h	*1
Thysanoptera	Phlaeothripidae	Haplothrips minutus (Uzel, 1895)	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips niger (Osborn, 1883)	*		h	*1
Thysanoptera	Phlaeothripidae	Haplothrips pannonicus Fábián, 1938	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips phyllophilus Priesner, 1914	*		h	*1
Thysanoptera	Phlaeothripidae	Haplothrips propinquus Bagnall, 1933	*		h	*1
Thysanoptera	Phlaeothripidae	Haplothrips setiger Priesner, 1921	*		sh	*1
Thysanoptera	Phlaeothripidae	Haplothrips setigeriformis Fábián, 1938	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips statices (Haliday, 1836)	*		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips subtilissimus (Haliday, 1852)	*		sh	*1
Thysanoptera	Phlaeothripidae	Haplothrips tritici (Kurdjumov, 1912)	*		sh	*1
Thysanoptera	Phlaeothripidae	Haplothrips utae Klimt, 1970	D		s	*1
Thysanoptera	Phlaeothripidae	Haplothrips verbasci (Osborn, 1896)	*		mh	*1
Thysanoptera	Phlaeothripidae	Haplothrips vuilleti Priesner, 1920	*		mh	*1
Thysanoptera	Phlaeothripidae	Hindsiothrips bonessi (Titschack, 1955)	D		s	*1
Thysanoptera	Phlaeothripidae	Holothrips schaubergeri (Priesner, 1920)	*		s	*1
Thysanoptera	Phlaeothripidae	Hoplandrothrips bidens (Bagnall, 1910)	*		h	*1
Thysanoptera	Phlaeothripidae	Hoplandrothrips ellisi Bagnall, 1914	*		h	*1
Thysanoptera	Phlaeothripidae	Hoplandrothrips parvus (Uzel, 1895)	D		ss	*1
Thysanoptera	Phlaeothripidae	Hoplandrothrips williamsianus Priesner, 1923	D		s	*1
Thysanoptera	Phlaeothripidae	Hoplothrips caespitis (Uzel, 1895)	*		s	*1
Thysanoptera	Phlaeothripidae	Hoplothrips carpathicus Pelikán, 1961	*		s	*1
Thysanoptera	Phlaeothripidae	Hoplothrips corticis (De Geer, 1773)	*		mh	*1
Thysanoptera	Phlaeothripidae	Hoplothrips fieldsi J. C. Crawford, 1939	D		s	*1
Thysanoptera	Phlaeothripidae	Hoplothrips fungi (Zetterstedt, 1828)	*		mh	*1
Thysanoptera	Phlaeothripidae	Hoplothrips grisescens (Priesner, 1924)	D		s	*1
Thysanoptera	Phlaeothripidae	Hoplothrips pedicularius (Haliday, 1836)	*		h	*1
Thysanoptera	Phlaeothripidae	Hoplothrips semicaecus (Uzel, 1895)	*		h	*1
Thysanoptera	Phlaeothripidae	Hoplothrips ulmi (Fabricius, 1781)	*		h	*1
Thysanoptera	Phlaeothripidae	Liothrips austriacus (Karny, 1909)	*		mh	*1
Thysanoptera	Phlaeothripidae	Liothrips pragensis Uzel, 1895	*		s	*1
Thysanoptera	Phlaeothripidae	Liothrips setinodis (O. M. Reuter, 1880)	*		h	*1
Thysanoptera	Phlaeothripidae	Liothrips vaneeckei Priesner, 1920	D		s	*1
Thysanoptera	Phlaeothripidae	Maderothrips longisetis (Bagnall, 1910)	*		s	*1
Thysanoptera	Phlaeothripidae	Megalothrips bonannii Uzel, 1895	*		mh	*1
Thysanoptera	Phlaeothripidae	Megathrips lativentris (Heeger, 1852)	*		mh	*1
Thysanoptera	Phlaeothripidae	Neoheegeria dalmatica Schmutz, 1909	*		mh	*1
Thysanoptera	Phlaeothripidae	Notothrips vittatus (Hood, 1912)	D		s	*1
Thysanoptera	Phlaeothripidae	Phlaeothrips annulipes O. M. Reuter, 1880	*		mh	*1
Thysanoptera	Phlaeothripidae	Phlaeothrips bispinoides Bagnall, 1926	*		mh	*1

Order	Family	Species	K	L	P	S
Thysanoptera	Phlaeothripidae	Phlaeothrips bispinosus Priesner, 1919	*		mh	*1
Thysanoptera	Phlaeothripidae	Phlaeothrips coriaceus Haliday, 1836	*		h	*1
Thysanoptera	Phlaeothripidae	Phlaeothrips denticauda Priesner, 1914	D		s	*1
Thysanoptera	Phlaeothripidae	Phlaeothrips minor Uzel, 1895	D		ss	*1
Thysanoptera	Phlaeothripidae	Phlaeothrips pillichianus Priesner, 1924	D		s	*1
Thysanoptera	Phlaeothripidae	Poecilothrips albopictus Uzel, 1895	*		mh	*1
Thysanoptera	Phlaeothripidae	Xylaplothrips fuliginosus (Schille, 1911)	*		mh	*1
Thysanoptera	Thripidae	Anaphothrips atroapterus Priesner, 1920	*		s	*1
Thysanoptera	Thripidae	Anaphothrips badius (Williams, 1913)	*		ss	*1
Thysanoptera	Thripidae	Anaphothrips euphorbiae Uzel, 1895	*		s	*1
Thysanoptera	Thripidae	Anaphothrips gracillimus Priesner, 1923	D		s	*1
Thysanoptera	Thripidae	Anaphothrips obscurus (O. F. Müller, 1776)	*		h	*1
Thysanoptera	Thripidae	Aptinothrips elegans Priesner, 1924	*		mh	*1
Thysanoptera	Thripidae	Aptinothrips karnyi (John, 1927)	G		s	*1
Thysanoptera	Thripidae	Aptinothrips rufus Haliday, 1836	*		sh	*1
Thysanoptera	Thripidae	Aptinothrips stylifer Trybom, 1894	*		sh	*1
Thysanoptera	Thripidae	Baliothrips dispar (Haliday, 1836)	*		s	*1
Thysanoptera	Thripidae	Belothrips acuminatus Haliday, 1836	*		s	*1
Thysanoptera	Thripidae	Belothrips morio O. M. Reuter, 1899	D		ss	*1
Thysanoptera	Thripidae	Bolacothrips jordani Uzel, 1895	*		mh	*1
Thysanoptera	Thripidae	Ceratothrips ericae (Haliday, 1836)	*		mh	*1
Thysanoptera	Thripidae	Chaetanaphothrips orchidii (Moulton, 1907)	nb		nb	*1
Thysanoptera	Thripidae	Chirothrips aculeatus Bagnall, 1927	*		h	*1
Thysanoptera	Thripidae	Chirothrips ambulans Bagnall, 1932	*		mh	*1
Thysanoptera	Thripidae	Chirothrips hamatus Trybom, 1895	*		mh	*1
Thysanoptera	Thripidae	Chirothrips manicatus Haliday, 1836	*		sh	*1
Thysanoptera	Thripidae	Chirothrips molestus Priesner, 1926	D		s	*1
Thysanoptera	Thripidae	Chirothrips pallidicornis Priesner, 1925	*		mh	*1
Thysanoptera	Thripidae	Chirothrips ruptipennis Priesner, 1938	*		ss	*1
Thysanoptera	Thripidae	Ctenothrips distinctus (Uzel, 1895)	*		ss	*1
Thysanoptera	Thripidae	Dendrothrips degeeri Uzel, 1895	*		h	*1
Thysanoptera	Thripidae	Dendrothrips eastopi Pitkin & Palmer, 1975	D		ss	*1
Thysanoptera	Thripidae	Dendrothrips ornatus (Jablonowski, 1894)	*		h	*1
Thysanoptera	Thripidae	Dendrothrips saltatrix Uzel, 1895	*		h	*1
Thysanoptera	Thripidae	Dictyothrips betae Uzel, 1895	D		s	*1
Thysanoptera	Thripidae	Dorcadothrips billeni zur Strassen, 1995	nb		nb	*1
Thysanoptera	Thripidae	Drepanothrips reuteri Uzel, 1895	*		h	*1
Thysanoptera	Thripidae	Echinothrips americanus Morgan, 1913	nb		nb	*1
Thysanoptera	Thripidae	Euchaetothrips kroli (Schille, 1911)	*		mh	*1
Thysanoptera	Thripidae	Firmothrips firmus (Uzel, 1895)	*		mh	*1
Thysanoptera	Thripidae	Frankliniella intonsa (Trybom, 1895)	*		sh	*1
Thysanoptera	Thripidae	Frankliniella nigriventris (Uzel, 1895)	*		s	*1
Thysanoptera	Thripidae	Frankliniella occidentalis (Pergande, 1895)	nb		nb	*1
Thysanoptera	Thripidae	Frankliniella pallida (Uzel, 1895)	*		s	*1
Thysanoptera	Thripidae	Frankliniella tenuicornis (Uzel, 1895)	*		h	*1
Thysanoptera	Thripidae	Heliothrips haemorrhoidalis (Bouché, 1833)	nb		nb	*1
Thysanoptera	Thripidae	Hemianaphothrips articulosus Priesner, 1925	D		mh	*1
Thysanoptera	Thripidae	Hercinothrips bicinctus (Bagnall, 1919)	nb		nb	*1
Thysanoptera	Thripidae	Hercinothrips femoralis (O. M. Reuter, 1891)	nb		nb	*1
Thysanoptera	Thripidae	Iridothrips iridis (Watson, 1924)	D		s	*1
Thysanoptera	Thripidae	Iridothrips mariae Pelikán, 1961	D		ss	*1
Thysanoptera	Thripidae	Kakothrips robustus (Uzel, 1895)	*		h	*1
Thysanoptera	Thripidae	Limothrips cerealium Haliday, 1836	*		sh	*1
Thysanoptera	Thripidae	Limothrips denticornis Haliday, 1836	*		sh	*1
Thysanoptera	Thripidae	Limothrips schmutzi Priesner, 1919	D		ss	*1
Thysanoptera	Thripidae	Mycterothrips albidicornis (Knechtel, 1923)	*		mh	*1
Thysanoptera	Thripidae	Mycterothrips annulicornis (Uzel, 1895)	D		s	*1
Thysanoptera	Thripidae	Mycterothrips consociatus (Targioni-Tozzetti, 1886)	*		mh	*1
Thysanoptera	Thripidae	Mycterothrips latus (Bagnall, 1912)	*		s	*1
Thysanoptera	Thripidae	Mycterothrips salicis (O. M. Reuter, 1879)	*		mh	*1
Thysanoptera	Thripidae	Neohydatothrips abnormis (Karny, 1910)	*		mh	*1
Thysanoptera	Thripidae	Neohydatothrips gracilicornis (Williams, 1916)	*		h	*1
Thysanoptera	Thripidae	Odontothrips aemulans Priesner, 1924	D		ss	*1
Thysanoptera	Thripidae	Odontothrips biuncus John, 1921	*		mh	*1
Thysanoptera	Thripidae	Odontothrips confusus Priesner, 1926	*		h	*1
Thysanoptera	Thripidae	Odontothrips cytisi Morison, 1928	*		h	*1
Thysanoptera	Thripidae	Odontothrips ignobilis Bagnall, 1919	*		ss	*1
Thysanoptera	Thripidae	Odontothrips loti (Haliday, 1852)	*		sh	*1
Thysanoptera	Thripidae	Odontothrips meliloti Priesner, 1951	*		sh	*1
Thysanoptera	Thripidae	Odontothrips meridionalis Priesner, 1919	D		ss	*1
Thysanoptera	Thripidae	Odontothrips phaleratus (Haliday, 1836)	*		mh	*1
Thysanoptera	Thripidae	Odontothrips ulicis (Haliday, 1836)	*		mh	*1
Thysanoptera	Thripidae	Organothrips indicus Bhatti, 1974	nb		nb	*1
Thysanoptera	Thripidae	Oxythrips ajugae Uzel, 1895	*		h	*1
Thysanoptera	Thripidae	Oxythrips bicolor (O. M. Reuter, 1879)	*		h	*1
Thysanoptera	Thripidae	Oxythrips priesneri Pelikán, 1957	D		ss	*1
Thysanoptera	Thripidae	Oxythrips ulmifoliorum (Haliday, 1836)	*		s	*1
Thysanoptera	Thripidae	Parthenothrips dracaenae (Heeger, 1854)	nb		nb	*1
Thysanoptera	Thripidae	Pelikanothrips kratochvili (Pelikán, 1947)	D		s	*1
Thysanoptera	Thripidae	Pezothrips dianthi (Priesner, 1921)	*		s	*1

Order	Family	Species	K	L	P	S
Thysanoptera	Thripidae	Pezothrips frontalis (Uzel, 1895)	*		s	*1
Thysanoptera	Thripidae	Platythrips tunicatus (Halidady, 1852)	*		s	*1
Thysanoptera	Thripidae	Pteridothrips pteridicola (Karny, 1914)	nb		nb	*1
Thysanoptera	Thripidae	Rhaphidothrips longistylosus Uzel, 1895	D		s	*1
Thysanoptera	Thripidae	Rubiothrips ferrugineus (Uzel, 1895)	*		mh	*1
Thysanoptera	Thripidae	Rubiothrips pillichi (Priesner, 1938)	*		mh	*1
Thysanoptera	Thripidae	Rubiothrips silvarum (Priesner, 1920)	*		mh	*1
Thysanoptera	Thripidae	Rubiothrips sordidus (Uzel, 1895)	*		s	*1
Thysanoptera	Thripidae	Rubiothrips validus (Karny, 1910)	*		mh	*1
Thysanoptera	Thripidae	Scirtothrips longipennis (Bagnall, 1909)	nb		nb	*1
Thysanoptera	Thripidae	Scolothrips longicornis Priesner, 1926	*		s	*1
Thysanoptera	Thripidae	Scolothrips uzeli (Schille, 1910)	*		s	*1
Thysanoptera	Thripidae	Sericothrips bicornis (Karny, 1910)	*		h	*1
Thysanoptera	Thripidae	Sphaeropothrips vittipennis (Bagnall, 1927)	D		s	*1
Thysanoptera	Thripidae	Stenothrips graminum Uzel, 1895	*		sh	*1
Thysanoptera	Thripidae	Taeniothrips inconsequens (Uzel, 1895)	*		h	*1
Thysanoptera	Thripidae	Taeniothrips picipes (Zetterstedt, 1828)	*		h	*1
Thysanoptera	Thripidae	Tenothrips frici (Uzel, 1895)	*		sh	*1
Thysanoptera	Thripidae	Theilopedothrips pilosus (Uzel, 1895)	D		s	*1
Thysanoptera	Thripidae	Thrips albopilosus Uzel, 1895	D		s	*1
Thysanoptera	Thripidae	Thrips alni Uzel, 1895	*		s	*1
Thysanoptera	Thripidae	Thrips angusticeps Uzel, 1895	*		sh	*1
Thysanoptera	Thripidae	Thrips atratus Haliday, 1836	*		sh	*1
Thysanoptera	Thripidae	Thrips brevicornis Priesner, 1920	*		h	*1
Thysanoptera	Thripidae	Thrips calcaratus Uzel, 1895	*		mh	*1
Thysanoptera	Thripidae	Thrips conferticornis Priesner, 1922	D		s	*1
Thysanoptera	Thripidae	Thrips crassicornis Bagnall, 1923	D		s	*1
Thysanoptera	Thripidae	Thrips difficilis Priesner, 1920	D		s	*1
Thysanoptera	Thripidae	Thrips dilatatus Uzel, 1895	D		s	*1
Thysanoptera	Thripidae	Thrips discolor Haliday, 1836	*		mh	*1
Thysanoptera	Thripidae	Thrips dubius Priesner, 1927	*		s	*1
Thysanoptera	Thripidae	Thrips euphorbiae Knechtel, 1923	*		mh	*1
Thysanoptera	Thripidae	Thrips flavus Schrank, 1776	*		sh	*1
Thysanoptera	Thripidae	Thrips fulvipes Bagnall, 1923	*		h	*1
Thysanoptera	Thripidae	Thrips funebris Bagnall, 1924	D		s	*1
Thysanoptera	Thripidae	Thrips fuscipennis Haliday, 1836	*		sh	*1
Thysanoptera	Thripidae	Thrips incognitus Priesner, 1914	D		s	*1
Thysanoptera	Thripidae	Thrips inopinatus zur Strassen, 1963	D		s	*1
Thysanoptera	Thripidae	Thrips juniperinus Linnaeus, 1758	*		s	*1
Thysanoptera	Thripidae	Thrips klapaleki Uzel, 1895	D		s	*1
Thysanoptera	Thripidae	Thrips latiareus Vierbergen, 2004	D		ss	*1
Thysanoptera	Thripidae	Thrips linariae (Priesner, 1928)	D		s	*1
Thysanoptera	Thripidae	Thrips linarius Uzel, 1895	D		s	*1
Thysanoptera	Thripidae	Thrips major Uzel, 1895	*		sh	*1
Thysanoptera	Thripidae	Thrips mancosetosus Priesner, 1964	*		h	*1
Thysanoptera	Thripidae	Thrips mareoticus (Priesner, 1932)	D		ss	*1
Thysanoptera	Thripidae	Thrips menyanthidis Bagnall, 1923	D		s	*1
Thysanoptera	Thripidae	Thrips minutissimus Linnaeus, 1758	*		sh	*1
Thysanoptera	Thripidae	Thrips nigropilosus Uzel, 1895	*		h	*1
Thysanoptera	Thripidae	Thrips origani Priesner, 1926	*		h	*1
Thysanoptera	Thripidae	Thrips palustris O. M. Reuter, 1899	D		s	*1
Thysanoptera	Thripidae	Thrips physapus Linnaeus, 1758	*		sh	*1
Thysanoptera	Thripidae	Thrips pillichi Priesner, 1924	*		h	*1
Thysanoptera	Thripidae	Thrips pini (Uzel, 1895)	*		h	*1
Thysanoptera	Thripidae	Thrips praetermissus Priesner, 1920	D		s	*1
Thysanoptera	Thripidae	Thrips sambuci Heeger, 1854	*		mh	*1
Thysanoptera	Thripidae	Thrips simplex (Morison, 1930)	*		mh	*1
Thysanoptera	Thripidae	Thrips tabaci Lindeman, 1889	*		sh	*1
Thysanoptera	Thripidae	Thrips trehernei Priesner, 1927	*		sh	*1
Thysanoptera	Thripidae	Thrips urticae Fabricius, 1781	*		h	*1
Thysanoptera	Thripidae	Thrips validus Uzel, 1895	*		sh	*1
Thysanoptera	Thripidae	Thrips verbasci (Priesner, 1920)	*		h	*1
Thysanoptera	Thripidae	Thrips viminalis Uzel, 1895	*		mh	*1
Thysanoptera	Thripidae	Thrips vulgatissimus Haliday, 1836	*		sh	*1
Thysanoptera	Thripidae	Tmetothrips subapterus (Haliday, 1836)	*		s	*1
Trichoptera	Apataniidae	Apatania auricula (Forsslund, 1930)	G		ss	*1
Trichoptera	Apataniidae	Apatania eatoniana McLachlan, 1880	1		ss	*1
Trichoptera	Apataniidae	Apatania fimbriata (Pictet, 1834)	V		h	*1
Trichoptera	Apataniidae	Apatania muliebris McLachlan, 1866	2		s	*1
Trichoptera	Beraeidae	Beraea maura (Curtis, 1834)	V		h	*1
Trichoptera	Beraeidae	Beraea pullata (Curtis, 1834)	*		sh	*1
Trichoptera	Beraeidae	Beraeodes minutus (Linnaeus, 1761)	*		sh	*1
Trichoptera	Beraeidae	Ernodes articularis (Pictet, 1834)	V		h	*1
Trichoptera	Beraeidae	Ernodes vicinus (McLachlan, 1879)	2		s	*1
Trichoptera	Brachycentridae	Brachycentrus maculatus (Fourcroy, 1785)	*		h	*1
Trichoptera	Brachycentridae	Brachycentrus montanus Klapálek, 1892	*		h	*1
Trichoptera	Brachycentridae	Brachycentrus subnubilus Curtis, 1834	*		h	*1
Trichoptera	Brachycentridae	Micrasema longulum McLachlan, 1876	*		h	*1
Trichoptera	Brachycentridae	Micrasema minimum McLachlan, 1876	*		h	*1
Trichoptera	Brachycentridae	Micrasema morosum (McLachlan, 1868)	3		ss	*1

Order	Family	Species	K	L	P	S
Trichoptera	Brachycentridae	Micrasema setiferum (Pictet, 1834)	V		s	*1
Trichoptera	Ecnomidae	Ecnomus deceptor McLachlan, 1884	R		es	*1
Trichoptera	Ecnomidae	Ecnomus tenellus (Rambur, 1842)	*		sh	*1
Trichoptera	Glossosomatidae	Agapetus delicatulus McLachlan, 1884	*		mh	*1
Trichoptera	Glossosomatidae	Agapetus fuscipes Curtis, 1834	*		sh	*1
Trichoptera	Glossosomatidae	Agapetus laniger (Pictet, 1834)	2		ss	*1
Trichoptera	Glossosomatidae	Agapetus nimbulus McLachlan, 1879	3		ss	*1
Trichoptera	Glossosomatidae	Agapetus ochripes Curtis, 1834	*		h	*1
Trichoptera	Glossosomatidae	Glossosoma bifidum McLachlan, 1879	2		ss	*1
Trichoptera	Glossosomatidae	Glossosoma boltoni Curtis, 1834	*		mh	*1
Trichoptera	Glossosomatidae	Glossosoma conformis Neboiss, 1963	*		h	*1
Trichoptera	Glossosomatidae	Glossosoma intermedium (Klapálek, 1892)	3		mh	*1
Trichoptera	Glossosomatidae	Synagapetus dubitans McLachlan, 1879	3		mh	*1
Trichoptera	Glossosomatidae	Synagapetus iridipennis McLachlan, 1879	V		h	*1
Trichoptera	Glossosomatidae	Synagapetus moselyi (Ulmer, 1938)	3		mh	*1
Trichoptera	Goeridae	Goera pilosa (Fabricius, 1775)	*		sh	*1
Trichoptera	Goeridae	Lithax niger (Hagen, 1859)	V		h	*1
Trichoptera	Goeridae	Lithax obscurus (Hagen, 1859)	V		h	*1
Trichoptera	Goeridae	Silo nigricornis (Pictet, 1834)	*		sh	*1
Trichoptera	Goeridae	Silo pallipes (Fabricius, 1781)	*		sh	*1
Trichoptera	Goeridae	Silo piceus (Brauer, 1857)	*		h	*1
Trichoptera	Hydropsychidae	Cheumatopsyche lepida (Pictet, 1834)	*		h	*1
Trichoptera	Hydropsychidae	Diplectrona felix McLachlan, 1878	2		s	*1
Trichoptera	Hydropsychidae	Hydropsyche angustipennis (Curtis, 1834)	*		sh	*1
Trichoptera	Hydropsychidae	Hydropsyche botosaneanui Marinković-Gospodnetić, 1966	3		s	*1
Trichoptera	Hydropsychidae	Hydropsyche bulbifera McLachlan, 1878	*		mh	*1
Trichoptera	Hydropsychidae	Hydropsyche bulgaromanorum Malicky, 1977	*		h	*1
Trichoptera	Hydropsychidae	Hydropsyche contubernalis McLachlan, 1865	*		sh	*1
Trichoptera	Hydropsychidae	Hydropsyche dinarica Marinković-Gospodnetić, 1979	*		h	*1
Trichoptera	Hydropsychidae	Hydropsyche exocellata Dufour, 1841	*		h	*1
Trichoptera	Hydropsychidae	Hydropsyche fulvipes (Curtis, 1834)	V		h	*1
Trichoptera	Hydropsychidae	Hydropsyche guttata Pictet, 1834	3		s	*1
Trichoptera	Hydropsychidae	Hydropsyche incognita Pitsch, 1993	*		h	*1
Trichoptera	Hydropsychidae	Hydropsyche instabilis (Curtis, 1834)	*		h	*1
Trichoptera	Hydropsychidae	Hydropsyche pellucidula (Curtis, 1834)	*		sh	*1
Trichoptera	Hydropsychidae	Hydropsyche saxonica McLachlan, 1884	*		sh	*1
Trichoptera	Hydropsychidae	Hydropsyche silfvenii Ulmer, 1906	V		s	*1
Trichoptera	Hydropsychidae	Hydropsyche siltalai Döhler, 1963	*		sh	*1
Trichoptera	Hydropsychidae	Hydropsyche tenuis Navas, 1932	*		mh	*1
Trichoptera	Hydropsychidae	Hydropsyche tobiasi Malicky, 1977	0	1938	ex	*1
Trichoptera	Hydroptilidae	Agraylea multipunctata Curtis, 1834	*		sh	*1
Trichoptera	Hydroptilidae	Agraylea sexmaculata Curtis, 1834	*		sh	*1
Trichoptera	Hydroptilidae	Allotrichia pallicornis (Eaton, 1873)	V		mh	*1
Trichoptera	Hydroptilidae	Hydroptila angulata Mosely, 1922	*		h	*1
Trichoptera	Hydroptilidae	Hydroptila cornuta Mosely, 1922	3		s	*1
Trichoptera	Hydroptilidae	Hydroptila dampfi Ulmer, 1929	G		s	*1
Trichoptera	Hydroptilidae	Hydroptila forcipata (Eaton, 1873)	*		h	*1
Trichoptera	Hydroptilidae	Hydroptila insubrica Ris, 1903	R		es	*1
Trichoptera	Hydroptilidae	Hydroptila ivisa Malicky, 1972	2		ss	*1
Trichoptera	Hydroptilidae	Hydroptila lotensis Mosely, 1930	1		es	*1
Trichoptera	Hydroptilidae	Hydroptila martini Marshall, 1977	2		s	*1
Trichoptera	Hydroptilidae	Hydroptila occulta (Eaton, 1873)	2		ss	*1
Trichoptera	Hydroptilidae	Hydroptila pulchricornis Pictet, 1834	G		mh	*1
Trichoptera	Hydroptilidae	Hydroptila simulans Mosely, 1920	V		mh	*1
Trichoptera	Hydroptilidae	Hydroptila sparsa Curtis, 1834	*		sh	*1
Trichoptera	Hydroptilidae	Hydroptila tineoides Dalman, 1819	*		mh	*1
Trichoptera	Hydroptilidae	Hydroptila valesiaca Schmid, 1946	1		ss	*1
Trichoptera	Hydroptilidae	Hydroptila vectis Curtis, 1834	*		h	*1
Trichoptera	Hydroptilidae	Ithytrichia clavata Morton, 1905	R		es	*1
Trichoptera	Hydroptilidae	Ithytrichia lamellaris Eaton, 1873	*		h	*1
Trichoptera	Hydroptilidae	Orthotrichia angustella (McLachlan, 1865)	G		s	*1
Trichoptera	Hydroptilidae	Orthotrichia costalis (Curtis, 1834)	V		h	*1
Trichoptera	Hydroptilidae	Orthotrichia tragetti Mosely, 1930	G		s	*1
Trichoptera	Hydroptilidae	Oxyethira distinctella McLachlan, 1880	1		es	*1
Trichoptera	Hydroptilidae	Oxyethira falcata Morton, 1893	G		mh	*1
Trichoptera	Hydroptilidae	Oxyethira flavicornis (Pictet, 1834)	*		h	*1
Trichoptera	Hydroptilidae	Oxyethira frici Klapálek, 1891	1		ss	*1
Trichoptera	Hydroptilidae	Oxyethira sagittifera Ris, 1897	G		s	*1
Trichoptera	Hydroptilidae	Oxyethira simplex (Ris, 1897)	2		ss	*1
Trichoptera	Hydroptilidae	Oxyethira tristella Klapálek, 1895	G		s	*1
Trichoptera	Hydroptilidae	Stactobia eatoniella McLachlan, 1880	1		ss	*1
Trichoptera	Hydroptilidae	Stactobia maclachlani Kimmins, 1949	0	1904	ex	*1
Trichoptera	Hydroptilidae	Stactobia moselyi Kimmins, 1949	1		ss	*1
Trichoptera	Hydroptilidae	Stactobiella risi (Felber, 1908)	0	1895	ex	*1
Trichoptera	Hydroptilidae	Tricholeiochiton fagesii (Guinard, 1879)	2		s	*1
Trichoptera	Lepidostomatidae	Crunoecia irrorata (Curtis, 1834)	*		sh	*1
Trichoptera	Lepidostomatidae	Crunoecia kempnyi Morton, 1901	G		ss	*1
Trichoptera	Lepidostomatidae	Lepidostoma basale (Kolenati, 1848)	*		sh	*1
Trichoptera	Lepidostomatidae	Lepidostoma hirtum (Fabricius, 1775)	*		sh	*1
Trichoptera	Leptoceridae	Adicella filicornis (Pictet, 1834)	V		h	*1

Order	Family	Species	K	L	P	S
Trichoptera	Leptoceridae	Adicella reducta (McLachlan, 1865)	*		sh	*1
Trichoptera	Leptoceridae	Athripsodes albifrons (Linnaeus, 1758)	*		sh	*1
Trichoptera	Leptoceridae	Athripsodes aterrimus (Stephens, 1836)	*		sh	*1
Trichoptera	Leptoceridae	Athripsodes bilineatus (Linnaeus, 1758)	*		h	*1
Trichoptera	Leptoceridae	Athripsodes cinereus (Curtis, 1834)	*		sh	*1
Trichoptera	Leptoceridae	Athripsodes commutatus (Rostock, 1874)	V		s	*1
Trichoptera	Leptoceridae	Athripsodes leucophaeus (Rambur, 1842)	1		es	*1
Trichoptera	Leptoceridae	Ceraclea albimacula (Rambur, 1842)	*		sh	*1
Trichoptera	Leptoceridae	Ceraclea annulicornis (Stephens, 1836)	*		h	*1
Trichoptera	Leptoceridae	Ceraclea aurea (Pictet, 1834)	2		ss	*1
Trichoptera	Leptoceridae	Ceraclea dissimilis (Stephens, 1836)	*		sh	*1
Trichoptera	Leptoceridae	Ceraclea fulva (Rambur, 1842)	*		h	*1
Trichoptera	Leptoceridae	Ceraclea nigronervosa (Retzius, 1783)	*		h	*1
Trichoptera	Leptoceridae	Ceraclea riparia (Albarda, 1874)	0	1960	ex	*1
Trichoptera	Leptoceridae	Ceraclea senilis (Burmeister, 1839)	V		h	*1
Trichoptera	Leptoceridae	Erotesis baltica McLachlan, 1877	3		mh	*1
Trichoptera	Leptoceridae	Leptocerus interruptus (Fabricius, 1775)	V		mh	*1
Trichoptera	Leptoceridae	Leptocerus lusitanicus (McLachlan, 1884)	*		s	*1
Trichoptera	Leptoceridae	Leptocerus tineiformis Curtis, 1834	*		sh	*1
Trichoptera	Leptoceridae	Mystacides azureus (Linnaeus, 1761)	*		sh	*1
Trichoptera	Leptoceridae	Mystacides longicornis (Linnaeus, 1758)	*		sh	*1
Trichoptera	Leptoceridae	Mystacides niger (Linnaeus, 1758)	*		sh	*1
Trichoptera	Leptoceridae	Oecetis furva (Rambur, 1842)	V		h	*1
Trichoptera	Leptoceridae	Oecetis lacustris (Pictet, 1834)	*		sh	*1
Trichoptera	Leptoceridae	Oecetis notata (Rambur, 1842)	*		h	*1
Trichoptera	Leptoceridae	Oecetis ochracea (Curtis, 1825)	*		sh	*1
Trichoptera	Leptoceridae	Oecetis struckii (Klapálek, 1903)	1		es	*1
Trichoptera	Leptoceridae	Oecetis testacea (Curtis, 1834)	*		h	*1
Trichoptera	Leptoceridae	Oecetis tripunctata (Fabricius, 1793)	1		es	*1
Trichoptera	Leptoceridae	Setodes argentipunctellus McLachlan, 1877	2		es	*1
Trichoptera	Leptoceridae	Setodes punctatus (Fabricius, 1793)	3		s	*1
Trichoptera	Leptoceridae	Setodes viridis (Fourcroy, 1785)	3		s	*1
Trichoptera	Leptoceridae	Triaenodes bicolor (Curtis, 1834)	V		h	*1
Trichoptera	Leptoceridae	Triaenodes unanimis McLachlan, 1877	2		s	*1
Trichoptera	Leptoceridae	Ylodes conspersus (Rambur, 1842)	0	1983	ex	*1
Trichoptera	Leptoceridae	Ylodes detruncatus (Martynov, 1924)	G		s	*1
Trichoptera	Leptoceridae	Ylodes kawraiskii (Martynov, 1909)	0	1890	ex	*1
Trichoptera	Leptoceridae	Ylodes reuteri (McLachlan, 1880)	G		ss	*1
Trichoptera	Leptoceridae	Ylodes simulans (Tjeder, 1929)	2		s	*1
Trichoptera	Limnephilidae	Acrophylax zerberus Brauer, 1867	V		s	*1
Trichoptera	Limnephilidae	Allogamus auricollis (Pictet, 1834)	*		h	*1
Trichoptera	Limnephilidae	Allogamus hilaris (McLachlan, 1876)	2		ss	*1
Trichoptera	Limnephilidae	Allogamus ligonifer (McLachlan, 1876)	3		s	*1
Trichoptera	Limnephilidae	Allogamus stadleri (Schmid, 1951)	1		es	*1
Trichoptera	Limnephilidae	Allogamus uncatus (Brauer, 1857)	*		mh	*1
Trichoptera	Limnephilidae	Anabolia brevipennis (Curtis, 1834)	G		mh	*1
Trichoptera	Limnephilidae	Anabolia furcata Brauer, 1857	*		h	*1
Trichoptera	Limnephilidae	Anabolia nervosa (Curtis, 1834)	*		sh	*1
Trichoptera	Limnephilidae	Annitella obscurata (McLachlan, 1876)	*		h	*1
Trichoptera	Limnephilidae	Annitella thuringica (Ulmer, 1909)	V		s	*1
Trichoptera	Limnephilidae	Anomalopterygella chauviniana (Stein, 1874)	*		h	*1
Trichoptera	Limnephilidae	Chaetopterygopsis maclachlani Stein, 1874	*		mh	*1
Trichoptera	Limnephilidae	Chaetopteryx major McLachlan, 1876	V		h	*1
Trichoptera	Limnephilidae	Chaetopteryx villosa (Fabricius, 1798)	*		sh	*1
Trichoptera	Limnephilidae	Consorophylax consors (McLachlan, 1880)	2		es	*1
Trichoptera	Limnephilidae	Drusus annulatus (Stephens, 1837)	V		h	*1
Trichoptera	Limnephilidae	Drusus biguttatus (Pictet, 1834)	*		mh	*1
Trichoptera	Limnephilidae	Drusus chrysotus (Rambur, 1842)	2		s	*1
Trichoptera	Limnephilidae	Drusus discolor (Rambur, 1842)	3		mh	*1
Trichoptera	Limnephilidae	Drusus monticola McLachlan, 1876	V		s	*1
Trichoptera	Limnephilidae	Drusus trifidus McLachlan, 1868	3		mh	*1
Trichoptera	Limnephilidae	Ecclisopteryx dalecarlica Kolenati, 1848	*		h	*1
Trichoptera	Limnephilidae	Ecclisopteryx guttulata (Pictet, 1834)	*		mh	*1
Trichoptera	Limnephilidae	Ecclisopteryx madida (McLachlan, 1867)	*		mh	*1
Trichoptera	Limnephilidae	Enoicyla pusilla (Burmeister, 1839)	*		sh	*1
Trichoptera	Limnephilidae	Enoicyla reichenbachi (Kolenati, 1848)	*		mh	*1
Trichoptera	Limnephilidae	Glyphotaelius pellucidus (Retzius, 1783)	*		sh	*1
Trichoptera	Limnephilidae	Grammotaulius nigropunctatus (Retzius, 1783)	V		h	*1
Trichoptera	Limnephilidae	Grammotaulius nitidus (Müller, 1764)	G		mh	*1
Trichoptera	Limnephilidae	Grammotaulius submaculatus (Rambur, 1842)	3		mh	*1
Trichoptera	Limnephilidae	Halesus digitatus (Schrank, 1781)	*		sh	*1
Trichoptera	Limnephilidae	Halesus radiatus (Curtis, 1834)	*		sh	*1
Trichoptera	Limnephilidae	Halesus rubricollis (Pictet, 1834)	3		s	*1
Trichoptera	Limnephilidae	Halesus tessellatus (Rambur, 1842)	*		h	*1
Trichoptera	Limnephilidae	Hydatophylax infumatus (McLachlan, 1865)	*		h	*1
Trichoptera	Limnephilidae	Ironoquia dubia (Stephens, 1837)	V		h	*1
Trichoptera	Limnephilidae	Limnephilus affinis Curtis, 1834	V		h	*1
Trichoptera	Limnephilidae	Limnephilus algosus (McLachlan, 1868)	R		es	*1
Trichoptera	Limnephilidae	Limnephilus auricula Curtis, 1834	*		sh	*1
Trichoptera	Limnephilidae	Limnephilus binotatus Curtis, 1834	G		h	*1

Order	Family	Species	K	L	P	S
Trichoptera	Limnephilidae	Limnephilus bipunctatus Curtis, 1834	*		sh	*1
Trichoptera	Limnephilidae	Limnephilus centralis Curtis, 1834	V		h	*1
Trichoptera	Limnephilidae	Limnephilus coenosus Curtis, 1834	2		mh	*1
Trichoptera	Limnephilidae	Limnephilus decipiens (Kolenati, 1848)	V		h	*1
Trichoptera	Limnephilidae	Limnephilus dispar McLachlan, 1875	1		es	*1
Trichoptera	Limnephilidae	Limnephilus elegans Curtis, 1834	2		mh	*1
Trichoptera	Limnephilidae	Limnephilus externus Hagen, 1861	0	1932	ex	*1
Trichoptera	Limnephilidae	Limnephilus extricatus McLachlan, 1865	*		sh	*1
Trichoptera	Limnephilidae	Limnephilus flavicornis (Fabricius, 1787)	*		sh	*1
Trichoptera	Limnephilidae	Limnephilus fuscicornis Rambur, 1842	G		mh	*1
Trichoptera	Limnephilidae	Limnephilus fuscinervis (Zetterstedt, 1840)	G		s	*1
Trichoptera	Limnephilidae	Limnephilus germanus McLachlan, 1875	G		s	*1
Trichoptera	Limnephilidae	Limnephilus griseus (Linnaeus, 1758)	*		h	*1
Trichoptera	Limnephilidae	Limnephilus hirsutus (Pictet, 1834)	V		h	*1
Trichoptera	Limnephilidae	Limnephilus ignavus McLachlan, 1865	V		h	*1
Trichoptera	Limnephilidae	Limnephilus incisus Curtis, 1834	V		h	*1
Trichoptera	Limnephilidae	Limnephilus italicus McLachlan, 1884	*		s	*1
Trichoptera	Limnephilidae	Limnephilus lunatus Curtis, 1834	*		sh	*1
Trichoptera	Limnephilidae	Limnephilus luridus Curtis, 1834	G		mh	*1
Trichoptera	Limnephilidae	Limnephilus marmoratus Curtis, 1834	V		h	*1
Trichoptera	Limnephilidae	Limnephilus nigriceps (Zetterstedt, 1840)	V		h	*1
Trichoptera	Limnephilidae	Limnephilus pati O'Connor, 1980	G		ss	*1
Trichoptera	Limnephilidae	Limnephilus politus McLachlan, 1865	G		mh	*1
Trichoptera	Limnephilidae	Limnephilus rhombicus (Linnaeus, 1758)	*		sh	*1
Trichoptera	Limnephilidae	Limnephilus sericeus (Say, 1824)	1		es	*1
Trichoptera	Limnephilidae	Limnephilus sparsus Curtis, 1834	*		sh	*1
Trichoptera	Limnephilidae	Limnephilus stigma Curtis, 1834	*		sh	*1
Trichoptera	Limnephilidae	Limnephilus subcentralis Brauer, 1857	3		mh	*1
Trichoptera	Limnephilidae	Limnephilus tauricus Schmid, 1964	G		ss	*1
Trichoptera	Limnephilidae	Limnephilus vittatus (Fabricius, 1798)	V		h	*1
Trichoptera	Limnephilidae	Melampophylax melampus (McLachlan, 1876)	V		s	*1
Trichoptera	Limnephilidae	Melampophylax mucoreus (Hagen, 1861)	*		mh	*1
Trichoptera	Limnephilidae	Melampophylax nepos (McLachlan, 1880)	V		s	*1
Trichoptera	Limnephilidae	Mesophylax impunctatus McLachlan, 1884	V		s	*1
Trichoptera	Limnephilidae	Metanoea rhaetica Schmid, 1956	V		s	*1
Trichoptera	Limnephilidae	Micropterna fissa McLachlan, 1875	D		?	*1
Trichoptera	Limnephilidae	Micropterna lateralis (Stephens, 1837)	*		sh	*1
Trichoptera	Limnephilidae	Micropterna nycterobia McLachlan, 1875	V		h	*1
Trichoptera	Limnephilidae	Micropterna sequax McLachlan, 1875	*		sh	*1
Trichoptera	Limnephilidae	Micropterna testacea (Gmelin, 1789)	V		mh	*1
Trichoptera	Limnephilidae	Nemotaulius punctatolineatus (Retzius, 1783)	1		es	*1
Trichoptera	Limnephilidae	Parachiona picicornis (Pictet, 1834)	V		h	*1
Trichoptera	Limnephilidae	Potamophylax cingulatus (Stephens, 1837)	*		sh	*1
Trichoptera	Limnephilidae	Potamophylax latipennis (Curtis, 1834)	*		sh	*1
Trichoptera	Limnephilidae	Potamophylax luctuosus (Piller & Mitterpacher, 1783)	*		sh	*1
Trichoptera	Limnephilidae	Potamophylax nigricornis (Pictet, 1834)	*		sh	*1
Trichoptera	Limnephilidae	Potamophylax rotundipennis (Brauer, 1857)	*		sh	*1
Trichoptera	Limnephilidae	Pseudopsilopteryx zimmeri (McLachlan, 1876)	3		mh	*1
Trichoptera	Limnephilidae	Psilopteryx psorosa (Kolenati, 1860)	3		ss	*1
Trichoptera	Limnephilidae	Rhadicoleptus alpestris (Kolenati, 1848)	V		h	*1
Trichoptera	Limnephilidae	Stenophylax mitis McLachlan, 1875	*		s	*1
Trichoptera	Limnephilidae	Stenophylax mucronatus McLachlan, 1880	R		es	*1
Trichoptera	Limnephilidae	Stenophylax permistus McLachlan, 1895	*		sh	*1
Trichoptera	Limnephilidae	Stenophylax vibex (Curtis, 1834)	V		mh	*1
Trichoptera	Molannidae	Molanna albicans (Zetterstedt, 1840)	G		s	*1
Trichoptera	Molannidae	Molanna angustata Curtis, 1834	*		sh	*1
Trichoptera	Molannidae	Molanna nigra (Zetterstedt, 1840)	1		es	*1
Trichoptera	Molannidae	Molannodes tinctus (Zetterstedt, 1840)	G		mh	*1
Trichoptera	Odontoceridae	Odontocerum albicorne (Scopoli, 1763)	*		sh	*1
Trichoptera	Philopotamidae	Chimarra marginata (Linnaeus, 1767)	3		s	*1
Trichoptera	Philopotamidae	Philopotamus ludificatus McLachlan, 1878	*		h	*1
Trichoptera	Philopotamidae	Philopotamus montanus (Donovan, 1813)	*		h	*1
Trichoptera	Philopotamidae	Philopotamus variegatus (Scopoli, 1763)	*		h	*1
Trichoptera	Philopotamidae	Wormaldia copiosa (McLachlan, 1868)	2		s	*1
Trichoptera	Philopotamidae	Wormaldia mediana McLachlan, 1878	V		s	*1
Trichoptera	Philopotamidae	Wormaldia occipitalis (Pictet, 1834)	*		sh	*1
Trichoptera	Philopotamidae	Wormaldia pulla (McLachlan, 1878)	V		s	*1
Trichoptera	Philopotamidae	Wormaldia subnigra McLachlan, 1865	V		s	*1
Trichoptera	Philopotamidae	Wormaldia triangulifera McLachlan, 1878	3		s	*1
Trichoptera	Phryganeidae	Agrypnia obsoleta (Hagen, 1864)	3		mh	*1
Trichoptera	Phryganeidae	Agrypnia pagetana Curtis, 1835	V		h	*1
Trichoptera	Phryganeidae	Agrypnia picta Kolenati, 1848	1		es	*1
Trichoptera	Phryganeidae	Agrypnia varia (Fabricius, 1793)	*		sh	*1
Trichoptera	Phryganeidae	Hagenella clathrata (Kolenati, 1848)	2		mh	*1
Trichoptera	Phryganeidae	Oligostomis reticulata (Linnaeus, 1761)	G		h	*1
Trichoptera	Phryganeidae	Oligotricha striata (Linnaeus, 1758)	*		sh	*1
Trichoptera	Phryganeidae	Phryganea bipunctata Retzius, 1783	*		sh	*1
Trichoptera	Phryganeidae	Phryganea grandis Linnaeus, 1758	*		sh	*1
Trichoptera	Phryganeidae	Trichostegia minor (Curtis, 1834)	V		h	*1
Trichoptera	Polycentropodidae	Cyrnus crenaticornis (Kolenati, 1859)	V		h	*1

Order	Family	Species	K	L	P	S
Trichoptera	Polycentropodidae	Cyrnus flavidus McLachlan, 1864	*		sh	*1
Trichoptera	Polycentropodidae	Cyrnus insolutus McLachlan, 1878	G		mh	*1
Trichoptera	Polycentropodidae	Cyrnus trimaculatus (Curtis, 1834)	*		sh	*1
Trichoptera	Polycentropodidae	Holocentropus dubius (Rambur, 1842)	V		h	*1
Trichoptera	Polycentropodidae	Holocentropus insignis Martynov, 1924	G		ss	*1
Trichoptera	Polycentropodidae	Holocentropus picicornis (Stephens, 1836)	V		h	*1
Trichoptera	Polycentropodidae	Holocentropus stagnalis (Albarda, 1874)	G		mh	*1
Trichoptera	Polycentropodidae	Neureclipsis bimaculata (Linnaeus, 1758)	*		sh	*1
Trichoptera	Polycentropodidae	Plectrocnemia appennina McLachlan, 1884	2		ss	*1
Trichoptera	Polycentropodidae	Plectrocnemia brevis McLachlan, 1871	V		h	*1
Trichoptera	Polycentropodidae	Plectrocnemia conspersa (Curtis, 1834)	*		sh	*1
Trichoptera	Polycentropodidae	Plectrocnemia geniculata McLachlan, 1871	V		h	*1
Trichoptera	Polycentropodidae	Polycentropus excisus Klapálek, 1894	3		s	*1
Trichoptera	Polycentropodidae	Polycentropus flavomaculatus (Pictet, 1834)	*		sh	*1
Trichoptera	Polycentropodidae	Polycentropus irroratus Curtis, 1835	*		sh	*1
Trichoptera	Polycentropodidae	Polycentropus schmidi Novak & Botosaneanu, 1965	R		es	*1
Trichoptera	Psychomyiidae	Lype phaeopa (Stephens, 1836)	*		sh	*1
Trichoptera	Psychomyiidae	Lype reducta (Hagen, 1868)	*		sh	*1
Trichoptera	Psychomyiidae	Psychomyia fragilis (Pictet, 1834)	2		ss	*1
Trichoptera	Psychomyiidae	Psychomyia pusilla (Fabricius, 1781)	*		sh	*1
Trichoptera	Psychomyiidae	Tinodes assimilis McLachlan, 1865	V		mh	*1
Trichoptera	Psychomyiidae	Tinodes dives (Pictet, 1834)	3		mh	*1
Trichoptera	Psychomyiidae	Tinodes kimminsi Sykora, 1962	1		es	*1
Trichoptera	Psychomyiidae	Tinodes maclachlani Kimmins, 1966	3		s	*1
Trichoptera	Psychomyiidae	Tinodes maculicornis (Pictet, 1834)	V		s	*1
Trichoptera	Psychomyiidae	Tinodes pallidulus McLachlan, 1878	*		h	*1
Trichoptera	Psychomyiidae	Tinodes rostocki McLachlan, 1878	*		h	*1
Trichoptera	Psychomyiidae	Tinodes unicolor (Pictet, 1834)	V		h	*1
Trichoptera	Psychomyiidae	Tinodes waeneri (Linnaeus, 1758)	*		sh	*1
Trichoptera	Psychomyiidae	Tinodes zelleri McLachlan, 1878	3		ss	*1
Trichoptera	Ptilocolepidae	Ptilocolepus granulatus (Pictet, 1834)	V		h	*1
Trichoptera	Rhyacophilidae	Rhyacophila albardana McLachlan, 1879	2		ss	*1
Trichoptera	Rhyacophilidae	Rhyacophila aquitanica McLachlan, 1879	3		ss	*1
Trichoptera	Rhyacophilidae	Rhyacophila aurata Brauer, 1857	V		s	*1
Trichoptera	Rhyacophilidae	Rhyacophila bonaparti Schmid, 1947	2		ss	*1
Trichoptera	Rhyacophilidae	Rhyacophila dorsalis (Curtis, 1834)	*		mh	*1
Trichoptera	Rhyacophilidae	Rhyacophila evoluta McLachlan, 1879	*		mh	*1
Trichoptera	Rhyacophilidae	Rhyacophila fasciata Hagen, 1859	*		sh	*1
Trichoptera	Rhyacophilidae	Rhyacophila glareosa McLachlan, 1867	V		s	*1
Trichoptera	Rhyacophilidae	Rhyacophila hirticornis McLachlan, 1879	V		s	*1
Trichoptera	Rhyacophilidae	Rhyacophila intermedia McLachlan, 1868	V		s	*1
Trichoptera	Rhyacophilidae	Rhyacophila laevis Pictet, 1834	3		mh	*1
Trichoptera	Rhyacophilidae	Rhyacophila nubila (Zetterstedt, 1840)	*		sh	*1
Trichoptera	Rhyacophilidae	Rhyacophila obliterata McLachlan, 1863	*		h	*1
Trichoptera	Rhyacophilidae	Rhyacophila pascoei McLachlan, 1879	0	1947	ex	*1
Trichoptera	Rhyacophilidae	Rhyacophila philopotamoides McLachlan, 1879	3		mh	*1
Trichoptera	Rhyacophilidae	Rhyacophila polonica McLachlan, 1879	2		es	*1
Trichoptera	Rhyacophilidae	Rhyacophila praemorsa McLachlan, 1879	*		h	*1
Trichoptera	Rhyacophilidae	Rhyacophila producta McLachlan, 1879	2		ss	*1
Trichoptera	Rhyacophilidae	Rhyacophila pubescens Pictet, 1834	3		mh	*1
Trichoptera	Rhyacophilidae	Rhyacophila simulatrix McLachlan, 1879	3		ss	*1
Trichoptera	Rhyacophilidae	Rhyacophila stigmatica (Kolenati, 1859)	2		ss	*1
Trichoptera	Rhyacophilidae	Rhyacophila torrentium Pictet, 1834	V		s	*1
Trichoptera	Rhyacophilidae	Rhyacophila tristis Pictet, 1834	*		h	*1
Trichoptera	Rhyacophilidae	Rhyacophila vulgaris Pictet, 1834	*		mh	*1
Trichoptera	Sericostomatidae	Notidobia ciliaris (Linnaeus, 1761)	*		sh	*1
Trichoptera	Sericostomatidae	Oecismus monedula (Hagen, 1859)	*		h	*1
Trichoptera	Sericostomatidae	Sericostoma personatum (Spence in Kirby & Spence, 1826)	*		sh	*1
Trichoptera	Sericostomatidae	Sericostoma schneideri (Kolenati, 1848)	*		sh	*1
Trichoptera	Uenoidae	Thremma gallicum McLachlan, 1880	*		s	*1