

RECENT LITERATURE ON LEPIDOPTERA

Under this heading are listed each month papers on Lepidoptera from all the scientific journals which are accessible to us and our cooperating abstractors. It is hoped that eventually our coverage of the world's literature will be virtually complete. It is intended that every paper and book published after 1946 will be included. Abstracts give all new subspecies and higher categories, with type localities and genotypes. Papers of only local interest are merely listed. Papers devoted entirely to economic aspects will be omitted. Reprints are solicited from all publishing members. Initials of cooperating abstractors are as follows: [P.B.] - P. F. BELLINGER; [A.D.] - A. DIAKONOFF; [Y.O.] - Y. OKADA; [C.R.] - C.L. REMINGTON; [J.R.] - J.E. REMINGTON; [T.S.] - T. SHIRÔZU. A complete set of these pages for clipping and filing may be obtained for Vols. 4, 5, and 6 for \$0.50 per volume.

B. SYSTEMATICS AND NOMENCLATURE

- Bernardi, G., "Les caractères distinctifs de trois *Pieris* français" [in French]. *Rev. Franç. Lépid.*, vol. 13: pp. 60-62, 7 figs. "Mar.-Apr." [31 July] 1951. Characters of pattern and venation distinguishing *P. rapae*, *P. manni*, and *P. ergane*. [P.B.]
- Gerhardinger, Klaus, "*Thais rumina* subsp. *minima* nov." [in German]. *Ent. Nachrichtenbl.*, vol. 3: pp. 101-103, 107, 2 figs. Feb. 1951. From Aranjuez, Spain [P.B.]
- Gregor, František, & Dalibor Povolny, "The genus *Pleurota* Hb. in Moravia (Lep. Gelechiidae)" [in Czech and English]. *Acta Soc. Ent. Českosloveniae*, vol. 47: pp. 38-41, 12 figs. 1 Feb. 1950. Key (in Czech) to the 4 spp.; describes and figures ♂ genitalia and discusses ecology. [P.B.]
- Grey, L. Paul, "The subspeciation of *Speyeria atantis*." *Lep. News*, vol. 5: pp. 31-35. 1951.
- Hata, Yoshihiko, "Genus *Lamproptera* Gray" [in Japanese]. *Butt. and Moths (Trans. Lep. Soc. Japan)*, vol. 2: pp. 10-11. 1951. 2 spp. discussed and their genitalia figured. [Y.O.]
- Herbulot, C., "Diagnoses de quatre nouveaux genres de Larentiinae paléarctiques (Geometridae)" [in French]. *Rev. Franç. Lépid.*, vol. 13: pp. 62-63. "Mar.-Apr." [31 July] 1951. Describes as new: *ANTILURGA* (type *Larentia alhambrata* Stgr.); *PAREULYPE* (*Geometra berberata* D. & S.); *PROTORHOE* (*Melanippe unicata* Gn.); *GRAMMORHOE* (*Geometra polygrammata* Bkh.). Genera based entirely on structure of ♂ genitalia; no figures. [P.B.]
- Hoffman, Emil, "Zusammenfliegen von *Coenonympha arcania* L. und *satyria* Esp." [in German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 121-123. 30 June 1947.
- Howarth, T. G., "Prison camp entomology in the Far East." *Proc. Trans. So. London Ent. Nat. Hist. Soc.*, 1949-50: pp. 94-110, 3 pls. April 1951. Describes as new: *Apatele cerasi* (Chemulpho, Korea); figs. both sexes and ♂ genitalia. Describes, with some figs., early stages of *Epinanga borneensis*, *Xanthodes intercepta*, *Utetheisa lotrix* (foodplant *Tephrosia candida*), *Aporarandria specularia* (foodplant "mangosteen"). Lists spp. collected while in prison camps in Singapore and Korea. [P.B.]
- Lempke, B. J., "The generic nomenclature of the European Pygaerinae (Lep., Notodontidae)." *Ent. Berichten*, vol. 13: pp. 332-333. 1 Sept. 1951. Prefers the name *Clostera* Sam. above *Ichthyura* Hb. Type of *Pygaera* is *timon* Hb. (designation of Kirby); *Phalera* Hb. remains for *bucephala* L. [A.D.]
- Lempke, B. J., "The Schiffermüller Names". *Ent. Berichten*, vol. 14: pp. 92-94. 1 June 1952.
- de Lesse, H., "Sur une espèce de Satyridae mal connue: *Hipparchia (Pseudotergumia) wyssii* Christ" [in French]. *Bull. Soc. Ent. France*, vol. 56: pp. 50-53, 3 figs. 1951. Redescribes sp.; figures ♂ genitalia of the 3 spp. of the subgenus. [P.B.]
- de Lesse, H., "Divisions génériques et subgénériques des anciens genres *Satyris* et *Eumemis* (sensu lato)" [in French]. *Rev. Franç. Lépid.*, vol. 13: pp. 39-42. "Mar.-Apr." [31 July] 1951. Lists the following genera and subgenera, with type spp.: *Hipparchia*: *Hipparchia (fagi)* Scop., *NEOHIPPARCHIA*, new (*stailinus* Hufn.), *Pseudotergumia (fidea)* L.; *ARETHUSANA*, new (*arethusa* Esp.); *Aulocera (braminus)* Blanch.; *Kanetisa*: *Kanetisa (digna)* Marsh, *Brintesia (circe)* Fabr.; *Karanasa (buebneri)* Fldr.; *Minois (dryas)* Scop.; *Satyris (actaea)* Esp.; *BERBERIA*, new (*abdelkader* Pierret); *PSEUDOCHAZARA*, new (*peloepa* Klug); *Chazara*

- (*briseis* L.); *Neominos* (*ridingsii* Edw.). Lists spp. included in each genus. Study based on examination of genotypes of all genera referable to this group (spp. with spurs on mesothoracic tibiae). New genera briefly described. Resumé of a more extensive paper, to appear shortly. [P.B.]
- Marion, H., "*Mecyna lutealis* Dup. bona species et f. *citrinalis* H.-S." [in French]. *Rev. Franç. Lépid.*, vol. 13: pp. 10-15, 4 figs. "Jan.-Feb." [31 Mar.] 1951. Distinguishes *M. lutealis* from *M. flavalis*; figures pattern and ♂ genitalia of both. [P.B.]
- Munroe, Eugene, "Some remarks on the genus concept in Rhopalocera." *Lep. News* vol. 3: pp. 3-4. 'Jan.' [Mar.] 1949.
- Munroe, Eugene, "Subspeciation in the Microlepidoptera." *Lep. News*, vol. 5: pp. 29-31. 1951.
- Okada, Yoshio, "Revised catalogue of the Theclinae (Lycaenidae) of Japan, Korea, Sakhalin, and Formosa." *Lep. News*, vol. 3: pp. 79-80. "Oct. [Nov.] 1949.
- Paclt, Jiří, & Jiří Smelhaus, "On the representative of the genus *Philotes* Scudd. in Czechoslovakia" [in Czech, English summary]. *Acta Soc. Ent. Českosloveniae*, vol. 47: pp. 45-47, 3 figs. 1 Feb. 1950. Czech records of *P. baton* refer to *P. vicrama*. Valves of these 2 and of *P. panoptes* are described and figured. [P.B.]
- Paclt, Jiří, "Les profits que la nomenclature zoologique pourrait tirer du schème international de translittération applique aux noms cyrilliques" [in French]. *Proc. VIII Int. Ent. Congr.*: pp. 995-998. 1950. Proposes that the Rules be amended to direct the use of a uniform system for transliterating names derived from Russian and related languages. [P.B.]
- Toxopeus, L. J., "Notes on the genus *Amathusia* (Lep., Rhop.)." *Idea*, vol. 9: pp. 9-23, pls. 1-3. 31 Dec. 1951. Revision of the five Javanese species, describes two as new: *duponti* (Buitenzorg) and *lieftincki* (Bantam); gives a key and photographs of upper and underside; adds critical notes on other spp. and describes also *A. lieftincki rosieri* subsp. nov. (Sumatra). [A.D.]
- Toxopeus, L. J., "*Charaxes baya* (Moore) and *Charaxes scylax* Felder in Java (Lep., Nymphalidae)." *Idea*, vol. 9: pp. 27-28. 31 Dec. 1951. Two "forms" occurring side by side in Java apparently are distinct spp. [A.D.]
- Toxopeus, L. J., "What is *Amathusia binghami* Fruhst.? (Lep., Rhop.)." *Idea*, vol. 9: pp. 28-31. 31 Dec. 1951. Proposes the following changes of names: *Amathusia phidippus binghami* Fruhst. (Malay Peninsula); *A. phidippus chersias* Fruhst. (as restricted by Corbet & Pendlebury); *A. ochrotaenia ochrotaenia* nom. nov. for *A. phidippus binghami* Fruhst. (Penang), wet season form (= *A. binghami* auct. not Fruhst.); *A. ochrotaenia frubstorferi* subsp. n. (West Coast of Sumatra) for *A. binghami* Fruhst., in Seitz, p. 429, part. [A.D.]
- Toxopeus, L. J., "Nieuwe gegevens over *Papilio polytes* L." [In Dutch: new data on *P. p.*] *Idea*, vol. 9: 38-39. 31 Dec. 1951. As is generally understood, females mimic *P. (Atrophaneura) aristolochiae*. This does not apply to the *polytes* subspecies from North Sumatra, female of which is extremely variable. Separates *Papilio polytes wagensveldi*, new subsp. (Atjeh). [A.D.]
- Viette, P., "Sur la nomenclature des Eriocraniidae" [in French]. *Rev. Franç. Lépid.*, vol. 13: pp. 43-44. "Mar.-Apr." [31 July] 1951. Discusses the taxonomic history of the group. Regards as valid the following genera, with type spp.: *Eriocrania (semipurpurella)* Steph.; *Dyseriocrania (subpurpurella)* Hw.; *Heringocrania (unimaculella)* Zett.). *Mnemonic* a synonym of *Dyseriocrania*. [P.B.]

C. MORPHOLOGY AND CYTOLOGY

- Pardi, L., "I primi processi dello sviluppo nell'uova fecondato delle razze tetraploidi-partenogenetiche di *Solenobia triquetrella* F.R. (Lepidoptera - Psychidae)" [in Italian, German summary]. *Chromosoma*, vol. 4: pp. 108-147, 25 figs. 1950. Describes fertilization and early cleavage stages, with emphasis on abnormalities of mitosis and chromosome number. [P.B.]
- Seiler, J. & Barbara Gessner, "Die automiktischen Vorgänge im Ei der tetraploid parthenogenetischen *Solenobia triquetrella* F.R. (Psychidae, Lepid.)" [in German]. *Chromosoma*, vol. 4: pp. 91-107, 8 figs. 1950. Following reduction division the tetraploid chromosome number is restored by fusion of two nuclei. Other peculiarities and racial differences in cytology are described. [P.B.]

D. VARIATION AND GENETICS

- Alexandre, R., "Notes et captures" [in French]. *Rev. Franç. Lépid.*, vol. 13: p. 64. "Mar.-Apr." [31 July] 1951. Describes a gynandromorph of *Erebia aethiops*. [P.B.]
- Mauny, Jean, "Papillons inédits" [in French]. *Lambillionea*, vol. 49: p. 105. 25 Oct. 1949. Names an aberration of *Melitaea aurinia*. [P.B.]
- Slabý, Otto, "*Erebia medusa* Fabr. from eastern Slovakia" [in Czech, English summary]. *Acta Soc. Ent. Českosloveniae*, vol. 47: pp. 48-52. 1 Feb. 1950. Local population belongs to *E. m. brigobanna*. Names an aberration. [P.B.]
- Vigneau, Pierre, "Intéressantes captures en Gironde et dans les Pyrénées" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 147-149. "Sept.-Oct. 1949" [25 Jan. 1950]. Notes on 3 noctuids; names an aberration of "*Heodes*" *alcipbron gordius*. [P.B.]

E. DISTRIBUTION AND PHENOLOGY

- Adamczewski, Stanisław, "Notes on the Lepidoptera of Poland. II" [in Polish, English summary]. *Fragm. Faun. Mus. Zool. Polonici*, vol. 6: pp. 95-110. 15 July 1950. Notes on habits and distribution of 3 spp. of Noctuidae. *Melicleptria scutosa* and *Phytometra confusa* are new records for Poland. New localities in Poland recorded for 6 spp. [P.B.]
- Antram, Chas. B., "Notes on the butterflies of the New Forest in 1950." *Ent. Rec.*, vol. 62: pp. 75-76. Sept. 1950.
- Berger, L., "Espèces nouvelles pour la faune belge: *Scopula tessellaria* B. et *Cosymbia quercimontaria* Bastelb." [in French]. *Lambillionea*, vol. 49: p. 23. 25 Apr. 1949.
- Boursin, Ch., "A propos de *Cucullia lactucae*" [in French]. *Rev. Franç. Lépid.*, vol. 11: pp. 398-399. "Oct.-Nov." [16 Dec.] 1948. Species is replaced in eastern Asia by *C. fraterna*. [P.B.]
- Brčák, Jaroslav, "Poznámky k ekologii a fenologii pŕidalky. *Poecilopsis isabellae* Harr. (Lep. Geometridae)" [in Czech]. *Acta Soc. Ent. Českosloveniae*, vol. 45: p. 77. 1 May 1948.
- Cary, Margaret M., "Sphingidae collecting in north-central Venezuela in June, 1949." *Lep. News*, vol. 3: p. 78. "Oct." [Nov.] 1949.
- Huard, G., "Une localité interessante du Morvan" [in French]. *Rev. Franç. Lépid.*, vol. 11: pp. 359-363. Sept. 1948. Notes on some Lepidoptera, mostly butterflies. [P.B.]
- Hunt, Charles-J., "A propos de *Libythea celtis* Fuessly dans les Alpes Maritimes et sa bibliographie" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 217-218. "Jan.-Feb." [12 July] 1950.
- Janmouille, E., "Espèces nouvelles pour la faune belge" [in French]. *Lambillionea*, vol. 49: pp. 90-91, 110. 25 Oct., 25 Dec. 1949. Records *Dioryctria mutata*, *Coleophora atriplicis*, *Elachista scirpi*, *Lypusa maurella*, *Dioryctria splendidella*. [P.B.]
- Johnston, Edward C., "Lepidoptera of the Pribilof Island, Alaska." *Lep. News*, vol. 4: pp. 27-30. [June] 1950.
- Justino, Irmão Gabriel, "Lepidopteros do Brasil Meridional. III" [in Portuguese]. *Bol. Inform. Inst. Geobiologico "La Salle" de Canoas*, no. 5; pp. 16-17. Apr. 1951. Records, with data, 30 spp. of butterflies. [C.R.]
- Kaisila, Jouko, "*Coleophora tractella* Zell. (Lep. Oecophoridae) borealpin" [in Finnish, German summary]. *Ann. Ent. Fennici*, vol. 15: p. 42. 1949. New record for north Europe. [P.B.]
- Komárek, Julius, "The vertical geographical migration of phytophagous insects (*Ips typographus* L., *Lymantria monacha* L., *Lecanium coryli* L., *Semasia dimiana* Gn. etc.)" [in Czech, English summary]. *Acta Soc. Ent. Českosloveniae*, vol. 47: pp. 110-119. 1 Oct. 1950. *L. monacha*, *Epiblema tedella*, *E. nigricana*, *Cacoecia murinana* and *Semasia rufimitrana* have migrated vertically with new planting of their conifer hosts; *S. dimiana* restricted to the original altitudinal zone, in spite of spread of its hosts. [P.B.]
- Kudla, Miloslav, "Hřbetozubci (Notodontidae) z okolí Olomouce (Lep.)" [in Czech]. *Acta Soc. Ent. Českosloveniae*, vol. 46: pp. 165-170. 1 Oct. 1949.
- de Laever, E., "Arenostola bondii K. en Belgique?" [in French]. *Lambillionea*, vol. 49: p. 117, 25 Dec. 1949.

- de Lattin, Gustav, "Über die zoogeographische Verhältnisse Vorderasiens" [in German]. *Verhandl. Deutsch. Zool., Marburg*, 1950: pp. 206-214, 7 figs. 1950. Discusses the origins of the fauna of western Asia, based on distribution of Lepidoptera. [P.B.]
- Leech, M. J., "Lepidoptera in the Island of South Uist, Outer Hebrides. August 17-September 4, 1950." *Entomologist*, vol. 84: pp. 193-194. Sept. 1951.
- Le Marchand, S., "Contribution à l'étude de la faune des microlépidoptères de la Gironde" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 104-111, 135-144. "May-June" [7 Dec.] 1949; "Sept.-Oct. 1949" [25 Jan. 1950]. Annotated list.
- Lempke, B. J., "Belangrijke vangsten van Macrolepidoptera" [in Dutch: Important captures of M.] *Natuurhist. Maandbl.*, vol. 40: pp. 90-92. 31 Aug. 1951.
- de Lesse, H., "*Scolitantides orion* Pallas et quelques Rhopalocères du Massif Central" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 58-60. "Feb." [2 Apr.] 1949.
- de Lesse, H., "Sur la présence de reliques alpines dans la Drôme (*Melit. varia* Meyer-Dür. et *Polyom. eros* Ochs.)" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 61-64. "Feb." [2 Apr.] 1949.
- de Lesse, H., "Contribution à l'étude du genre *Coenonympha*. *C. arcania* et ses formes" [in French]. *Lambillionea*, vol. 49: pp. 68-80, 1 map. 25 Aug. 1949. Discusses the distribution of *C. arcania*, *C. darwiniana* and *C. gardetta*; the latter appear to be alpine representatives of *C. arcania*. [P.B.]
- de Lesse, H., "Les races de *Pararge achine* Scop. en France et première capture de la forme typique à Gap" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 101-104, 1 pl. "May-June" [7 Dec.] 1949. *P. a. achine* and *P. a. laetalba*; figures adults. [P.B.]
- Loritz, J., "Complément d'information sur *Catocala fraxini* L. près du littoral méditerranéen des Alpes-Maritimes" [in French]. *Rev. Franç. Lépid.*, vol. 11: pp. 402-412, 1 pl. "Dec. 1948" [10 Feb. 1949].
- Loritz, J., "Sur la répartition verticale de quelques espèces de Lépidoptères dans les Alpes-Maritimes, les Hautes-Alpes et les Basses-Alpes" [in French]. *Rev. Franç. Lépid.*, vol. 11: pp. 384-394, 413-420; vol. 12: pp. 2-8, 69-81. "Oct.-Nov." [16 Dec.] 1948; "Dec. 1948" [10 Feb. 1949]; "Jan." [28 Feb.], "Feb." [2 Apr.], "Mar.-Apr." [4 Oct.] 1949. Extensive notes on the fauna of several localities in this area. [P.B.]
- Loritz, Jean, "A propos de *Lybythea celtis* Fuessly dans les Alpes-Maritimes et sa bibliographie" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 175-178. "Nov.-Dec. 1949" [26 Apr. 1950].
- Loritz, Jean, "Sur la répartition géographique d'*Erebia epiphron aetherius* Esper dans les Alpes-Maritimes" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 246-250. "Mar.-Apr." [25 Sept.] 1950.
- Maréchal, Paul "Insectes intéressants récoltés par le Cercle des Entomologistes Liégeois" [in French]. *Lambillionea*, vol. 49: pp. 92-97. 25 Oct. 1949. Records 27 Lepidoptera. [P.B.]
- Marion, H., "*Homoeosoma pseudonimbella* Benth., (Phycitinae) nouvelle pour la France" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 173-175, 1 fig. "Nov.-Dec. 1949" [26 Apr. 1950]. Figures ♂ genitalia [P.B.]
- Morley, A. M., "*Colias alfacariensis* Ribbe à Folkestone" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 155-156. "Sept.-Oct. 1949" [25 Jan. 1950].
- Mounterde, R., "Les voies de pénétration des papillons méridionaux dans la région lyonnaise" [in French]. *Bull. Mens. Soc. Linn. Lyon*, vol. 18: pp. 39-42, 51-53. Mar., Apr. 1949. Fauna of the Lyons area is poor in southern spp., compared with that of the Atlantic coast of France. The main path of penetration appears to be the Rhone valley. [P.B.]
- de Puysegur, K., "*Erebia epistygne* Hübner dans le Gard et l'Hérault" [in French]. *Rev. Franç. Lépid.*, vol. 12: p. 216. "Jan.-Feb." [12 July] 1950.
- Reisser, Hans, "Lepidopteren von den Aegäischen Inseln" [in German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 44-61. 30 June 1947. Annotated list.
- Reisser, Hans, "Microlepidopteren aus der Sierra de Gredos" [in German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 109-112. 30 June 1947. Annotated list.
- Reisser, Hans, "Notizen zur Lepidopterenfauna von Niederösterreich" [in German]. *Z. Wiener Ent. Ges.*, vol. 62: pp. 117-119. 1 Aug. 1951. List of new local records: [P.B.]
- de Ricci, D., "*Pericallia matronula* en France" [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 112-116. "May-June" [7 Dec.] 1949.

- de Ricci, D., "Notes complémentaires sur *Pericallia matronula*" [in French]. *Rev. Franç. Lépid.*, vol. 13: pp. 21-23. "Jan.-Feb." [31 Mar.] 1951. Distribution; appears to favor Jurassic formations. [P.B.]
- Richard, F., "Espèces nouvelles pour la faune belge" [in French]. *Lambillionea*, vol. 50: pp. 14-15. 25 Feb. 1950. Records *Chlorissa cloraria* and lists differences from *C. viridata*. [P.B.]
- Skala, Hugo, "Mitteilungen zur Falterfauna von Oberösterreich" [in German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 96-106. 30 June 1947. Annotated list.
- Slabý, Otto, "Quelques dates faunistiques sur les Rhopalocères des montagnes de Orlické Hory (Bohême du nord-est). (Lep.)" [in Czech, French summary]. *Acta Soc. Ent. Českosloveniae*, vol. 45: pp. 94-98, 2 figs. 1 May 1948. Notes on fauna; mostly butterflies. Figures 2 aberrations. [P.B.]
- Smelhaus, Jiří, "Contribution to the knowledge of Sesiidae of Bohemia" [in Czech, English summary]. *Acta Soc. Ent. Českosloveniae*, vol. 45: pp. 127-128. 1 Oct. 1948. Record of *Chamaesphexia affinis* refers properly to *C. empiformis*. [P.B.]
- Smith, C. A. S., "The first records of European Corn Borer in Western Canada." *80th Ann. Rep. Ent. Soc. Ontario*: pp. 18-19. 1950. *Pyrausta nubilalis*.
- Various authors, "The field season summary of North American Lepidoptera for 1948." *Lep. News*, vol. 2, suppl: pp. i-xii. '1948' [Apr. 1949.]
- Various authors, "The field season summary of North American Lepidoptera for 1949." *Lep. News*, vol. 3: pp. 85-102. "Nov.-Dec. 1949" [Mar. 1950].
- Various authors, "The field season summary of North American Lepidoptera for 1950." *Lep. News*, vol. 4: pp. 85-107. "1950" [May 1951].
- Vlach, Vilém, "Contribution à la connaissance de la faune lépidoptérologique de la Bohême" [in Czech, French summary]. *Acta Soc. Ent. Českosloveniae*, vol. 47: pp. 60-61. 1 Feb. 1950. 1 new record (*Zygaenidae*) and 3 corrections. [P.B.]
- Vlach, Vilém, "Further discoveries of microlepidoptera from Bohemia" [in Czech]. *Ann. Soc. Ent. Českosloveniae*, vol. 47: pp. 192-193. 1 Oct. 1950. Records 21 spp. of *Nepticula*, 1 *Coleophora*, 1 *Euxanthia*. [P.B.]
- Warnecke, G., "Auffallende Häufigkeit des Kiefernspinners (*Dendrolimus pini* L.) im Niederelbgebiet und Schleswig-Holstein" [in German]. *Mitt. Faun. Arbeitsgem. Schleswig-Holst.*, n.s., vol. 2: pp. 21-22. 1949.
- Warnecke, Georg, "Einige Schmetterlingsfunde im Juni 1949 im Brunsholm (Stapelholm) und bei Schwabstedt (Kr Husum)" [in German]. *Mitt. Faun. Arbeitsgem. Schleswig-Holst.*, n.s., vol. 2: p. 35. 1949.
- Warnecke, Georg, "Zur Ausbreitung des Tagfalters *Archnia* [sic] *levana* L. (Landkärtchen)" [in German]. *Mitt. Faun. Arbeitsgem. Schleswig-Holst.*, n.s., vol. 2: p. 36. 1949. Northward extension of range in central Europe. [P.B.]
- Warnecke, Georg, "Zur Frage eines 'atlantischen' Klimakeils in Schleswig-Holstein und seines Einflusses auf die Tierwelt" [in German]. *Verb. Ver. f. Naturw. Heimatsforsch. Hamburg*, vol. 30: pp. 91-98, 9 figs. June 1949. The theory of a projection of "Atlantic" climate into N. Germany is not supported by the distribution of the fauna, particularly the Lepidoptera. [P.B.]
- Weber, Neal A., "A survey of the insects and related arthropods of arctic Alaska" *Trans. Amer. Ent. Soc.*, vol. 76: pp. 147-206, 10 pls. 11 Oct. 1950. Records 17 spp. Lepidoptera and a number determined only to genus or family; 1) families represented. [P.B.]
- Weddell, B. W., "Entomological Report." *Wiltshire Arch. Nat. Hist. Mag.*, vol. 53: pp. 97-104. June 1949. List of about 250 spp. of Lepidoptera collected in 1948. [P.B.]
- Wichra, Jaroslav, "Nová naleziště v záněšších druhů molytlů v čechách" [in Czech]. *Acta Soc. Ent. Českosloveniae*, vol. 46: pp. 172-180. 1 Oct. 1949. Annotated list.
- Wolfsberger, Joseph, "Neue und interessante Macrolepidopterenfunde aus Südbavern und den angrenzenden nördlichen Kalkalpen" [in German]. *Mitt. Münchn. Ent. Ges.*, vol. 35/39: pp. 308-329. 1 Aug. 1949. Notes on 123 spp. [P.B.]
- Zimmerman, Fr., & Hugo Skala, "Kleinfalter aus Mähren-Schlesien" [in German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 121-123. 30 June 1947. Annotated list.

F. BIOLOGY AND IMMATURE STAGES

- Berger, L., & E. Janmouille, "Remarques sur la faune belge" [in French]. *Lambillionea*, vol. 49: pp. 107, 129. 25 Oct., 25 Dec. 1949. Records of 6 spp; *Polyommatus icarus* and *Cyaniris semiargus* in copulation. [P.B.]

- Bianchi, Fred A., "Recent changes in the parasite complex of armyworms." *Proc. Hawaiian Ent. Soc.*, vol. 13: p. 345. Mar. 1949. 3 recently introduced parasites of *Laphygma exempta* have replaced some older introductions in importance. [P.B.]
- Burmann, Karl, "Abweichende Flugzeiten zweier *Titamio*-Arten (Microlepidoptera)" [in German] *Z. Wiener Ent. Ges.*, vol. 57: pp. 2-3. 30 June 1947. *T. schrankiana* and *T. phrygialis*.
- Butcher, James W. & A.C. Hodson, "Biological and ecological studies on some lepidopterous bud and shoot insects of Jack Pine (Lepidoptera-Olethreutidae)." *Canad. Ent.*, vol. 81: pp. 161-173, 5 figs. July 1949. Life history, parasites and nature of damage caused by *Eucosma sonomana*, *Petrova pallipennis*, and *P. albicapitana*. [P.B.]
- Cameron, Ewen, "The biology and economic importance of *Alomya debellator* (F.), a remarkable parasite of the swift moth, *Hepialus lupulinus* (L)." *Bull. Ent. Res.*, vol. 41: pp. 429-438, 5 figs. Sept. 1950.
- Cameron, Ewen, "On the identity of an ichneumonid parasite of *Hepialus lupulinus* (L)." *Bull. Ent. Res.*, vol. 41: p. 637. Feb. 1951. Parasite identified in a previous paper as *Alomya debellator* is actually *Ichneumon suspiciosus*. [P.B.]
- Cardew, P.A., "Notes on protective resemblances in the Order Lepidoptera." *Proc. So. London Ent. Nat. Hist. Soc.*, 1948-49: pp. 61-68. Feb. 1950. Deals principally with cryptic coloration. [P.B.]
- Chada, Harvey Lorenzo, "Seasonal development and ecology of the European Corn Borer in the upper Mississippi Valley." *Wisconsin Univ. Sum. Doctoral Diss.*, vol. 9: pp. 74-76. 1949.
- Chang, Joseph T., "A preliminary survey of tobacco insects in Sian." *Peking Nat. Hist. Bull.*, vol. 16: pp. 279-289. Mar.-June 1948. Morphology and biology of 3 spp. of *Heliothis* and 1 *Crambus*; 10 other noctuids recorded. [P.B.]
- Franklin, Henry J., "A new cutworm on cranberry." *Journ. Econ. Ent.*, vol. 42: p. 986, 3 figs. Dec. 1949. Describes larva, cocoon and adult of *Hyppa xylinoides*, with poor figures. [P.B.]
- Gómez Clemente, Federico, "Estudio biológico del lepidoptero *Chilo simplex* Butl. en los arrozales valencianos" [in Spanish]. *Bol. Patol. Veg. Ent. Agric.*, vol. 16: pp. 1-22, 8 figs. 1949. Biology and morphology of all stages. [P.B.]
- Graham, A. R., "Developments in the control of the Larch Case Bearer, *Coleophora laricella* (Hbn.)." *78th Ann. Rep. Ent. Soc. Ontario*: pp. 45-50. 1949. Biology of 2 parasites. [P.B.]
- Grandori, Remo, "Un nuovo nemico del gelho e delle piante da frutto: *Hyphantria cunea* Drury" [in Italian]. *Boll. Zool. Agr. Bachic.*, vol. 15: pp. 3-9, 4 figs. 1949. Morphology and biology of this introduced American species. [P.B.]
- Guppy, Richard, "Some records of parasitic Diptera from Wellington, B.C." *Proc. Ent. Soc. Brit. Columbia*, vol. 46: p. 4. 15 May 1950. Records 4 parasites of Lepidoptera (Phalaenidae, Arctiidae, Lasiocampidae). [P.B.]
- Hill, A. R., "The Bionomics of *Lampronia rubiella* (Bjerkander), the Raspberry Moth, in Scotland." *Journ. Hort. Sci.*, vol. 27: pp. 1-13, 1 pl. Jan. 1952.
- Hofmaster, Richard Namon, "Biology and control of the Potato Tuberworm with special reference to eastern Virginia." *Ohio State U. Abs. Doct. Diss.*, no. 57: pp. 93-101, 4 figs. 1949.
- House, H. L., & M. Gladys Turner, "An artificial food for rearing *Pseudosarcophaga affinis* (Fall.), a parasite of the Spruce Budworm *Choristoneura fumiferana* (Clem.)." *79th Ann. Rep. Ent. Soc. Ontario*: pp. 50-53. 1949. Parasites reared on liver and fish mixture. [P.B.]
- Janmouille, E., & L. Berger, "Remarques sur la faune belge" [in French]. *Lambillionea*, vol. 49: pp. 57-58. 25 June 1949. Habits of larva of *Teichobia verhuellella*; food plant *Scolopendrium*. Records of 18 other spp. [P.B.]
- Janmouille, E., "Remarques sur la faune belge" [In French]. *Lambillionea*, vol. 50: p. 59. 25 June 1950. *Eupithecia oblongata* on *Statice limonium* and *Artemisia maritima*. [P.B.]
- Jones, J. R. J. Llewellyn, "Notes on rearing, from larvae, *Sarbena* (*Roeselia*) *minuscula* Zell." *Proc. Ent. Soc. Brit. Columbia*, vol. 46: p. 41. 15 May 1950. Reared on oak, but lichen must be present also. [P.B.]
- Kautz, Hans, "Bemerkungen zum Aufsatz von Emil Hoffman in Linz Eine II. Generation von *Pieris bryoniae* O. in Salzburg?" [in German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 42-43. 30 June 1947.

- Keifer, H. H., "Systematic entomology." *Bull. Calif. Dept. Agric.*, vol. 37: pp. 205-209. Oct.-Nov.-Dec. 1948. Habits of *Apterona crenulella*; the sp. appears to be parthenogenetic in California, as no adults have ever been seen to emerge. [P.B.]
- Kerzina, M. N., "Massovoe pramnozhenedubovı́ khokhlatki (*Notodonta trepida* Esp.) i istreblenie ee ptitsami" [in Russian; Mass reproduction of *N. trepida* and its extermination by birds]. *Izvest Akad. Nauk. SSSR, Ser. Biol.*, 1949: pp. 317-322, 1 fig.
- Klimesch, Josef, "*Brachmia arulensis* Rbl. (Lep. Gelechiidae)" [in German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 65-72, 1 pl., 11 figs. 30 June 1947. Describes all stages and biology; well illustrated. [P.B.]
- Klimesch, Josef, "Die Lebensweise der Raupe von *Xanthospilapteryx magnifica* Stt. (Lep., Gracilariidae)" [in German]. *Z. Wiener Ent. Ges.*, vol. 57: pp. 74-80, 1 pl., 11 figs. 30 June 1947. Distribution; structure and biology of early stages. [P.B.]
- Labeurie, V., & R. Pons, "*Microgaster globatus* Ness., nouveau parasite de la Teigne du Poireau (*Acrolepia assectella* Zeller)" [in French]. *Bull. Soc. Ent. France*, vol. 56: p. 31. Feb. 1951.
- Le Charles, L., "Sur le comportement d'une chenille de *Cucullia lactucae* Esper. (Lepidopt. Noctuidae)" [in French]. *Rev. Franç. Lépid.*, vol. 11: pp. 355-356, 1 pl., 1 map. Sept. 1948. Distribution in France; larval habits. Larva figured. [P.B.]
- Legay, Jean-Marie, & Michel Pascal, "De l'effet de groupe chez le ver à soie" [in French]. *C. R. Acad. Sci.*, vol. 233: pp. 445-447, 1 fig. 30 July 1951. Concentration of larvae has slight effects in last instar only. [P.B.]
- Le Marchand, S., "Sur une particularité biologique inédite chez une espèce nouvelle de *Stigmella* (*Nepticula*)" [in French]. *Rev. Franç. Lépid.*, vol. 11: pp. 347-349. Sept. 1948. Pupation habits of *S. phyllotomella*. [P.B.]
- Rougeot, P. C., "Description des premiers états de *Lobobunaea goodi* Holl." [in French]. *Bull. Mens. Soc. Linn. Lyon*, vol. 18: pp. 42-43. Apr. 1949. Describes full-grown larva and pupa. [P.B.]

G. PHYSIOLOGY AND BEHAVIOR

- Anderson, E. C., "Mating Habits of Soil Webworms." *Journ. Econ. Ent.*, vol. 43: p. 956, 1 fig. Dec. 1950. *Crambus dorsipunctellus*.
- Betz, J.-T., "Éclosions diférées et paradoxales chez *Smerinthus ocellata atlanticus* Aust." [in French]. *Rev. Franç. Lépid.*, vol. 12: pp. 156-160. "Sept.-Oct. 1949" [25 Jan: 1950]. Effectiveness of thermal shock in breaking diapause. [P.B.]
- Busnel, René-Guy, "Nouvelle acquisitions sur les pterines des insectes" [in French]. *Proc. VIII Int. Ent. Congr.*, pp. 622-625. 1950. Report on recent work on this group of pigments, characteristic of the Pieridae. [P.B.]
- Dréux, Ph., "Influence des ions K et Ca sur l'automatisme du vaisseau dorsal de la chenille de *Galleria mellonella* L." [in French]. *C. R. Soc. Biol.*, vol. 144: pp. 803-804. June 1950.
- Dréux, Ph., "Action de la concentration totale des solutions sur l'automatisme du vaisseau dorsal de la chenille de *Galleria mellonella* L." [in French]. *C. R. Soc. Biol.*, vol. 144: pp. 804-806, 1 fig. June 1950.
- Drilhon, Andrée, and René-Guy Busnel, "Discrimination des acides aminés libres dans l'oeuf de *Bombyx mori* L." [in French]. *C. R. Acad. Sci.*, vol. 230: pp. 1114-1116. 13 March 1950.
- Fukaya, M., "On the factor inducing the dormancy of the rice borer, *Chilo simplex* Butler." *Proc. VIII Int. Ent. Congr.*, pp. 223-225. 1950. Dormancy in 5th instar larva partly determined by conditions of temperature, and perhaps light, under which the egg is kept. [P.B.]
- Jahn, Theodore, & Lewis A. Kaplan, "Effect of carbon dioxide on insect electroretinograms." *Anat. Rec.*, vol. 105: p. 577. Nov. 1949. Abstract; *Celerio lineata*, *Papilio daunus*.
- van der Kloot, William, & Carroll M. Williams, "An experimental analysis of the spinning behaviour of the *Cecropia* silkworm." *Anat. Rec.*, vol. 108: pp. 511-512. Nov. 1950. Abstract only.
- Passonneau, Janet V., & Carroll M. Williams, "The moulting-fluid of the *Cecropia* silkworm." *Anat. Rec.*, vol. 108: p. 558. Nov. 1950. Abstract only.
- Sanborn, Richard C. & Carroll M. Williams, "Oxidative enzymes in relation to pupal diapause and adult development in the *Cecropia* silkworm." *Anat. Rec.*, vol. 108: p. 558. Nov. 1950. Abstract only.

- Svetlov, P. G., & O. V. Chekanovskaia, "O prirode ralizhii v chuvstvitel'nosti k vrednym faktoram v samtsor i samok. Opyty s imaginal'nymi diskami gusenits *Dasychira* sp." [in Russian; on the nature of the differences in sensitivity to injurious agents in ♂♂ and ♀♀; experiments with imaginal disks of *Dasychira* sp.]. *Izvestia Akad. Nauk SSSR, Ser. Biol.* 1949: pp. 201-207.
- Telfer, William H. & Carroll M. Williams, "An immunological study of the larval-pupal transformation of the *Cercropia* silkworm." *Anat. Rec.*, vol. 108: p. 559. Nov. 1950. Abstract only.

H. MIGRATION

- Lempke, B. J., "The migrating Macrolepidoptera of Holland in comparison with those of Great Britain." *Proc. So. London Ent. Nat. Hist. Soc.*, 1948-49: pp. 148-158: Feb. 1950. summary of progress in recording migrants in Holland; notes on 37 spp. Holland evidently much poorer in migrants than Britain. [P.B.]
- Loeliger, R., "The migration observation group of Switzerland." *Lep. News*, vol. 4: pp. 61-62. "1950" [Mar. 1951].
- Rawson, George W., "A migration of the Snout Butterfly (*Libytheana bachmanii*) in eastern Arizona." *Lep. News*, vol. 3: p. 28. "Mar." [May] 1949.
- Warnecke, G., "Ein Schmetterlingswanderzug am 12.V.1949. bei Hamburg und auf der Unterelbe" [in German]. *Mitt. Faun. Arbeitsgem. Schleswig-Holst.*, n.s., vol. 2: pp. 20-21. 1949. *Pieris brassicae* migrating. [P.B.]
- Warnecke, Georg, "Wanderzug des Grossen Kohlweisslings (*Pieris brassicae* L.) am 23 und 24 Juli 1949 bei Hamburg" [in German]. *Mitt. Faun. Arbeitsgem. Schleswig-Holst.*, n.s., vol. 2: pp. 32-33. 1949.
- Warnecke, Georg, "Einflug des Distelfalters (*Pyrameis cardui* L.) 1949" [in German]. *Mitt. Faun. Arbeitsgem. Schleswig-Holst.*, n.s., vol. 2: pp. 33-34. 1949.

I. TECHNIQUE

- Anonymous, "Collecting Insects." *Life*, vol. 32: pp. 62-66, 13 figs., 1 col. pl. 16 June 1952. Brief elementary instructions on collecting, killing, and mounting insects. [J.R.]
- Klots, Alexander B., "Back-yard butterflies for young collectors." *Family Circle*, vol. 41: pp. 38-41, 58-62, 11 figs., 2 col. pls. July 1952. Popular article with suggestions for starting a Lepidoptera collection, including equipment, "hunting seasons", attracting butterflies, life history, unusual habits. [J.R.]
- Le Charles, L., "Comment tuer les Zygènes" [in French]. *Rev. Franç. Lépid.*, vol. 13: pp. 33, 38, 55, 63. "Mar.-Apr." [31 July] 1951. Recommends use of carbon tetrachloride or a pin dipped in nicotine solution. [P.B.]

J. MISCELLANY

- Beirne, Bryan P., "Some original paintings by John Abbot." *Lep. News*, vol. 4: pp. 25-26. [June] 1950.
- Bryk, Felix, "Der Gattungsbegriff bei Linné" [in German]. *Proc. VIII Int. Ent. Congr.*, pp. 989-992. 1950. Discusses Linnaeus' genera, especially in the Lepidoptera, and some other peculiarities of 'binomial nomenclature'. [P.B.]
- Clarke, J. F. Gates, "The date of "A List of North American Lepidoptera" by Harrison G. Dyar." *Proc. Ent. Soc. Wash.*, vol. 52: p. 308. 13 Dec. 1950. The actual date of publication was 13 Jan. 1903. [P.B.]
- Clench, Harry K., "Regional lists." *Lep. News*, vol. 3: pp. 15-16. 'Feb.' [Apr.] 1949.
- Hyde, George E., "A lost British butterfly." *Country Life*, vol. 107: p. 1027, 3 figs. 1950. *Aporia crataegi*.
- Meiners, Edwin P., "A brief history of lepidopterology in Missouri." *Lep. News*, vol. 3: pp. 51-52. "Apr.-May" [July] 1949.
- Pistorius, Anna, *What Butterfly Is It?* 25 pp.; ill. Wilcox and Follett Co., New York. 1949.
- Reichel, Johannes, "Collecting on the Peloponnesus of Greece." *Lep. News*, vol. 4: p. 47. "1950" [Mar. 1951].
- Remington, P. S., Jr., & J. Donald Eff, "A collecting trip in search of *Speyeria egleis secreta*." *Lep. News*, vol. 2: pp. 91-92. Nov. 1948.

146. in this issue