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Salticidae (Araneae) genera of the world - an atlas

(unfinished manuscript) by Jerzy Prószyński

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Chapter 2 ICIINES informal group of genera

Version August 24th, 2020.



Composition and searching on this page. <u>Anarrhotus</u>, <u>Artabrus</u>, <u>Burmattus</u>, <u>Cavillator</u>, <u>Corambis</u>, "<u>Cosmophasis"-ICINES</u> <u>Dasycyptus</u>, <u>Diplocanthopoda</u>, <u>Echinussa</u>, <u>Hakka</u>, <u>Helicius</u>, <u>Huntiglennia</u>, <u>Icius</u>, <u>Idastrandia</u>, <u>Jajpurattus</u>, <u>Marchena</u>, <u>Matagaia</u> <u>Padillothorax</u> <u>Pilia</u>, <u>Pungalina</u>, <u>Schenkelia</u>, <u>Stagetillus</u>, <u>Trite</u>, <u>Xuriella</u>. <u>NOTE ON Helicius-Plexippoides-Yaginumaella</u>

Exemplary representatives of the group A Icius hamatus B Icius hamatus C D Icius subinermis E F Icius hamatus G H I. subinermis I

A-C, F-G - *Icius hamatus*, D-E, H-I - *Icius subinermis*.

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Informal group of genera ICIINES

Mutual diagnostic characters of genera included. Embolus sitting atop of bulbus, or arising from its anterolateral part, spermophor translucent along retrolateral side of bulbus. Differs from CHRYSILLINES by indistinct separation of the basis of embolus from bulbus and by more complicated spermathecae. In larger genera palps may be diversified, while habitus may be more uniform.

Remark. This group of genera is split provisionally from CHRYSILLINES and HOLOPLATINES for practical reasons of being together too large to be handled conveniently. Differences between these groups are obvious when one compares type genera *Icius* and *Chrysilla*, but less convincing with some other. Pending further considerations.

Gen. Anarrhotus Simon, 1902

Type species *Anarrhotus fossulatus* (2 recognizable species) See more species at <u>Anarrhotus-Q+M</u>

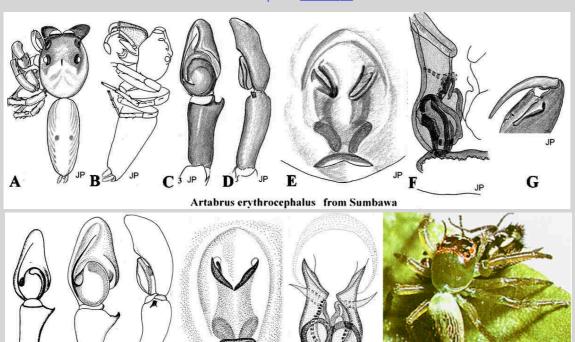


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A - Anarrhotus fossulatus B - Anarrhotus cf. fossulatus Brunei.

Gen. Artabrus Simon, 1902

Type species *Artabrus erythrocephalus* (3 recognizable species)
See more species at <u>Artabrus-Q+M</u>



from Lombok from A-M - Artabrus erythrocephalus

H

geth H-Pari **J**

from Java

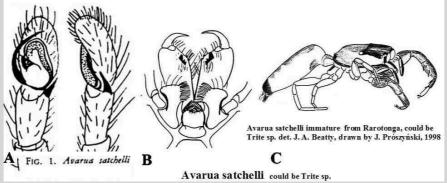
K Artabrus erythrocephalus

SOURCE: A-G - Prószyński, Deeleman-Reinhold, 2010. Arthropoda selecta, 19(3): 156, 1-12, H - Prószyński 1987. Atlas ..., 2-3, M - Photo Murphy F. and J. 2000. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy

from Peninsular Malaisia

Gen. Avarua Marples, 1955

Type species *Avarua satchelli*. (1 recognizable species)
See more species at <u>Avarua=Trite-Q+M</u>

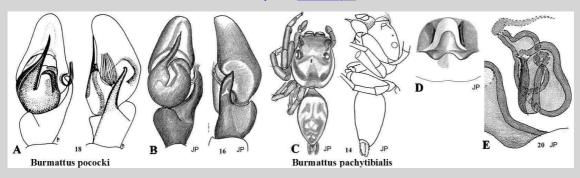


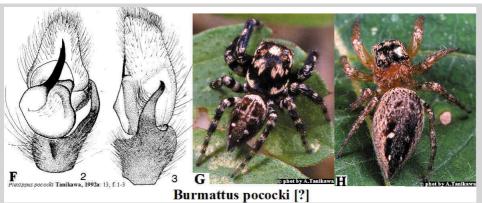
A-B - Avarua satchelli, C -Avarua satchelli from Rarotonga, immature, det. J. A. Beatty, drawn by Prószyński.

SOURCE: A-B - Żabka M. 1988b. Annales zoologici, 41 (14): 471, f 137-141, C - det. J. A. Beatty, drawn by .Prószyński - Internet Salticidae Database. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Burmattus Prószynski, 1992

Type species (6 recognizable species) See more species at <u>Burmattus-Q+M</u>



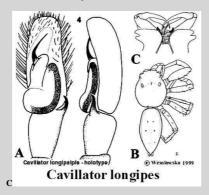


A, F-H - Burmattus pococki, B-C - Burmattus pachytibialis.

SOURCE: A-E - Prószynski & Deeleman-Reinhold, 2010. Arthr. sel., 19(3): 156-157, f 13-16, 19-20, F - Tanikawa, 1992a. Atypus 100: 13-16, f. 1-3, G-H - male & female ©Photo A. Tanikawa. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Cavillator Wesołowska, 1999

Type species Cavillator longipes (1 recognizable species)
See more species at Cavillator-Q+M

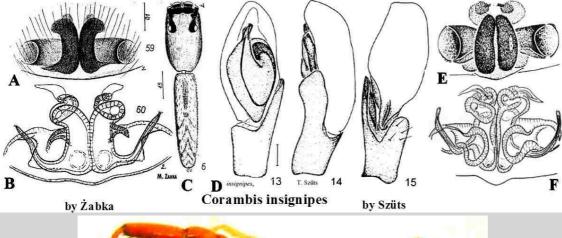


A-C - Cavillator longipes.

SOURCE: Wesołowska W. 1999a. Arnoldia Zimbabwe, 10(15): 147, f 1-4.All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy

Gen. Corambis Simon, 1901

Type species *Corambis insignipes* (2 recognizable species)
See more species at <u>Corambis-Q+M</u>





A-G - Corambis insignipes: male and femal

SOURCE: A-C - Zabka 1988b. Ann. zool.41 (14): 443, f. 59-61, D-G - Szuts T. 2002b. Folia entomol. hungarica, LXIII: 26-29, figs 1-4, 6-9, 11-18. All @Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Cosmophasis Simon, 1901- see HYLLINES

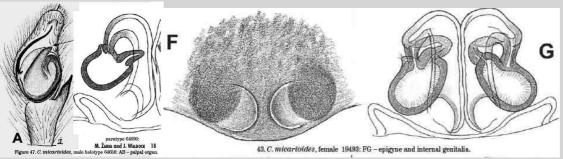
Type species $Cosmophasis\ thalassina$. See $\underline{Cosmophasis}$

Gen. "Cosmophasis"- ICINES Simon, 1901- ICINES

Representative species Cosmophasis micarioides see more at Cosmophasis [remaining groups]-Q+M



C4 - Cosmophasis (tristriatus) baehrae Representative of the Cosmophasis tristriatus group species, containing 5 species. SOURCE: Żabka, Waldock 2012. ©Ann. zool.: 62(1): 128-129, f 32-35. All ©copyrights are retained by the original authors and copyright holders, used here by their



C2 - C2 - "Cosmophasis micarioides - Male + female representative species of the Cosmophasis micarioides group of species, containing 7 species differing by palp and internal structures of epigyne. SOURCE: Żabka, Waldock 2012. ©Ann. zool.: 62(1): 130-131, f 39–48, 62. All ©copyrights are retained by the original authors and copyright holders, used here by their



cosmophasis_micar_ph_1 cosmophasis_micar C2 - C2 - Cosmophasis micarioides:[?] - various species labelled tentatively Żabka, Waldock 2012. Male + female. SOURCE: Żabka, Waldock 2012. Male + female ©Ann. zool.: 62(1): 130-131, f 39-48, 62. All ©copyrights are retained by the original authors and copyright holders, used here by their courtesy.



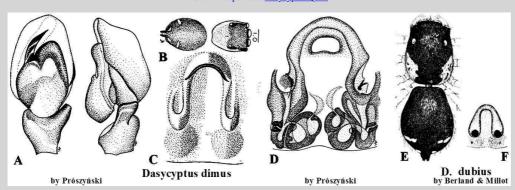
C3 - "Cosmophasis" (rakata) rakata

SOURCE:: Zabka, Waldock 2012. @Ann.zool.: 62(1): 134-135, f 57-59, 62D,

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Gen. Dasycyptus Simon, 1902

Type species Dasycyptus dimus (2 recognizable species) See more species at <u>Dasycyptus-Q+M</u>



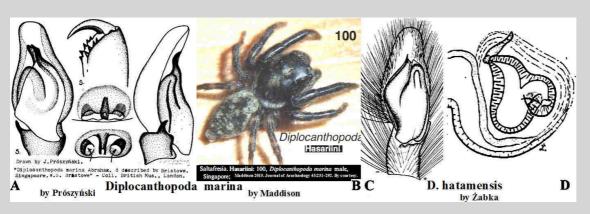
A-D - Dasycyptus dimus, E-F - D. dubius.

SOURCE: **A-D** - Prószyński 1987: Atlas ...: 20, **C-D** - Prószyński 2003a . Ann. zool.,39-42, figs 113-114, 21, **E-F** - Berland L., Millot J. 1941. Mem. Mus. Nat. Hist. Natur.: 359, figs. 59, 60. All @Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Diplocanthopoda Abraham, 1925

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Type species *Diplocanthopoda marina* (2 species)
See more species at <u>Diplocanthopoda-Q+M</u>



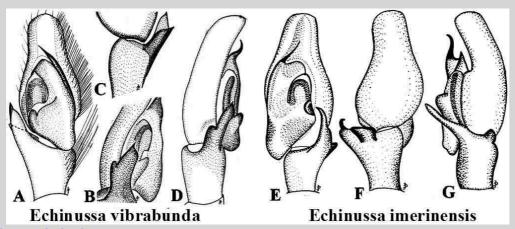
A - Diplocanthopoda marina, B - same, C-D - Diplocanthopoda hatamensis.

SOURCE: A - Prószyński J. 1984a Atlas: ... *Zeszyty Naukowe Wyższej Szkoty Rolniczo-Pedagogiczne*, Siedlce **2**:35, **B** - Maddison 2015. Journal of Arachnology. 43: 231–292, f. 100, **A-D** - Żabka 1988b. Annales zoologici, 41 (14): 448-450, ff. 74-79. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

NOTE: "Diplocanthopoda marina ... when the tide comes in, the spider retreats to a small hole in the rock and seals the entrance with silk. ... When resting, these spiders can resemble small crabs occupying the same habitat." (Murphy & Murphy 2000: 355).

Gen. Echinussa Simon, 1901

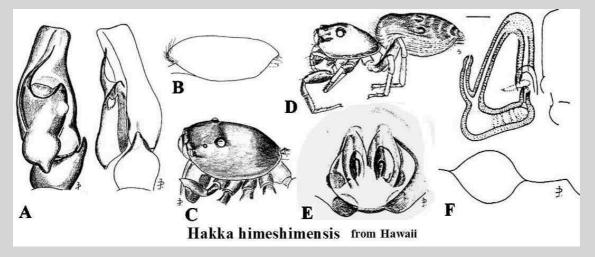
Type species *Echinussa vibrabunda* (3 recognizable species)
See more species at <u>Echinussa-Q+M</u>



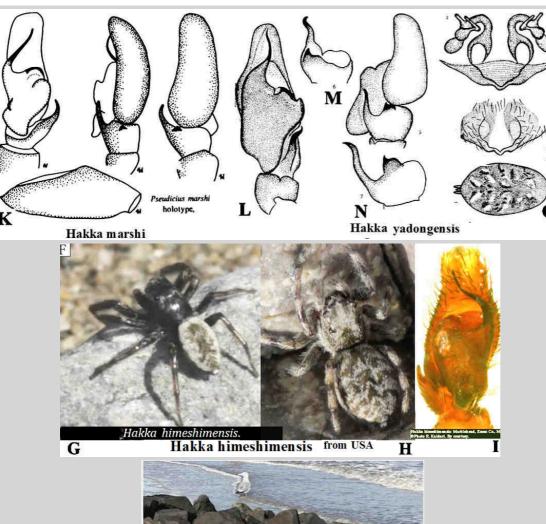
A-D - *Echinussa vibrabunda*. SOURCE: **A-G** Prószyński 1987: 20. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Hakka Berry & Prószynski, 2001

Type species *Hakka himeshimensis* (3 recognizable species) See more species at <u>Hakka-Q+M</u>



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Hakka himeshimensis environment in USA

A-F - Hakka himeshimensis from Hawaiian: palps, male abdomen and carapace, female side view, epigune and one spermatheca with duct, G-I - specimens from USA:male, female and palp, specimens - , USA specimens: male, female, palp & -J - environment in USA, **K** - Hakka [?] marshi from S Africa, **L-Q** - Hakka yadongensis Qinghai-Tibet Plateau.

SOURCE: **A-F** - Berry, Prószynski 2001. J. Arachn. 2001, vol. 29(2): 201-204, figs 1-7, **G-J** - Kaldari, Edwards, Walton 2011: Peckhamia **94.1**: 1-6.: f. 1, 2A-B. **K** - Wesołowska W. 1986. Annales zoologici, 40, 1: 230, f 862-865, **L-Q** - Hu J., 2001. Spiders in a. Henan Science and Technology Publishing House: 399, f 247.1-7. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

NOTE ON GENERA Helicius, Plexippoides and Yaginumaella created by Prószynski, 1976

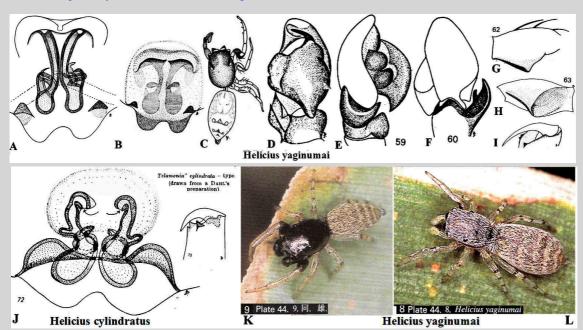
Long term research project of revision of system of Salticidae (precise definitions and placement of genera into subfamilies) carried on during years 1960-1990 by Prószyński during short visits in a number of arachnological collections of the world, and on types borrowed by mail, resulted in revisions of hundreds of type species of genera (and subfamilies), exceeding possibility of publishing final papers. To preserve them from oblivion and to make them accessible to arachnologist, graphic documentation of main diagnostic characters were published in TEMPORARY Atlases (Prószyński 1984 and 1987), accompanied only by texts of original labels and, in some cases, one line comments on proposed reclassifications. In spite of irregular form of publications, these revisions and reclassifications were accepted by Platnick's Catalogs and their present continuation - the Internet World Spider Catalog. The precedent of acceptation of such revision was not extended to the first case of such TEMPORARY delimitation of genera Helicius, Plexippoides and Yaginumaella Prószyński, 1976, by Brignolli 1983 who did not realize the importance of that project, and that is still followed by World Spider Catalog. This was caused by scattering of accompanying captions, separately from diagnostic drawings (new names of genera are listed on pages 16-17, with indication of their type species in the footnotes of these pages, diagnostic drawings - fig. 373-382, 424-437, their original labels are quoted on page 186-187). While procedure of delimiting these genera was highly irregular (although understandable in the peculiar situation of the author at that time, endangered by perspective of not publishing any paper), the case deserves reinterpretation of the ICZN rules (intended to prevent recognition of taxa described by incompetent, incidental authors - which cannot be said on Prószyński, already considered an authority at that time), because of high quality of graphic documentation, unsurpassed during subsequent 43 years. The paper of Prószyński, 1976, although looks primitive, had influenced significantly development of taxonomy of Salticidae and is still quoted as modern reorientation of placement of 60 genera in revised subfamilies (see Maddison 2015: 231, Zhang J. & Maddison 2015: 938 (1): 4). The delimitation of three Japanese genera was done on request of T. Yaginuma, the authority on Japanese spiders, and was quickly communicated to arachnologist interested in taxonomy of Salticidae. Yaginumaella was studied further by Żabka (1981), who on request of Prószyński included also remarks on Helicius. Yaginuma himself used these genera in his book Spiders of Japan in color (1986),

they were used by other Japanese authors of that decade. Prószyński himself was ready to publish extensive paper on taxonomy of Japanese spiders only in 1987 (Bohdanowicz & Prószyński, 1987), his "irregular" publishing of these genera in 1976 speeded up their usage for 11 years. Whatever is being said about formal aspect of publication, delimitation of these genera is intellectual property of J. Prószyński.

Gen. Helicius Prószynski, 1976 [Żabka, 1981b: 38*]

Type species *Helicius cylindratus* (4 recognizable species) See more species at <u>Helicius-Q+M</u>

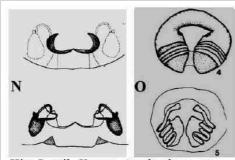
* NOTE: See explanatory note on delimitation of this genus above.



A-I, K-L- Helicius yaginumai: Prószyński 1976: 186, figs 373-382, J -- Helicius cylindratus: Prószyński J. 1973b. [Type specimen in Dahl's permanent slide].

SOURCE: A-I Prószyński 1976: 186, figs 373-382, J - Prószyński J. 1973b. Ann. zool., 30: 125, figs 72-73, K-L - © Ono, Ikeda, Kono. Salticidae of Japan. Tokai University Press, 2009: 568, pl 44-8-9. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

"HELICIUS" ERROR



Two different diagnostic drawings of the same new species Helicius kimjoopili Kim, 1995b: 2, f. 1-5, substituted in two versions of the original paper by Kim, J. P. (1995b). A new species of genus Helicius (Araneae: Salticidae) from Korea. Korean Arachnology 11(2): 1-5, both known to me in PDF copies. World Spider Catalog (ver. 20.0) accepts one of these versions because "f. 7N fits with the printed version of the original description", but the other version, accepted by Suguro & Yahata, 2014: 89, f. 2-9 was also made from printed version. The quality of description does not permit to tell the supposed species from their congeners.

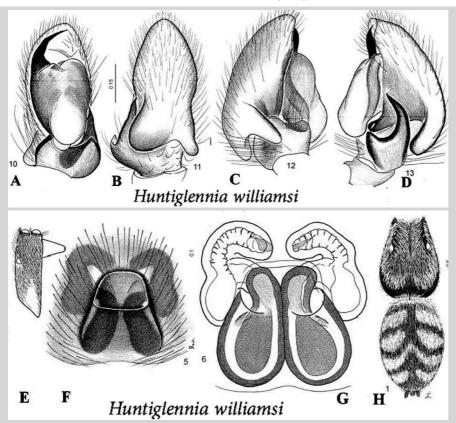
Kim Joopil, Korean Arachnology: N - 11(2): 2, Figs 4-5 O - 11(2)-"bis": 2, Figs 4-5

N-O - Existence of **two original versions** of publication of Kim, J. P. (1995b), presenting two different species as *Helicius kimjoopili* Kim, 1995b (marked **N** and **O** above), and in absence of type specimen, forces to strike the description as invalid, and to declare name *Helicius kimjoopili* Kim, 1995b a nomen nudum, which extends to its subsequent combinations *Pseudicius kimjoopili*: Suguro & Yahata, 2014 and *Nandicius kimjoopili*: Prószyński, 2016.

SOURCE: Prószyński, J. (2016). *Ecologica Montenegrina* **7**: 4-32. All ©copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Huntiglennia Żabka, Gray, 2004

Type species *Huntiglennia williamsi* (1 recognizable species) See more species at <u>Huntiglennia-Q+M</u>

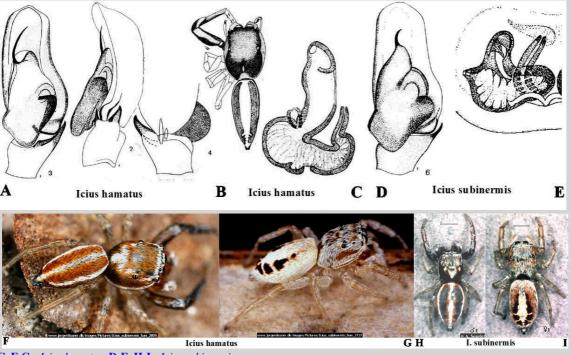


A-H - Huntiglennia williamsi.

SOURCE: Żabka, Gray 2004. Annales zoologici. 54(3): 587-590, f 1-14. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Icius Simon, 1876

Type species *Icius hamatus* (26 recognizable species) See more species at <u>Icius-Q+M</u>



A-C, F-G - *Icius hamatus*, D-E, H-I - *Icius subinermis*.

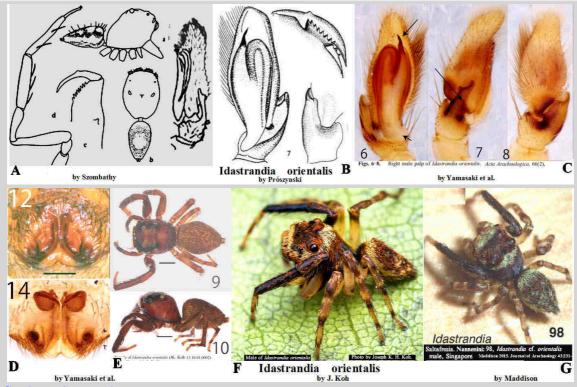
SOURCE: A-D --Prószyński J. 1976: f 396-402., D-E - Andreeva, Heciak, Prószyński. 1984. Ann. zool., 3, 13: 350, f. 1-5, F-G - ©Photo J. Lissner, -H-I - ©Photo A. Senglet. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Idastrandia Strand, 1929

Type species $Idastrandia\ orientalis\ (1\ recognizable\ species)$

See more species at $\underline{Idastrandia-Q+M}$

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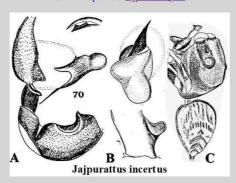


A-G - Idastrandia orientalis.

SOURCE: A - Szombathy, K. 1915. Ann. hist.-nat. Mus. nat. Hung., 13: 474-475, f. 5, B - Prószyński 1983b. Folia ent. hung., XLIV, 2: 284-287, f 7-10, C-E - Yamasaki, T., Koh, J. K. H. & Court, D. J. (2017). Acta Arachnologica 66(2): 81-85, 81, f. 1-4, 6-17, F - ©photo J. K. H. Koh, G - ©photo Maddison. Journal of Arachnology. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Jajpurattus Prószyński, 1992

Type species Jajpurattus incertus (1 recognizable species) See more species at <u>Jajpurattus-Q+M</u>



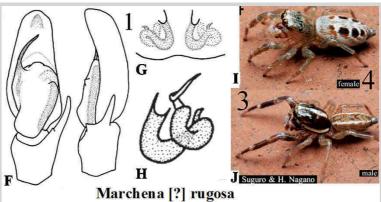
A-C - *Jajpurattus incertus*:

SOURCE: Prószyński J. 1992b. Ann. zool. 44, 9: 182, f 67-71, All @Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Marchena Peckham, Peckham, 1909

Type species Marchena minuta (1 recognizable species) See more species at Marchena-Q+M





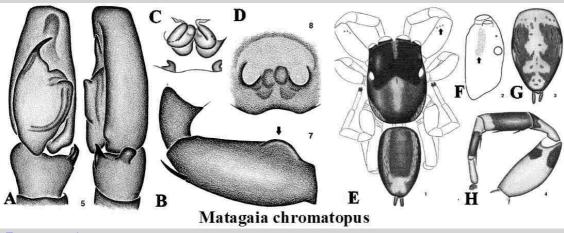
A-E -Marchena minuta, F-J - Marchena [?] rugosa, comb. n (syn. Icius rugosus)

SOURCE: A-E - Maddison 1987. Bulletin of the British Arachnological Society 7:: 101, ff. 1-5, 9-10, F-J - Suguro & Nagano, 2015: Acta Arachnologica, Tokyo 64(2): 92, f. 1-13. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

COMMENT: Transfer based on vague similarity (poor drawings F-H, of which G-H are dissimilar to *Icius*) but allowed by similarity of figs D-E and I-J. By the way, drawings A-C testify to big artist potential of their author, and that he was able to write decent taxonomic papers, gifts rare among molecular phylogeny practitioners).

Gen. Matagaia Ruiz, Brescovit & Freitas, 2007

Type species Matagaia chromatopus (1 recognizable species)



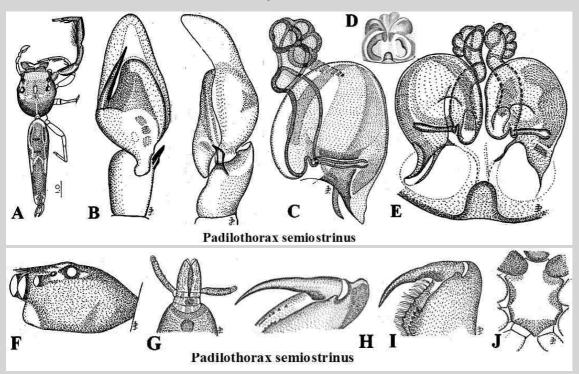
A-E - Matagaia chromatopus.

SOURCE Ruiz, Brescovit, Freitas 2007 . Revista Brasileira de Zoologia 24: 772, f. 1-9. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Padilothorax Simon, 1901

Type species Padillothorax semiostrinus (2 recognizable species)

See more species at Padillothorax-Q



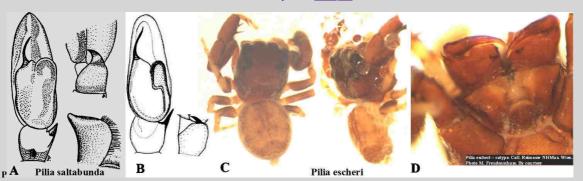
A-J - Padilothorax semiostrinus, syntypes kept in MNHN in Paris.

SOURCE. Proszynski (2018b). Review of genera Evarcha and Nigorella, with comments on Emertonius, Padilothorax [sic], Stagetillus, and description of five new genera and two new species (Araneae: Salticidae). Ecologica Montenegrina 16: 174, f. 28F-L. All ©copyrights are retained by the original authors and copyright holders, used by their courtesy.

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Gen. Pilia Simon, 1902

Type species Pilia saltabunda Simon, 1902 (3 recognizable species) See more species at $\underline{\text{Pilia-Q+M}}$

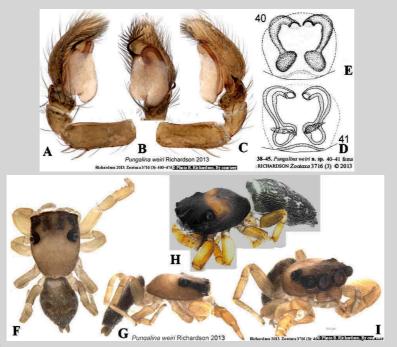


A - *Pilia saltabunda*, **B** - *Pilia escheri* "Cotype ... Indien: Karachi Valley. Escher" Samm. Reimoser, Mus. Wien". SOURCE A- Prószyński 1987: Atlas ..: 77, **B**-Prószyński J. 1983b. Folia entomologica hungarica, XLIV, 2: 287, f. 13-15. **C-D F** - ©photo M. Freudenschuss., All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Pungalina Richardson 2013

Type species Pungalina weiri Richardson 2013 (1 recognizable species)

See more species at Pungalina-Q+M

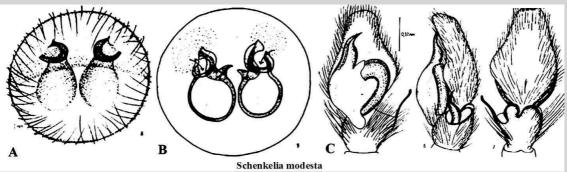


A-I - Pungalina weiri.

SOURCE: Richardson 2013. Zootaxa 3716 (3): 472-473, f 10, 39-46 [NOTE: photos in standard positions would facilitate comparison]. All @Copyrights are retained by the original authors and copyright holders, used by their courtesy

Gen. Schenkelia Lessert, 1927

Type species *Schenkelia modesta* (6 recognizable species)
See more species at <u>Schenkelia-Q+M</u>



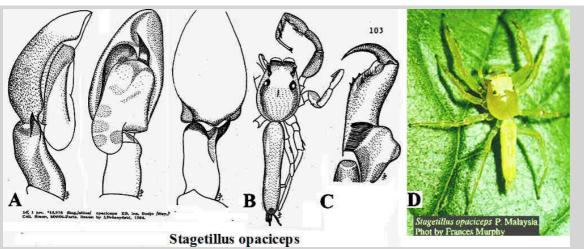
A-I - Schenkelia modesta.

SOURCE: Prószyński J. 1968b. Ann. 200l. 26: 217-221, f 1-9. All @Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Stagetillus Simon, 1885

Type species Stagetillus opaciceps (1 species) See more species at Stagetillus-Q+M

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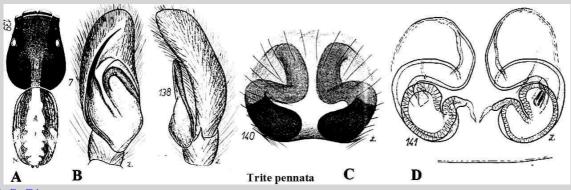


A-C - Stagetillus opaciceps.

SOURCE: Prószyński 1987. Atlas ...: 103, . **D** - ©Phot Murphy F. and J., 2000. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Trite Simon, 1885

Type species *Trite pennata*. (13 recognizable species)
See more species at <u>Trite-Q+M</u>

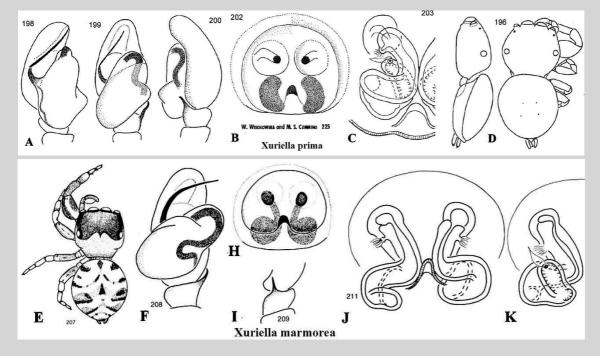


A-C - Trite pennata.

SOURCE: Żabka M. 1988b. Annales zoologici, 41 (14): 471, f 137-141, All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.

Gen. Xuriella Wesołowska, Russell-Smith, 2000

Type species *Xuriella prima* (2 recognizable species)
See more species at <u>Xuriella-Q+M</u>





A-D - Xuriella prima, E-M - Xuriella marmorea.

SOURCE: A-D -Wesołowska & Cumming, Annales Zoologici, 2008: 58: 224, f. 196-204, E-K - Wesołowska W., van Harten 2007. Fauna of Arabia 23: 262-265, f 207-212, phots 31-32.L-M - ©Phot B. Knoflach. All ©Copyrights are retained by the original authors and copyright holders, used by their courtesy.