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Psocid News

The Psocidologists' Newsletter

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Field trip in Mexico (June 2014: *Trichadenotecnum* project)
(From left to right: Jose Arturo Casasola Gonzalez, Alfonso Neri García Aldrete, Kazunori Yoshizawa, Naoki Ogawa)

ADDITIONS AND CORRECTIONS (PART 14) TO LIENHARD & SMITHERS, 2002: "PSOCOPTERA (INSECTA) – WORLD CATALOGUE AND BIBLIOGRAPHY"

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1. Introduction

This is the 14th part of a series of "Additions and Corrections to the World Catalogue and Bibliography" (Lienhard & Smithers, 2002) published in "Psocid News". Parts 1-13 were published in Psocid News no. 4-16 (see below); a **Synthesis of Parts 1-10** is available online at the Geneva Museum's homepage:

http://www.ville-ge.ch/mhng/psocoptera/divers/synthesis_add_1_10.pdf

Please send me regularly copies of your papers on Psocoptera, and please inform me about errors that you find in Lienhard & Smithers (2002). If papers which came to your notice are not treated in the "Additions", please send me the bibliographical references by e-mail. In the "Additions to the Bibliography", references to the papers which I have not yet seen are marked with "(Not seen)" or "(Only abstract seen)". Please send me a copy or PDF of these papers if you feel concerned. Only papers which I have seen are analysed for the "Additions to the Catalogue", or those where the matter they deal with is clearly indicated in the title or in the abstract.

In general these "Additions" present the information in the style of the catalogue (Lienhard & Smithers, 2002), according to the criteria mentioned there (pp. ix-xli) and using the same abbreviations (see pp. xl-xli). Families (and higher categories, if mentioned) are listed according to Table 1 of Lienhard & Smithers (2002), except for changes published since. For each family, newly published changes concerning supra-generic taxa are mentioned at the beginning of the family treatment. For genus-group names and species-group names already listed by Lienhard & Smithers (2002) only the author is cited here. For new names the complete reference (author, year, page) is given in their first entry, where new genus-group names are marked with two asterisks (**) and new species-group names with one asterisk (*). For a name not listed by Lienhard & Smithers (2002), but cited in a preceding part of the "Additions", author and year are always mentioned. Genera are listed alphabetically within each family. Species are listed alphabetically within each genus. Species names are cited in the combination used by Lienhard & Smithers (2002), if not an explicit change of combination (or a new synonymy) has been published since.

The "Corrections" refer to the pages of Lienhard & Smithers (2002) and the changes proposed here are usually underlined.

No nomenclatural act is published in the "Additions to the Catalogue" because articles in "Psocid News" are not considered as published works under the rules of ICZN (see Editorial: Disclaimer). Sometimes recommendations to future revisers are given concerning nomenclatural acts which eventually should be published. Only some mandatory changes are made in the "Additions to the Catalogue" (e. g. adaptation of species name ending to the grammatical gender of the genus name).

2. List of countries mentioned in the "Additions and Corrections to the World Catalogue" (Parts 1-14)

Country checklists of Psocoptera species extracted from Lienhard & Smithers (2002) are available online at: http://www.ville-ge.ch/mhng/psocoptera/page/ps-coun.htm

All additional species records are mentioned in the "Additions and Corrections to the World Catalogue" and all countries mentioned in Parts 1 to 14 of these Additions are listed below, arranged according to the main geographical regions defined for the Catalogue **(I-X)**, with a separate heading for fossils **(A)**, mainly from amber. This list is provided to facilitate computer searching for distributional references in the online version of the different parts which can be found at http://hdl.handle.net/2115/35519 or in the **Synthesis of Parts 1-10** available at:
http://www.ville-ge.ch/mhng/psocoptera/divers/synthesis_add_1_10.pdf

Part 1 – Psocid News, no. 4 (2003): 2-24 (= Lienhard, 2003a)
Part 2 – Psocid News, no. 5 (2003): 2-37 (= Lienhard, 2003b)
Part 3 – Psocid News, no. 6 (2004): 1-23 (= Lienhard, 2004a)
Part 4 – Psocid News, no. 7 (2005): 1-16 (= Lienhard, 2005a)
Part 5 – Psocid News, no. 8 (2006): 1-18 (= Lienhard, 2006a)
Part 6 – Psocid News, no. 9 (2007): 1-17 (= Lienhard, 2007a)
Part 7 – Psocid News, no. 10 (2008): 1-18 (= Lienhard, 2008a)
Part 8 – Psocid News, no. 11 (2009): 2-16 (= Lienhard, 2009a)
Part 9 – Psocid News, no. 12 (2010): 1-18 (= Lienhard, 2010)
Part 10 – Psocid News, no. 13 (2011): 1-18 (= Lienhard, 2011a)
Parts 1-10 – see URL above (= Lienhard, 2011c)
Part 11 – Psocid News, no. 14 (2012): 1-13 (= Lienhard, 2012a)
Part 12 – Psocid News, no. 15 (2013): 1-21 (= Lienhard, 2013)
Part 13 – Psocid News, no. 16 (2014): 1-20 (= Lienhard, 2014)
Part 14 – Psocid News, no. 17 (2015) (= present issue)

(I) Albania (Part 14), Austria (Parts 1, 3, 4, 5, 6, 8, 9), Bahrain (Part 8), Belgium (Parts 3, 6, 8, 10), Bosnia-Hercegovina (Part 14), Bulgaria (Parts 8, 14), Croatia (Parts 6, 7, 11, 12), Cyprus (Part 11), Czech Republic (Parts 1, 4, 5, 6, 7, 8, 10, 11, 13, 14), Denmark (Parts 10, 12), Egypt (Part 6), Europe (Parts 10, 11, 12), Finland (Parts 1, 7, 10, 11, 12, 13), France (Parts 1, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14), Germany (Parts 1, 3, 4, 5, 7, 8, 10, 11, 12, 14), Great Britain (Parts 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14), Greece (Parts 5, 6, 11, 14), Hungary (Parts 1, 3, 10), Iceland (Part 10), Iran (Parts 6, 8), Ireland (Parts 6, 9, 13), Israel (Parts 4, 6, 8, 11), Italy (Parts 1, 3, 5, 6, 7, 8, 9, 10), Kosovo (Part 14), Lebanon (Parts 6, 7, 9, 10, 11, 13, 14), Lithuania (Part 8), Luxembourg (Parts 1, 3, 7, 8, 10, 13), Macedonia (Part 14), Montenegro (Part 14), Morocco (Part 10), Netherlands (Parts 4, 7, 9, 11, 14), Norway (Parts 4, 10, 13), Oman (Part 8), Poland (Part 13), Portugal (Parts 6, 7), Romania (Parts 10, 14), Russia (Parts 6, 8, 10, 12, 13, 14), Saudi Arabia (Part 8), Serbia (Part 14), Slovakia (Parts 1, 11, 13), Spain (Parts 1, 5, 7, 8, 9, 11, 12, 13), Sweden (Part 8, 10), Switzerland (Parts 1, 3, 4, 6, 7, 8, 11, 12), Turkey (Part 5, 10), UAE (Parts 8, 9), Ukraine (Part 6), Yemen (Parts 4, 8)

(II) Ascension Island (Part 11), Azores (Parts 5, 11), Canary Islands (Parts 1, 4, 5, 10, 11), Cape Verde Islands (Parts 5, 11), Gough Island (Parts 5, 6), Madeira (Parts 5, 8), Saint Helena (Parts 5, 11), Selvagens Islands (Parts 1, 8)

(III) Bahamas (Part 13), Canada (Parts 4, 6, 7, 8, 13), North America (Parts 11, 12), USA (Parts 1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14)

(IV) Belize (Parts 1, 4, 6, 8, 9, 10), Costa Rica (Parts 1, 6, 8), Cuba (Parts 6, 11), Dominica (Parts 5, 6, 11), Dominican Republic (Parts 4, 6, 7, 8, 12, 13, 14), Guatemala (Parts 1, 4, 7, 8, 11), Haiti (Parts 1, 4), Hispaniola (Part 10), Honduras (Part 8), Jamaica (Parts 7, 8, 9), Mexico (Parts 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14), Middle America (Part 11), Nicaragua (Parts 1, 3, 4, 6, 7, 8, 13), Panama (Parts 4, 6, 8), Puerto Rico (Parts 1, 7, 10, 13), Trinidad (Part 1)

(V) Argentina (Parts 3, 4, 8, 9, 14), Bolivia (Parts 1, 5, 9, 10), Brazil (Parts 1, 4, 5, 6, 7, 8, 9, 10, 11,

12, 13, 14), Chile (Parts 1, 4, 6, 8), Colombia (Parts 1, 10, 11, 12, 13, 14), Ecuador (Parts 1, 6, 8, 13), Paraguay (Parts 13, 14), Peru (Parts 1, 5, 6, 8, 9, 10, 11, 12, 13, 14), Suriname (Part 10), Venezuela (Parts 1, 4, 6, 7, 8, 10)

(VI) Ghana (Part 4), Guinea (Part 1), Kenya (Part 4), Madagascar (Part 5), Malawi (Part 3), Namibia (Parts 1, 6, 7, 8, 10), South Africa (Parts 3, 6, 7, 8, 11), Tanzania (Parts 3, 4), Uganda (Part 6)

(VIII) Brunei (Parts 5, 6), China (Parts 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14), Hong Kong (Part 5), India (Parts 3, 5, 6, 7, 11), Indonesia (Parts 1, 3, 5, 6, 10), Japan (Parts 1, 4, 6, 7, 8, 9, 10, 12), Kazakhstan (Part 13), Kuril Islands (Part 4), Kyrgyzstan (Part 5), Laos (Parts 5, 6), Malaysia (Parts 1, 5, 6, 8, 10, 14), Myanmar (Parts 6, 8, 13, 14), Nepal (Part 7), New Guinea (Parts 3, 5, 8), Pakistan (Part 14), Philippines (Parts 3, 5, 6, 14), Russia (Parts 1, 10, 11), SE-Asia (Part 7), Singapore (Parts 5, 14), Sri Lanka (Parts 4, 6), Taiwan (Parts 1, 6, 7, 8, 13), Thailand (Parts 1, 4, 5, 6, 9, 11), USSR (Parts 4, 9), Vietnam (Parts 4, 5, 6, 8, 13, 14)

(IX) Australia (Parts 1, 4, 5, 6, 7, 8, 10, 12, 13, 14), Lord Howe Island (Parts 4, 7), New Zealand (Parts 1, 4, 13), Subantarctic islands (Part 13), Tasmania (Part 9)

(X) Easter Island (Part 13), Fiji (Part 8), Galapagos (Parts 5, 12), Hawaii (Parts 8, 13, 14), New Caledonia (Part 12)

(A) Amber and Copal (or other fossils) (Parts 1, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14)

3. Additions to the Catalogue

Psocodea

Foottit & Adler, 2009 (p. 3): 10598 species of Psocodea known (5574 spp. of Psocoptera and 5024 spp. of Phthiraptera). Zhang Zhi-Qiang, 2013: 10868 species of Psocodea known (5732 spp. of Psocoptera and 5136 spp. of Phthiraptera). Misof *et al.*, 2014 (phylogenomics; Psocodea sister-group of Holometabola). Wei Dan-Dan *et al*., 2014 (mitochondrial genome diversity and phylogeny of Psocodea).

Psocoptera

Yoshizawa, 2003d (short outline on systematics and biology of Psocoptera). Turienzo & Di Iorio, 2007: some undetermined psocids mentioned in birds' nests from Argentina (V). Foottit & Adler, 2009 (p. 3): 5574 species of Psocoptera known world-wide. Olejarski & Rybacki, 2011 (pest in stored rapeseed). Devetak *et al*., 2013 (gregarines as parasites). Jervis, 2013: facsimile of oldest known scientific illustration of a psocid (same figure as published by Neri, 2005; this figure shows probably a young nymph of Psocomorpha). Perez & Barrion-Dupo, 2013: leaf-litter, Philippines (VIII). Thapa *et al*., 2013 (predation by pseudoscorpions). Whitfield & Purcell, 2013 (key to families). Zhang Zhi-Qiang, 2013: 5732 species of Psocoptera known world-wide. Cameron, 2014: mitochondrial genomics. Dennis, 2014 (predation by Asilidae). Lienhard, 2014 (additions to the World Catalogue and Bibliography, Part 13). Loomis & Cameron, 2014: ecology, deciduous forests, USA (III). Sarria *et al*., 2014a, 2014b: diversity, ecology, Colombia (V). Wolf *et al*., 2014 (Psocoptera in feedstuffs for small mammals). Yoshizawa, 2014 (Newsletter).

Psocoptera fam., gen. n., spec. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012: 256.

Archaeatropidae

Proprionoglaris axioperierga* Azar, Nel & Perrichot, 2014: 11. France (I), Late Cretaceous Vendean amber (A).

Lepidopsocidae

Echmepteryx spec. Brazil (V): Silva Neto *et al*., 2014a.

Echmepteryx falco (Badonnel). Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.

Echmepteryx hageni (Packard). USA (III): Shreve & Johnson, 2014 (population genetics, parthenogenesis).

Echmepteryx madagascariensis (Kolbe). Colombia (V): Sarria *et al*., 2014a, 2014b.

Lepidopsocus pretiosus (Banks). Colombia (V): Sarria *et al*., 2014a, 2014b.

Lepolepis spec. Colombia (V): Sarria *et al*., 2014a, 2014b.

Nepticulomima hoesemanni (Enderlein). Colombia (V): Sarria *et al*., 2014a, 2014b.

Proentomum personatum Badonnel. Colombia (V): Sarria *et al*., 2014a, 2014b.

Pteroxanium spec. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.

Thylacella cubana (Banks). Fig.: Lopez, 2015 (habitus photograph).

Trogiidae

Cerobasis spec. Morph.: Friedemann *et. al*., 2014 (attachment structures; p. 178: tarsi erroneously considered as 2-segmented in adult *Cerobasis*).

Lepinotus spec. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.

Lepinotus patruelis Pearman. Netherlands (I): Gielis *et al*., 2014 (in bird nest boxes). Biol.: Yoshizawa *et al*., 2014b (sexual biology, comparison with *Neotrogla* spp.).

Lepinotus reticulatus Enderlein. Biol.: Nayak *et al.*, 2014 (life history). Ecol.: Athanassiou *et al*., 2014b (*Liposcelis bostrychophila* outcompetes *Lepinotus reticulatus* in stored products).

Psyllipsocidae

Dorypteryx domestica (Smithers). Germany (I): Büchs, 1988 (dom.); Blick & Dorow, 2014a, 2014b. Romania (I): Pricop, 2014 (diagnosis, distribution). Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.

Libanopsyllipsocus Azar & Nel, 2011. See Pachytroctidae.

Libanopsyllipsocus alexanderasnitsyni Azar & Nel, 2011. Lebanon (I): Lower Cretaceous amber (A). See Pachytroctidae.

Psyllipsocus angustipennis* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 239. Brazil (V).

Psyllipsocus clunioventralis* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 225. Brazil (V).

Psyllipsocus didymus* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 229. Brazil (V).

Psyllipsocus falcifer* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 216. Brazil (V).

Psyllipsocus fuscistigma* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 233. Brazil (V).

Psyllipsocus marconii* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 220. Brazil (V).

Psyllipsocus proximus* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 242. Brazil (V).

Psyllipsocus punctulatus* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 236 (male). Brazil (V).

Psyllipsocus cf. ***punctulatus*** Lienhard, 2014. Lienhard & Ferreira, 2014: 238 (female). Brazil (V).

Psyllipsocus radiopictus* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 234. Brazil (V).

Psyllipsocus ramburii Selys-Longchamp. Netherlands (I): Gielis *et al*., 2014 (in bird nest boxes).

Psyllipsocus spinifer* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 212. Brazil (V).

Psyllipsocus subtilis* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 229. Brazil (V).

Psyllipsocus thaidis* Lienhard, 2014; *in*: Lienhard & Ferreira, 2014: 223. Brazil (V).

Psyllipsocus yucatan Gurney. Brazil (V): Silva Neto *et al*., 2014a.

Prionoglarididae

Neotrogla Lienhard, 2010. Femal penis (gynosome), story of its discovery and its impact for evolutionary studies: Yoshizawa *et al*., 2014d; Yoshizawa, 2015.

Neotrogla aurora Lienhard, 2010. Copulation (female penis): Yoshizawa *et al*., 2014b; Yoshizawa, 2015.

Neotrogla brasiliensis Lienhard, 2010. Copulation (female penis): Yoshizawa *et al*., 2014b.

Neotrogla curvata Lienhard & Ferreira, 2013a. Copulation (female penis): Yoshizawa *et al*., 2014b; Yoshizawa, 2015.

Neotrogla truncata Lienhard, 2010. Copulation (female penis): Yoshizawa *et al*., 2014b.

Amphientometae

Scocompus* Azar, Nel & Perrichot, 2014: 12. Gender: M. Type species: *Scocompus atelisus* Azar, Nel & Perrichot. Incertae sedis within Amphientometae, i.e. not assigned to a family.

Scocompus atelisus* Azar, Nel & Perrichot, 2014: 12. France (I), Late Cretaceous Vendean amber (A).

Compsocidae

Compsocus elegans Banks. Colombia (V): Sarria *et al*., 2014a, 2014b.

Troctopsocidae

Family diagnosis and key to genera: Mockford & Garcia Aldrete, 2014: 160.

Troctopsocoides* Mockford & Garcia Aldrete, 2014: 160. Gender: M. Type species: *Troctopsocoides erwini* Mockford & Garcia Aldrete.

Troctopsocoides erwini* Mockford & Garcia Aldrete, 2014: 160. Peru (V).

Troctopsocoides gracilis* Mockford & Garcia Aldrete, 2014: 163. Amber (A) from the Dominican Republic (IV).

Amphientomidae

Key to genera: Taylor, 2013: 250.

Amphientomidae gen. spec. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.
Lithoseopsis Mockford. Description, list of species: Taylor, 2013.
Lithoseopsis spec. Fig.: Lopez, 2015 (habitus photograph).
Lithoseopsis humphreysi (New). Description of male: Taylor, 2013: 246 (**from** *Seopsis*) (the unavailable name *Newseopsides smithersi* is used on pages 247, 248 and 250); Australia (IX).
Lithoseopsis incisa (Smithers). Taylor, 2013: 245 (**from** *Seopsis*).
Newseopsides smithersi. These unavailable names are inadvertently used by Taylor (2013: pp. 247, 248, 250) for *Lithoseopsis humphreysi* (New).
Seopsocus spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.

Liposcelididae
Liposcelididae gen. spec. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.
Belaphotroctes spec. Colombia (V): Sarria *et al*., 2014a, 2014b.
Embidopsocus spec. Morph.: Friedemann *et. al*., 2014 (attachment structures); Wipfler & Pass, 2014 (antennal heart).
Liposcelis spec. Germany (I): Büchs, 1988 (ecol.); Blick & Dorow, 2014a. Colombia (V): Sarria *et al*., 2014a. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012. Morph.: Friedemann *et. al*., 2014 (attachment structures).
Liposcelis badia Wang Zi-Ying, Wang Jin-Jun & Lienhard, 2006. Biol.: Nayak *et al.*, 2014 (life history).
Liposcelis bostrychophila Badonnel. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012. Biol.: Nayak *et al.*, 2014 (life history). Ecol.: Throne & Flinn, 2013 (temperature preference); Athanassiou *et al*., 2014b (*L. bostrychophila* outcompetes other stored-product psocid species tested). Genet.: Chen Shi-Chun *et al*., 2014a, 2014b (mitochondrial genome); Misof *et al.*, 2014 (de novo transcriptome, see Table S1). Morph.: Kucerova *et al*., 2014 (SEM micrographs). Pest: Athanassiou *et al*., 2014a (control); Diaz-Montano *et al*., 2014 (brewer's yeast best attractant for *L. bostrychophila*); Liu Xin Chao *et al*., 2014 (control); Wang Ke-Xia *et al*., 2014 (in medicinal herbs).
Liposcelis brunnea Motschulsky. Biol.: Nayak *et al.*, 2014 (life history). Morph: Kucerova *et al*., 2014 (SEM micrographs).
Liposcelis corrodens (Heymons). Morph.: Kucerova *et al*., 2014 (SEM micrographs).
Liposcelis decolor (Pearman). Ecol.: Athanassiou *et al*., 2014b (*L. bostrychophila* outcompetes *L. decolor* in stored products). Biol.: Nayak *et al.*, 2014 (life history). Genet.: Chen Shi-Chun *et al*., 2014a, 2014b (mitochondrial genome). Morph.: Kucerova *et al*., 2014 (SEM micrographs).
Liposcelis entomophila (Enderlein). Australia (Barrow Island) (IX): Gunawardene *et al*., 2012. Biol.: Nayak *et al.*, 2014 (life history). Ecol.: Throne & Flinn, 2013 (temperature preference). Genet.: Chen Shi-Chun *et al*., 2014b (mitochondrial genome). Morph.: Kucerova *et al*., 2014 (SEM micrographs). Pest: Athanassiou *et al*., 2014a (control).
Liposcelis paeta Pearman. Pakistan (VIII): Wakil & Yasin, 2013 (in stored wheat); Kucerova *et al*., 2014 (morphology, SEM micrographs, variation of surface sculpture, phylogeny of geographic strains). Biol.: Nayak *et al.*, 2014 (life history). Ecol.: Throne & Flinn, 2013 (temperature preference); Athanassiou *et al*., 2014b (*L. bostrychophila* outcompetes *L. paeta* in stored products). Genet.: Chen Shi-Chun *et al*., 2014b (mitochondrial genome). Pest: Athanassiou *et al*., 2014a (control).
Liposcelis pearmani Lienhard. Biol.: Nayak *et al.*, 2014 (life history).
Liposcelis pubescens Broadhead. Morph.: Kucerova *et al*., 2014 (SEM micrographs).
Liposcelis rufa Broadhead. Biol.: Nayak *et al.*, 2014 (life history).
Liposcelis silvarum (Kolbe). Morph.: Kucerova *et al*., 2014 (SEM micrographs).
Liposcelis tricolor Badonnel. Biol.: Nayak *et al.*, 2014 (life history). Morph.: Kucerova *et al*., 2014 (SEM micrographs).
Liposcelis yunnaniensis Li Fasheng & Li Zhihong. Biol.: Nayak *et al.*, 2014 (life history).

Pachytroctidae
Checklist of species: Azar *et al*., 2015: 338.
Libaneuphorinae Azar, Huang Diying, Cai Chenyang & Nel, 2015: 337. Type genus: *Libaneuphoris* Azar, Huang Diying, Cai Chenyang & Nel.
Atapinella** Azar, Huang Diying, Cai Chenyang & Nel, 2015: 343. Gender: F. Type species: *Atapinella garroustei* Azar, Huang Diying, Cai Chenyang & Nel. Genus assigned to subfamily Tapinellinae.
Atapinella garroustei* Azar, Huang Diying, Cai Chenyang & Nel, 2015: 343. Myanmar (VIII): Cretaceous amber (A).
Burmipachytrocta** Azar, Huang Diying, Cai Chenyang & Nel, 2015: 340. Gender: F. Type species: *Burmipachytrocta singularis* Azar, Huang Diying, Cai Chenyang & Nel. Genus assigned to subfamily

Tapinellinae.

Burmipachytrocta singularis* Azar, Huang Diying, Cai Chenyang & Nel, 2015: 340. Myanmar (VIII): Cretaceous amber (A).

Libaneuphoris* Azar, Huang Diying, Cai Chenyang & Nel, 2015: 338. Gender: M (explicitely indicated by the authors). Type species: *Libaneuphoris jantopi* Azar, Huang Diying, Cai Chenyang & Nel. Genus assigned to the new subfamily Libaneuphorinae.

Libaneuphoris jantopi* Azar, Huang Diying, Cai Chenyang & Nel, 2015: 339. Lebanon (I): Lower Cretaceous amber (A).

Libanopsyllipsocus Azar & Nel, 2011. This genus is considered as belonging to Psyllipsocidae by Azar *et al*. (2015: 346) without discussing the arguments presented by Mockford *et al*. (2013: 16) in favour of an assignment to Pachytroctidae.

Libanopsyllipsocus alexanderasnitsyni Azar & Nel, 2011. Lebanon (I): Lower Cretaceous amber (A). This species is considered as belonging to Psyllipsocidae by Azar *et al*. (2015: 346) without discussing the arguments presented by Mockford *et al*. (2013: 16) in favour of an assignment to Pachytroctidae.

Tapinella spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.

Psocomorpha

Yoshizawa & Johnson, 2014: Phylogeny, new higher-level classification proposed. Six infraorders recognized: Archipsocetae, Caeciliusetae, Homilopsocidea (redefined), Philotarsetae (new infraorder), Epipsocetae, Psocetae.

Awightipsocus* Azar, 2014: 312. Gender: M. Type species not designated. Incertae sedis within Psocomorpha (not assigned to an infraorder or family).

Awightipsocus jarzembowskii* Azar, 2014: 312. Limestone fossil from Late Eocene (A), Great Britain (I).

Awightipsocus megaloi* Azar, 2014: 314. Limestone fossil from Late Eocene (A), Great Britain (I).

Awightipsocus minimus* Azar, 2014: 314. Limestone fossil from Late Eocene (A), Great Britain (I).

Wightimicropsocus* Azar, 2014: 315. Gender: M. Type species: *Wightimicropsocus inexpectatus* Azar (by monotypy). Incertae sedis, probably within Psocomorpha (not assigned to an infraorder or family).

Wightimicropsocus inexpectatus* Azar, 2014: 315. Limestone fossil from Late Eocene (A), Great Britain (I).

Wightipsocus* Azar, 2014: 307. Gender: M. Type species: *Psocus acourti* Cockerell, 1921. Incertae sedis within Psocomorpha (not assigned to an infraorder or family).

Wightipsocus acourti (Cockerell, 1921). Redescription: Azar, 2014: 307 (**from** *Psocus*). Limestone fossil from Late Eocene (A), Great Britain (I).

Wightipsocus intasi* Azar, 2014: 309. Limestone fossil from Late Eocene (A), Great Britain (I).

Wightipsocus rossi* Azar, 2014: 311. Limestone fossil from Late Eocene (A), Great Britain (I).

Archipsocetae

Yoshizawa & Johnson, 2014: Phylogeny, infraorder status confirmed.

Archipsocidae

Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.

Archipsocus spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.

Pararchipsocus spec. Colombia (V): Sarria *et al*., 2014a, 2014b.

Caeciliusetae

Yoshizawa *et al*., 2014a: Molecular systematics, new family-level classification and key to families. Six families are recognized (see also Yoshizawa & Johnson, 2014): Amphipsocidae, Stenopsocidae, Dasydemellidae, Asiopsocidae, Paracaeciliidae, Caeciliusidae (including *Calocaecilius* Mockford).

Yoshizawa & Johnson, 2014: Phylogeny, infraorder status confirmed.

Amphipsocidae

Yoshizawa *et al*., 2014a: Molecular systematics, family definition revised (*Calocaecilius* Mockford assigned to Caeciliusidae and Dasydemellinae reinstated as a family of its own).

Yoshizawa & Johnson, 2014: Phylogeny, revised family definition confirmed.

Calocaeciliinae. See Caeciliusidae; not longer valid as a taxon of the family-group: Yoshizawa *et al*., 2014a.

Dasydemellinae. See Dasydemellidae, reinstated as a valid family: Yoshizawa *et al*., 2014a.

Calocaecilius Mockford. Genus assigned to Caeciliusidae: Yoshizawa *et al*., 2014a.

Stenopsocidae
Yoshizawa *et al*., 2014a: Molecular systematics, family status confirmed.
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.
Graphopsocus cruciatus (Linnaeus). Albania, Kosovo, Montenegro (I): Sziraki, 2013. Germany (I): Büchs, 1988 (ecol.); Blick & Dorow, 2014a, 2014b. Great Britain (I): Alexander, 2013b. Colombia (V): Sarria *et al*., 2014a, 2014b. Paraguay (V): Garcia Aldrete, 2014a.
Graphopsocus mexicanus Enderlein. Brazil (V): Silva Neto *et al*., 2014a. Fig.: Lopez, 2015 (habitus photograph).
Stenopsocus immaculatus (Stephens). Albania, Bulgaria, Macedonia, Serbia (I): Sziraki, 2013. Germany (I): Blick & Dorow, 2014a, 2014b.
Stenopsocus lachlani Kolbe. Bosnia-Hercegovina, Bulgaria (I): Sziraki, 2013. Czech Republic (I): Gol & Holusa, 2011 (ecol.).
Stenopsocus stigmaticus (Imhoff & Labram). Germany (I): Blick & Dorow, 2014a, 2014b. Montenegro (I): Sziraki, 2013.

Dasydemellidae
Yoshizawa *et al*., 2014a: Molecular systematics, family reinstated according to Mockford (1993a) and Lienhard & Smithers (2002).
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.

Asiopsocidae
Yoshizawa *et al*., 2014a: Molecular systematics, family status confirmed.
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.
Notiopsocus spec. Colombia (V): Sarria *et al*., 2014a, 2014b.

Paracaeciliidae
Yoshizawa *et al*., 2014a: Molecular systematics, new family status for Paracaeciliinae (subfamily of Caeciliusidae).
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.
Enderleinella obsoleta (Stephens). Czech Republic (I): Gol & Holusa, 2011 (ecol.). Great Britain (I): Alexander, 2013b.
Xanthocaecilius spec. Brazil (V): Silva Neto *et al*., 2014a.

Caeciliusidae
Yoshizawa *et al*., 2014a: Molecular systematics, family definition revised (*Calocaecilius* Mockford assigned to Caeciliusidae and Paracaeciliinae considered as a family of its own).
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.
Paracaeciliinae. See Paracaeciliidae, considered as a family of its own: Yoshizawa *et al*., 2014a.
Caecilius spec. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012. Morph.: Wipfler & Pass, 2014 (antennal heart).
Caecilius fuscopterus (Latreille). Germany (I): Blick & Dorow, 2014a, 2014b.
Calocaecilius Mockford. Genus transferred from Amphipsocidae to Caeciliusidae: Yoshizawa *et al*., 2014a.
Enderleinella Badonnel. See Paracaeciliidae.
Valenzuela spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.
Valenzuela burmeisteri (Brauer). Bulgaria, Montenegro (I): Sziraki, 2013. Czech Republic (I): Gol & Holusa, 2011 (ecol.). Germany (I): Büchs, 1988 (ecol.).
Valenzuela despaxi (Badonnel). Bulgaria (I): Sziraki, 2013. Czech Republic (I): Gol & Holusa, 2011 (ecol.).
Valenzuela flavidus (Stephens). Albania, Bulgaria, Montenegro (I): Sziraki, 2013. Czech Republic (I): Gol & Holusa, 2011 (ecol.). Germany (I): Büchs, 1988 (ecol.); Blick & Dorow, 2014a, 2014b. Morph.: Friedemann *et. al*., 2014 (attachment structures).
Valenzuela gynapterus (Tetens). Serbia (I): Sziraki, 2013.
Valenzuela piceus (Kolbe). Albania (I): Sziraki, 2013.
Xanthocaecilius Mockford. See Paracaeciliidae.

Homilopsocidea
Yoshizawa & Johnson, 2014: Phylogeny, infraorder definition revised, only five families retained (other families transferred to new infraorder Philotarsetae): Peripsocidae, Ectopsocidae, Elipsocidae, Lachesillidae, Mesopsocidae.

Peripsocidae
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.
Kaestneriella spec. Colombia (V): Sarria *et al*., 2014a, 2014b.
Kaestneriella ecuatoriana Garcia Aldrete. Colombia (V): Sarria *et al*., 2014a.
Peripsocus spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.
Peripsocus alboguttatus (Dalman). Bulgaria (I): Sziraki, 2013.
Peripsocus didymus Roesler. Germany (I): Blick & Dorow, 2014a, 2014b. Great Britain (I): Alexander, 2013b.
Peripsocus fici Smithers. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.
Peripsocus parvulus Kolbe. Germany (I): Büchs, 1988 (ecol.); Blick & Dorow, 2014a, 2014b.
Peripsocus phaeopterus (Stephens). Bulgaria, Greece (I): Sziraki, 2013. Germany (I): Blick & Dorow, 2014a, 2014b.
Peripsocus subfasciatus (Rambur). Bulgaria (I): Sziraki, 2013. Germany (I): Blick & Dorow, 2014a, 2014b.

Ectopsocidae
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.
Distribution of Neotropical and Caribbean species of Ectopsocidae (checklist): Saenz Manchola *et al*., 2014: 539.
Ectopsocidae gen. spec. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.
Ectopsocopsis cryptomeriae (Enderlein). Colombia (V): Saenz Manchola *et al*., 2014. Paraguay (V): Garcia Aldrete, 2014a.
Ectopsocus spec. Colombia (V): Sarria *et al*., 2014a, 2014b. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.
Ectopsocus andinus* Saenz Manchola, Gonzalez Obando & Garcia Aldrete, 2014: 525. Colombia (V). Fig.: Lopez, 2015 (habitus photograph).
Ectopsocus briggsi McLachlan. Germany (I): Blick & Dorow, 2014a, 2014b. Serbia (I): Sziraki, 2013. Colombia (V): Saenz Manchola *et al*., 2014. Genet.: Misof *et al.*, 2014 (de novo transcriptome, see Table S1).
Ectopsocus californicus (Banks). Colombia (V): Saenz Manchola *et al*., 2014.
Ectopsocus columbianus Badonnel. Colombia (V): Saenz Manchola *et al*., 2014.
Ectopsocus cf. ***erosus*** (Enderlein). Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.
Ectopsocus gorgonaensis* Saenz Manchola, Gonzalez Obando & Garcia Aldrete, 2014: 528. Colombia (V).
Ectopsocus maindroni Badonnel. Colombia (V): Saenz Manchola *et al*., 2014.
Ectopsocus meridionalis Ribaga. Albania (I): Sziraki, 2013. Germany (I): Blick & Dorow, 2014a, 2014b. Colombia (V): Saenz Manchola *et al*., 2014.
Ectopsocus pilosus Badonnel. Colombia (V): Saenz Manchola *et al*., 2014.
Ectopsocus richardsi (Pearman). Colombia (V): Saenz Manchola *et al*., 2014.
Ectopsocus thorntoni Garcia Aldrete. Description of male: Saenz Manchola *et al*., 2014: 536. Colombia (V).
Ectopsocus titschacki Jentsch. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Saenz Manchola *et al*., 2014.
Ectopsocus valvilobatus* Saenz Manchola, Gonzalez Obando & Garcia Aldrete, 2014: 528. Colombia (V).
Ectopsocus vilhenai Badonnel. Colombia (V): Saenz Manchola *et al*., 2014.
Ectopsocus vilhenaioides* Saenz Manchola, Gonzalez Obando & Garcia Aldrete, 2014: 532. Colombia (V).

Elipsocidae
Yoshizawa & Johnson, 2014: Phylogeny, tentatively maintained as valid family, monophyly not supported.
Elipsocus abdominalis Reuter. Germany (I): Blick & Dorow, 2014a, 2014b. Greece (I): Sziraki, 2013.
Elipsocus annulatus Roesler. Greece (I): Sziraki, 2013.
Elipsocus hyalinus (Stephens). Great Britain (I): Alexander, 2013b.
Elipsocus moebiusi Tetens. Albania, Macedonia (I): Sziraki, 2013.
Elipsocus pumilis (Hagen). Germany (I): Blick & Dorow, 2014a, 2014b.
Hemineura dispar Tetens. Bulgaria (I): Sziraki, 2013.
Pseudopsocus fusciceps (Reuter). Germany (I): Büchs, 1988 (ecol.); Blick & Dorow, 2014a, 2014b.
Pseudopsocus rostocki Kolbe. Germany (I): Blick & Dorow, 2014a, 2014b.

Lachesillidae
Yoshizawa & Johnson, 2014: Phylogeny, tentatively maintained as valid family, monophyly not supported.
Acantholachesilla* Garcia Aldrete, Saenz Manchola & Gonzalez Obando, 2014: 568. Gender: F. Type species: *Acantholachesilla saltoensis* Garcia Aldrete, Saenz Manchola & Gonzalez Obando. Genus

assigned to Eolachesillinae: Graphocaeciliini; relationships to the genera *Dagualachesilla* and *Dagualachesilloides* discussed.

Acantholachesilla saltoensis* Garcia Aldrete, Saenz Manchola & Gonzalez Obando, 2014: 568. Colombia (V).

Dagualachesilla anchicayaensis Garcia Aldrete, Gonzalez Obando & Carrejo, 2013a. Fig.: Lopez, 2015 (habitus photograph).

Dagualachesilla queremalensis Garcia Aldrete, Gonzalez Obando & Carrejo, 2013a. Fig.: Lopez, 2015 (forewing photograph).

Graphocaecilius spec. Brazil (V): Silva Neto *et al*., 2014a.

Hemicaecilius nicolasi Garcia Aldrete, Gonzalez Obando & Carrejo, 2012. Fig.: Lopez, 2015 (habitus photograph).

Lachesilla Westwood. Diagnosis of *palmera* species group, with list of species included: Garcia Aldrete, 2014a: 738.

Lachesilla spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.

Lachesilla cesarcardonai Garcia Aldrete, Gonzalez Obando & Saldaña, 2013. Fig.: Lopez, 2015 (habitus photograph).

Lachesilla cladoclaspers* Garcia Aldrete & Silva Neto, 2014: 7 (assigned to *riegeli* group). Brazil (V).

Lachesilla cuala Garcia Aldrete. Paraguay (V): Garcia Aldrete, 2014a.

Lachesilla diamantina Garcia Aldrete & Silva Neto, 2013. Brazil (V): Silva Neto *et al*., 2014a.

Lachesilla lapadoce Garcia Aldrete & Silva Neto, 2013. Brazil (V): Silva Neto *et al*., 2014a. Paraguay (V): Garcia Aldrete, 2014a.

Lachesilla lugoi* Garcia Aldrete, 2014a: 737 (belonging to *pedicularia* species group). Paraguay (V).

Lachesilla mattogrossensis Garcia Aldrete. Paraguay (V): Garcia Aldrete, 2014a.

Lachesilla nilopecanhensis* Garcia Aldrete & Silva Neto, 2014: 9 (assigned to *forcepeta* group). Brazil (V).

Lachesilla pedicularia (Linnaeus). Germany (I): Büchs, 1988 (ecol.); Blick & Dorow, 2014a, 2014b.

Lachesilla pereirorum Garcia Aldrete, 2004d. Paraguay (V): Garcia Aldrete, 2014a.

Lachesilla rugosa Garcia Aldrete. Paraguay (V): Garcia Aldrete, 2014a.

Lachesilla tanaidana Roesler. Russia (I): Golub & Golub, 2013.

Lachesilla tectorum Badonnel. Paraguay (V): Garcia Aldrete, 2014a.

Lachesilla yucateca Mockford, 2002a. Description of male: Mockford & Young, 2014: 126. USA: Texas (III).

Lachesilla zuninoi* Garcia Aldrete, 2014b: 95 (assigned to *corona* group). Mexico (IV).

Lachesilla zuninoides* Garcia Aldrete, 2014b: 96 (assigned to *corona* group). Mexico (IV).

Mesopsocidae

Yoshizawa & Johnson, 2014: Phylogeny, tentatively maintained as valid family, monophyly not supported.

Cyrtopsochus nasutus (Enderlein). Greece (I): Sziraki, 2013.

Mesopsocoides* Azar, Nel & Perrichot, 2014: 12. Gender: M. Type species: *Mesopsocoides dupei* Azar, Nel & Perrichot.

Mesopsocoides dupei* Azar, Nel & Perrichot, 2014: 13. France (I), Late Cretaceous Vendean amber (A).

Mesopsocus duboscqui Badonnel. Albania, Greece (I): Sziraki, 2013.

Mesopsocus laticeps (Kolbe). Germany (I): Blick & Dorow, 2014a, 2014b.

Mesopsocus unipunctatus (Müller). Germany (I): Büchs, 1988 (ecol.); Blick & Dorow, 2014a, 2014b. Greece (I): Sziraki, 2013.

Philotarsetae

Yoshizawa & Johnson, 2014: Phylogeny, new infraorder established, containing three families: Philotarsidae, Trichopsocidae, Pseudocaeciliidae.

Philotarsidae

Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.

Philotarsidae gen. spec. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.

Aaroniella spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.

Philotarsus parviceps Roesler. Czech Republic (I): Gol & Holusa, 2011 (ecol.).

Philotarsus picicornis (Fabricius). Bulgaria, Greece (I): Sziraki, 2013. Czech Republic (I): Gol & Holusa, 2011 (ecol.). Germany (I): Blick & Dorow, 2014a, 2014b.

Trichopsocidae
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.

Calopsocidae (see Pseudocaeciliidae)
Yoshizawa & Johnson, 2014: Phylogeny, family synonymized with Pseudocaeciliidae.
Calopsocus Hagen. See Pseudocaciliidae.

Pseudocaeciliidae
Yoshizawa & Johnson, 2014: Phylogeny, family definition revised (Calopsocidae considered as a new synonym of Pseudocaeciliidae and Bryopsocidae as a new synonym of Zelandopsocinae).
Zelandopsocinae. Yoshizawa & Johnson, 2014: Bryopsocidae considered as a new synonym of Zelandopsocinae.
Calopsocus infelix (Hagen). China, Vietnam (VIII): Liang Feiyang *et al*., 2013b (description).
Cladioneura foliata Smithers. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.
Heterocaecilius spec. Colombia (V): Sarria *et al*., 2014a, 2014b.
Pseudocaecilius citricola (Ashmead). Colombia (V): Sarria *et al*., 2014a, 2014b. Paraguay (V): Garcia Aldrete, 2014a.
Scytopsocus spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.

Bryopsocidae (see Pseudocaeciliidae)
Yoshizawa & Johnson, 2014: Phylogeny, family synonymized with Zelandopsocinae (subfamily of Pseudocaeciliidae).

Epipsocetae
Yoshizawa & Johnson, 2014: Phylogeny, infraorder status confirmed. Four families recognized: Dolabellopsocidae, Cladiopsocidae, Ptiloneuridae, Epipsocidae.

Dolabellopsocidae
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.
Dolabellopsocus Eertmoed. Distribution of species and key to the neotropical species: Calderon Martinez *et al*., 2014.
Dolabellopsocus spec. Colombia (V): Sarria *et al*., 2014a, 2014b.
Dolabellopsocus calima* Calderon Martinez, Gonzalez Obando & Garcia Aldrete, 2014: 13. Colombia (V).
Dolabellopsocus lobatus Mockford. Colombia (V): Calderon Martinez *et al*., 2014.
Dolabellopsocus roseusoides* Calderon Martinez, Gonzalez Obando & Garcia Aldrete, 2014: 13. Colombia (V).
Dolabellopsocus similis Mockford. Colombia (V): Calderon Martinez *et al*., 2014.
Dolabellopsocus yundiguai* Calderon Martinez, Gonzalez Obando & Garcia Aldrete, 2014: 18. Colombia (V).
Isthmopsocus Eertmoed. Distribution of species and key to the neotropical species: Calderon Martinez *et al*., 2014.
Isthmopsocus spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a.
Isthmopsocus barbatusoides* Calderon Martinez, Gonzalez Obando & Garcia Aldrete, 2014: 18. Colombia (V).
Isthmopsocus foliatus* Calderon Martinez, Gonzalez Obando & Garcia Aldrete, 2014: 22. Colombia (V).

Cladiopsocidae
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed (including *Spurostigma* Eertmoed).
Cladiopsocus Roesler. Distribution of species and key to the neotropical species: Calderon Martinez *et al*., 2014.
Cladiopsocus spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.
Cladiopsocus arboricola* Calderon Martinez, Gonzalez Obando & Garcia Aldrete, 2014: 3. Colombia (V).
Cladiopsocus bidentatus* Calderon Martinez, Gonzalez Obando & Garcia Aldrete, 2014: 6. Colombia (V).
Cladiopsocus multimaculatus Eertmoed. Colombia (V): Calderon Martinez *et al*., 2014.
Cladiopsocus nebulosus* Calderon Martinez, Gonzalez Obando & Garcia Aldrete, 2014: 6. Colombia (V). Fig.: Lopez, 2015 (habitus photograph).
Cladiopsocus pacificus* Calderon Martinez, Gonzalez Obando & Garcia Aldrete, 2014: 9. Colombia (V).
Spurostigma caatinga Silva Neto & Garcia Aldrete, 2012. Brazil (V): Silva Neto *et al*., 2014a.

Spurostigmatidae (see Cladiopsocidae)
Yoshizawa & Johnson, 2014: Phylogeny, reinstated family (see Casasola Gonzalez, 2006a) not recognized (see Lienhard & Smithers, 2002).
Spurostigma Eertmoed. See Cladiopsocidae.

Ptiloneuridae
Yoshizawa & Johnson, 2014: Phylogeny, tentatively maintained as valid family, potentially embedded within Cladiopsocidae.
Euplocania spec. Brazil (V): Silva Neto *et al*., 2014a. Fig.: Lopez, 2015 (habitus photograph).
Loneura spec. Brazil (V): Silva Neto *et al*., 2014a. Fig.: Lopez, 2015 (habitus photograph).
Loneura gorgonaensis Garcia Aldrete, Gonzalez & Sarria, 2011. Colombia (V): Sarria *et al*., 2014a.
Loneura insularis Garcia Aldrete, Gonzalez & Sarria, 2011. Colombia (V): Sarria *et al*., 2014a.
Loneura monticola Garcia Aldrete, Gonzalez & Sarria, 2011. Colombia (V): Sarria *et al*., 2014a.
Triplocania spec. Brazil (V): Silva Neto *et al*., 2014a. Fig.: Lopez, 2015 (habitus photograph).
Triplocania ariasi New. Brazil (V): Silva Neto *et al*., 2014a.
Triplocania lamasi* Silva Neto, Rafael & Garcia Aldrete, 2014: 79. Brazil, Colombia (V).
Triplocania mariateresae* Silva Neto, Rafael & Garcia Aldrete, 2014: 79. Brazil (V).
Triplocania newi* Silva Neto, Rafael & Garcia Aldrete, 2014: 81. Brazil (V).
Triplocania plaumanni* Silva Neto, Rafael & Garcia Aldrete, 2014: 84. Brazil (V).

Epipsocidae
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed, Neurostigmatidae treated as a junior synonym (as proposed by Casasola Gonzalez, 2006a, 2006b).
Bertkauia lucifuga (Rambur). Germany (I): Blick & Dorow, 2014a, 2014b.
Epipsocus spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a.
Goja spec. Colombia (V): Sarria *et al*., 2014a, 2014b.
Mesepipsocus spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.
Neurostigma spec. Brazil (V): Silva Neto *et al*., 2014a.

Psocetae
Yoshizawa & Johnson, 2014: Phylogeny, infraorder status confirmed. Four families recognized: Psilopsocidae, Hemipsocidae, Myopsocidae, Psocidae.

Psilopsocidae
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.

Hemipsocidae
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.
Hemipsocus spec. Brazil (V): Silva Neto *et al*., 2014a.
Hemipsocus africanus Enderlein. Colombia (V): Sarria *et al*., 2014a, 2014b.

Myopsocidae
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.
Lichenomima spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.
Myopsocus spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b. Fig.: Lopez, 2015 (habitus photograph).

Psocidae
Yoshizawa & Johnson, 2014: Phylogeny, family status confirmed.
Amphigerontia spec. Brazil (V): Silva Neto *et al*., 2014a.
Amphigerontia contaminata (Stephens). Albania, Greece, Macedonia (I): Sziraki, 2013.
Barrowia insularis Smithers. Australia (Barrow Island) (IX): Gunawardene *et al*., 2012.
Blaste spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.
Blaste conspurcata (Rambur). Albania (I): Sziraki, 2013.
Blaste quadrimaculata (Latreille). Albania, Greece (I): Sziraki, 2013.
Blastopsocus spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.
Cerastipsocus spec. Brazil (V): Silva Neto *et al*., 2014a.
Cervopsocus spec. Brazil (V): Silva Neto *et al*., 2014a.
Dictyopsocus spec. Brazil (V): Silva Neto *et al*., 2014a (misspelled *Dyctiopsocus*).

Elaphopsocoides Roman Palacios, Garcia Aldrete & Gonzalez Obando, 2014: 94. Gender: M. Type species: *Elaphopsocoides colombiensis* Roman Palacios, Garcia Aldrete & Gonzalez Obando. Assigned to subfamily Amphigerontiinae.

Elaphopsocoides colombiensis Roman Palacios, Garcia Aldrete & Gonzalez Obando, 2014: 94. Colombia (V). Fig.: Lopez, 2015 (habitus photograph).

Elaphopsocoides lahonduraensis Roman Palacios, Garcia Aldrete & Gonzalez Obando, 2014: 97. Colombia (V).

Elaphopsocus spec. Brazil (V): Silva Neto *et al*., 2014a.

Eremopsocus spec. Brazil (V): Silva Neto *et al*., 2014a.

Eremopsocus nigripes Mockford. Brazil (V): Silva Neto *et al*., 2014a.

Hyalopsocus contrarius (Reuter). Greece (I): Sziraki, 2013.

Indiopsocus spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.

Loensia fasciata (Fabricius). Germany (I): Büchs, 1988 (ecol.); Blick & Dorow, 2014a, 2014b.

Loensia variegata (Latreille). Germany (I): Büchs, 1988 (ecol.); Blick & Dorow, 2014a, 2014b. Greece (I): Sziraki, 2013.

Metylophorus spec. Brazil (V): Silva Neto *et al*., 2014a.

Metylophorus nebulosus (Stephens). Germany (I): Blick & Dorow, 2014a, 2014b. Macedonia (I): Sziraki, 2013.

Neopsocus rhenanus Kolbe. Albania, Bulgaria, Montenegro (I): Sziraki, 2013.

Oreopsocus montanus (Kolbe). Greece (I): Sziraki, 2013.

Psocidus spec. Brazil (V): Silva Neto *et al*., 2014a.

Psococerastis spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.

Psococerastis gibbosa (Sulzer). Albania (I): Sziraki, 2013. Germany (I): Blick & Dorow, 2014a, 2014b.

Ptycta Enderlein. Phylogeny and biogeography of Hawaiian species (X): Bess *et al*., 2014.

Ptycta spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b.

Steleops spec. Brazil (V): Silva Neto *et al*., 2014a. Fig.: Lopez, 2015 (habitus photograph).

Steleops albertonetoi Gonzalez, Garcia Aldrete & Carrejo, 2011b. Brazil (V): Silva Neto *et al*., 2014a.

Symbiopsocus Li Fasheng. Checklist of species, key to Chinese species: Liu Luxi *et al*., 2014.

Symbiopsocus yangminus Liu Luxi, Li Fasheng & Liu Zhiqi 2014: 290. China (VIII).

Thyrsopsocus spec. Colombia (V): Sarria *et al*., 2014a, 2014b.

Trichadenotecnum Enderlein. Keys to species groups and to species from Peninsular Malaysia and Singapore, definition of a new species group (*krucilense* group): Yoshizawa *et al*., 2014c.

Trichadenotecnum spec. Brazil (V): Silva Neto *et al*., 2014a. Colombia (V): Sarria *et al*., 2014a, 2014b. Malaysia (VIII): Yoshizawa *et al*., 2014c: 484 (fig.) (assigned to *spiniserrulum* group).

Trichadenotecnum adika Endang, Thornton & New, 2002. Singapore (VIII): Yoshizawa *et al*., 2014c (assigned to *spiniserrulum* group).

Trichadenotecnum anomalum Yoshizawa & Lienhard, 2014; *in*: Yoshizawa *et al*., 2014c: 492 (assigned to *majus* group). Singapore (VIII).

Trichadenotecnum cinnamonum Endang & New, 2005. Description of female: Yoshizawa *et al*., 2014c: 472 (assigned to *corniculum* group). Malaysia (VIII). NOTE: The female assigned to this species by Endang & New (2005: 36) is considered as misidentified.

Trichadenotecnum circularoides Badonnel. Singapore (VIII): Yoshizawa *et al*., 2014c (assigned to *circularoides* group).

Trichadenotecnum cornutum Endang & New, 2005. Malaysia (VIII): Yoshizawa *et al*., 2014c: (assigned to *majus* group).

Trichadenotecnum endangae Yoshizawa & Lienhard, 2014; *in*: Yoshizawa *et al*., 2014c: 481 (assigned to *spiniserrulum* group). Malaysia (VIII).

Trichadenotecnum germanicum Roesler. Germany (I): Büchs, 1988 (erroneously called *T. sexpunctatum* on p. 272; ecol.).

Trichadenotecnum gombakense New & Lee. Malaysia (VIII): Yoshizawa *et al*., 2014 (assigned to *spiniserrulum* group).

Trichadenotecnum hammani Endang, Thornton & New, 2002. Malaysia (VIII): Yoshizawa *et al*., 2014c (assigned to *spiniserrulum* group).

Trichadenotecnum imrum New & Thornton. Description of female: Yoshizawa *et al*., 2014c: 474 (assigned to *corniculum* group). Singapore (VIII).

Trichadenotecnum kerinciense Endang & New, 2005. Description of male: Yoshizawa *et al*., 2014c: 496 (assigned to *majus* group). Malaysia (VIII).

Trichadenotecnum kojimai Yoshizawa & Lienhard, 2014; *in*: Yoshizawa *et al*., 2014c: 478 (assigned to *spiniserrulum* group). Malaysia (VIII).

Trichadenotecnum krucilense Endang, Thornton & New, 2002. Malaysia (VIII): Yoshizawa *et al*., 2014c (assigned to *krucilense* group).

Trichadenotecnum majus (Kolbe). Germany (I): Blick & Dorow, 2014a, 2014b.

Trichadenotecnum malayense New. Malaysia (VIII): Yoshizawa *et al*., 2014 (assigned to *spiniserrulum* group).

Trichadenotecnum marginatum New & Thornton. Generic assignment questionable (appears to be close to *Cryptopsocus cynostigmus* Li Fasheng, 2002): Yoshizawa *et al*., 2014c.

Trichadenotecnum pardus Badonnel. Singapore (VIII): Yoshizawa *et al*., 2014c (assigned to *spiniserrulum* group).
Trichadenotecnum pardidum Thornton: New, 1975e: 258.
[Not *Trichadenotecnum pardidum* Thornton, 1961: 16].

Trichadenotecnum rachimi Endang & Thornton. Singapore (VIII): Yoshizawa *et al*., 2014c (assigned to *majus* group).
Trichadenotecnum arciforme Thornton: New & Lee, 1992a: 155.
[Not *Trichadenotecnum arciforme* Thornton, 1961: 11].
[Not *Trichadenotecnum arciforme* Thornton: Thornton, 1984b: 157].

Trichadenotecnum santosai Endang & Thornton. Malaysia (VIII): Yoshizawa *et al*., 2014c (assigned to *majus* group).

Trichadenotecnum sexpunctatum (Linnaeus). Albania (I): Sziraki, 2013. Germany (I): Büchs, 1988 (ecol.); Blick & Dorow, 2014a, 2014b. Great Britain (I): Alexander, 2013b.

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4. Additions to the Bibliography

NOTE: Complete bibliographical references to publications cited in the present paper, which are not listed here, can be found in the World Bibliography (Lienhard & Smithers, 2002: 493-664) or in Parts 1 to 13 of the "Additions"; see also **Synthesis of Parts 1-10**: http://www.ville-ge.ch/mhng/psocoptera/divers/synthesis_add_1_10.pdf

Remarks: Papers with two authors are listed in alphabetical order of second authors after the chronological list of papers with the first author as unique author. Papers with more than two authors (i. e. "first author *et al*."-papers) are listed chronologically after the two-author papers. References to papers published in the same year are distinguished by suffix-letters added to the publication year. No cross-references to co-authors or editors are given.

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5. Corrections to Lienhard & Smithers, 2002

Remark: These "Corrections" refer to the pages of Lienhard & Smithers (2002).

044: *Psocathropos pilipennis* (Enderlein). Add: Diagnostic characters: Mockford, 1993a: 51.
573: Replace the reference "Leach, W. 1815" by the following more complete reference: Leach, W. E. 1815. Entomology (pp. 57-172). *In*: Brewster, D. (ed.). The Edinburgh Encyclopaedia. Volume 9. *Edinburgh, William Blackwood.* (Psoc.: p. 139).

PSOCOPTERA IN THE PUBLIC

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Psocoptera are our close friends but, unfortunately, they are a group of insects rather neglected by taxonomists and evolutionary biologists. Two papers published in 2014 may change the situation dramatically, putting the Psocoptera on the front line (at least for a moment) of insect systematics and evolutionary research.

The one was published in May by Yoshizawa, Lienhard and two colleagues from Brazil (Rodrigo Ferreira) and Japan (Yoshitaka Kamimura) in the journal *Current Biology* (Yoshizawa *et al.*, 2014b: see Addition to Bibliography above). In this paper, we reported, for the first time, the acting condition of the gynosome (female copulatory organ, or female penis, present in *Neotrogla* and first reported by Lienhard, Do Carmo & Ferreira, 2010). Because the presence of an intromittent organ in the female changes our general idea about sex, the paper attracted enormous public interest. Altmetric scores the paper as the 14th most attractive scientific paper published in 2014 (see http://www.altmetric.com/top100/2014/: As of Feb 12th, the Score increases to 1795, ranking it 77th among over 3M papers so far evaluated by Altmetric). The gynosome was also selected as one of the oddest genital organs in the animal kingdom (e.g., see http://www.mareonline.nl/archive/2014/05/08/evolutie-tussen-de-benen). See also Yoshizawa *et al*. (2014d) and Yoshizawa (2015) for the detailed story about its discovery and evolutionary significance.

The other paper was published in November by an international team, the 1KITE consortium (http://1kite.org), in the journal *Science* (Misof *et al*., 2014). The paper reports the most comprehensive insect phylogeny available to date, based on ca. 1500 genes sequenced from over 100 species covering all insect orders. This paper also attracted great public interest (Altmetric Score 678 as of Feb 12th: ranked 552nd). In the resulting tree, Psocodea (= 'Psocoptera' + Phthiraptera) were placed to the sister of Holometabola, which means Psocoptera may be a key taxon in uncovering the origin and evolution of the holometabolous insects. However, placement of Psocodea is rather unstable, receiving 100% support value only under a specific data and model set. Personally, I still believe that the Paraneoptera are monophyletic because many independent morphological characters support it. The Paraneoptera subproject of the 1KITE project and the NSF's AToL Hemipteroid Insect Phylogeny project (with Kevin Johnson as a project leader) collaborate in their efforts for resolving the problems of the hemipteroid phylogeny and monophyly of Paraneoptera.

EDITORIAL

"Psocid News" publishes any kinds of topics (formal or informal) that may be interesting for psocidologists, but articles containing official nomenclatural acts (e.g. descriptions of new taxa, proposals of new combinations or new synonyms) will not be accepted for publication by the editor (see below).

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Next issue. About Feb. 2016. Please let me have all contributions by Jan. 31 2016.

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