



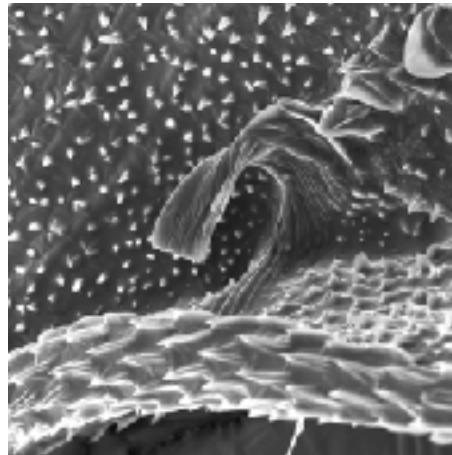
Title	Psocid News : The Psocidologists' Newsletter
Author(s)	Yoshizawa, Kazunori
Doc URL	<a href="http://hdl.handle.net/2115/35519">http://hdl.handle.net/2115/35519</a>
Type	other
Note	edited by Kazunori Yoshizawa at the Systematic Entomology, Faculty of Agriculture, Hokkaido University
Additional Information	There are other files related to this item in HUSCAP. Check the above URL.
File Information	020 PN_20.pdf (No. 20 (Feb. 28, 2018))



[Instructions for use](#)

# Psocid News

## The Psocidologists' Newsletter



No. 20 (Feb 28, 2018)  
In-flight wing-coupling structure of *Metylaphorus* sp. (Psocidae)  
(© Naoki Ogawa: See Ogawa & Yoshizawa, 2017b)

### AUTHORITIES FOR FAMILY-GROUP NAMES OF TROGIOMORPHA (INSECTA: PSOCODEA: 'PSOCOPTERA')

By Charles LIENHARD and Kazunori YOSHIZAWA

*Authors' address.* Lienhard, C.: Geneva Natural History Museum, CP 6434, 1211 Geneva 6, Switzerland (corresponding author: charleslienhard@bluewin.ch).

Yoshizawa, K.: Systematic Entomology, Graduate School of Agriculture, Hokkaido University, Sapporo 060-8589, Japan.

#### Introduction

Unfortunately, a comprehensive documentation of authorities for family-group names is lacking for psocids. This lack of information is particularly problematic in a period when phylogenetic research results in the frequent propositions of new classifications (e. g. Yoshizawa & Johnson, 2014; Yoshizawa *et al.*, 2014; Yoshizawa, 2016).

According to the principle of coordination applied to family-group names (ICZN Article 36) each name can be used in all ranks of the family-group with the same authorship and date, the rank-specific suffixes being -ina (subtribe), -ini (tribe), -inae (subfamily), -idae (family) and -oidea (superfamily).

All family-group names of the suborder Tropiomorpha that we were able to retrieve from the literature are listed here, including names based on fossil genera clearly assignable to Psocoptera (see Mockford *et al.*, 2013). The only known invalid name (*Lepidillinae*) is also listed and the reason of its invalidity is indicated.

The family-group names are listed alphabetically, each name in its original spelling and with its original suffix. For each name the authority [author(s), year, page] is indicated and, in parentheses, its type genus. For names with a non-evident stem the latter is indicated in square brackets, if necessary together with the correct spelling of the family-group name (according to mandatory changes or changes ruled by the ICZN). The names currently used (often with a suffix that is not identical to the original one) in the generally accepted classification of psocids are in bold type. This classification essentially corresponds to Lienhard & Smithers (2002), but includes some further changes documented by Lienhard (2012, 2013, 2014, 2015, 2016a, 2016b, 2017). These publications also contain all bibliographical details about the type genera, while the bibliographical references concerning the family-group names are listed below.

This list is an accessory result of several years of taxonomic research on the suborder Tropiomorpha. However, it is only a first step towards a comprehensive list of all family-group names of psocids, including

also the suborders Troctomorpha and Psocomorpha. We invite the reader to inform us about errors or omissions.

### List of family-group names of Trogiomorpha

- Anomocopiidae [sic] Smithers, 1972: 337 [Anomocope-; Anomocopeidae] (*Anomocopeus* Badonnel, 1967)
- Archaeatropidae** Baz & Ortuño, 2000: 369 (*Archaeatropos* Baz & Ortuño, 2000)
- Atropida Leach, 1815: 139 (*Atropos* Leach, 1815) (see Trogidae, below)
- Dorypteryginae Enderlein, 1903: 208 [Dorypteryg-] (*Dorypteryx* Aaron, 1883)
- Echinopsocidae** Enderlein, 1906: 109 (*Echinopsocus* Enderlein, 1903)
- Echmepterygini Karny, 1930: 448 [Echmepteryg-] (*Echmepteryx* Aaron, 1886)
- Empheriidae** Kolbe, 1884: 37 (*Empheria* Hagen, 1856)
- Eosillinae Ribaga, 1908: 22 (*Eosilla* Ribaga, 1908)
- Lepidillinae Ribaga, 1905: 100 (*Lepidilla* Ribaga, 1905 nec *Lepidilla* Matthew, 1885). Comment: This is an invalid name due to the homonymy of its type genus (ICZN Article 39).
- Lepidopsocidae** Enderlein, 1903: 207 (*Lepidopsocus* Enderlein, 1903)
- Lepinotinae Enderlein, 1905: 3 (*Lepinotus* Heyden, 1850). Comment: See remark on Trogidae, the family to which the genus *Lepinotus* is currently assigned.
- Lepolepidinae** Roesler, 1944: 134 (*Lepolepis* Enderlein, 1906)
- Parasoinae** Mockford, 2005: 208 (*Parasoia* Thornton, 1962)
- Perientomini** Kolbe, 1884: 37 (*Perientomum* Hagen, 1865)
- Prionoglarinae [sic] Karny, 1930: 448 [Prionoglarid-; **Prionoglaridinae**] (*Prionoglaris* Enderlein, 1909)
- Psocatropidae [sic] Pearman, 1936: 60 [Psocathropidae] (*Psocathropos* Ribaga, 1899)
- Psoquillidae** Kolbe, 1884: 37 (*Psoquilla* Hagen, 1865)
- Psyllipsocini** Kolbe, 1884: 38 (*Psyllipsocus* Selys-Longchamps, 1872)
- Rhypsocini [sic] Karny, 1930: 446 [Rhyopsocini] (*Rhyopsocus* Hagen, 1876)
- Scoliopsyllopsidae Badonnel, 1931: 256 (*Scoliopsyllopsis* Enderlein, 1912)
- Sensitibillini** Lienhard, 2007: 445 (*Sensitibilla* Lienhard, 2000)
- Siamoglaridini** Azar, Huang & Nel, 2017 in: Azar et al., 2017: 147 [Siamoglarid-] (*Siamoglaris* Lienhard, 2004)
- Speleketoridae** Smithers, 1972: 337 (*Speleketor* Gurney, 1943)
- Thylacellinae** Roesler, 1944: 131 (*Thylacella* Enderlein, 1911). Comment: This name is generally but incorrectly used for the subfamily of Lepidopsocidae that contains the genera *Thylacella* and *Thylax* (Lienhard & Smithers, 2002); the name Thylacinae has priority over Thylacellinae.
- Thylicinae Enderlein, 1903: 208 [Thylac-] (*Thylax* Hagen, 1866). Comment: See remark on Thylacellinae.
- Trogidae** Enderlein, 1911: 293 (1815) (*Trogium* Illiger, 1798). Comment: This name takes precedence over Atropidae Leach, 1815 with the date of the latter as date of priority (ICZN Article 40.2.1 and Recommandation 40A).
- Udamolepidini Karny, 1930: 446 [Udamolepid-] (*Udamolepis* Enderlein, 1912)

### References

- Azar, D., Huang Diying, El-Hajj, L., Cai Chenyang & Nel, A. 2017. New Prionoglarididae from Burmese amber (Psocodea: Trogiomorpha: Prionoglaridetae). *Cretaceous Research* 75: 146-156.
- Badonnel, A. 1931. Copéognathes de France (Ile note). Sur les pièces buccales de *Scoliopsyllopsis latreillei* Enderlein. *Bulletin de la Société zoologique de France* 56: 250-257.
- Baz, A. & Ortuño, V. M. 2000. Archaeatropidae, a new family of Psocoptera from the Cretaceous amber of Alava, Northern Spain. *Annals of the Entomological Society of America* 93(3): 367-373.
- Enderlein, G. 1903. Die Copeognathen des indo-australischen Faunengebietes. *Annales historico-naturales Musei nationalis Hungarici* 1: 179-344.
- Enderlein, G. 1905. Morphologie, Systematik und Biologie der Atropiden und Troctiden, sowie Zusammenstellung aller bisher bekannten recenten und fossilen Formen. *Results of the Swedish Zoological Expedition to Egypt and the White Nile, 1901*. No.18. 58 pp.
- Enderlein, G. 1906. The scaly winged Copeognatha (Monograph of the Amphientomidae, Lepidopsocidae, and Lepidillidae in relation to their morphology and taxonomy). *Spolia Zeylanica* 4: 39-122.
- Enderlein, G. 1911. Die fossilen Copeognathen und ihre Phylogenie. *Palaeontographica* 58: 279-360.
- Hagen, H. 1866. Psocinorum et Embidinorum Synopsis synonymica. *Verhandlungen der Zoologisch-Botanischen Gesellschaft Wien* 16: 201-222.

- International Commission on Zoological Nomenclature 1999. International Code of Zoological Nomenclature, 4th ed. *The International Trust for Zoological Nomenclature, London*, XXIX + 306 pp.
- Karny, H. H. 1930. Zur Systematik der Orthopteroidea Insekten. II. *Treubia* 12: 431-461.
- Kolbe, H. J. 1884. Der Entwickelungsgang der Psociden im Individuum und in der Zeit. *Berliner Entomologische Zeitschrift* 28: 35-38.
- Leach, W. E. 1815. Entomology (pp. 57-172). In: Brewster, D. (ed.). The Edinburgh Encyclopaedia. Volume 9. *Edinburgh, William Blackwood*. (Psocides: p. 139).
- Lienhard, C. 2007. Description of a new African genus and a new tribe of Speleketorinae (Psocodea: 'Psocoptera': Prionoglarididae). *Revue suisse de Zoologie* 114(3): 441-469.
- Lienhard, C. 2012. Additions and Corrections (Part 11) to Lienhard & Smithers, 2002: "Psocoptera (Insecta) - World Catalogue and Bibliography". *Psocid News* 14: 1-13.
- Lienhard, C. 2013. Additions and Corrections (Part 12) to Lienhard & Smithers, 2002: "Psocoptera (Insecta) - World Catalogue and Bibliography". *Psocid News* 15: 1-21.
- Lienhard, C. 2014. Additions and Corrections (Part 13) to Lienhard & Smithers, 2002: "Psocoptera (Insecta) - World Catalogue and Bibliography". *Psocid News* 16: 1-20.
- Lienhard, C. 2015. Additions and Corrections (Part 14) to Lienhard & Smithers, 2002: "Psocoptera (Insecta) - World Catalogue and Bibliography". *Psocid News* 17: 1-17.
- Lienhard, C. 2016a. Additions and Corrections (Part 15) to Lienhard & Smithers, 2002: "Psocoptera (Insecta) - World Catalogue and Bibliography". *Psocid News* 18: 1-12.
- Lienhard, C. 2016b. Synthesis of Parts 1-10 of the Additions and Corrections to Lienhard & Smithers, 2002: "Psocoptera (Insecta) – World Catalogue and Bibliography". *Psocid News, Special Issue* 3: 1-221.
- Lienhard, C. 2017. Additions and Corrections (Part 16) to Lienhard & Smithers, 2002: "Psocoptera (Insecta) - World Catalogue and Bibliography". *Psocid News* 19: 1-18.
- Lienhard, C. & Smithers, C. N. 2002. Psocoptera (Insecta): World Catalogue and Bibliography. *Instrumenta Biodiversitatis* 5: xli+745 pp. *Muséum d'histoire naturelle, Genève*.
- Mockford, E. L. 2005. A new genus of perientomine psocids (Psocodea: Lepidopsocidae) with a review of the perientomine genera. *Transactions of the American Entomological Society* 131: 201-215.
- Mockford, E. L., Lienhard, C. & Yoshizawa, K. 2013. Revised classification of 'Psocoptera' from Cretaceous amber, a reassessment of published information. *Insecta Matsumurana, New Series* 69: 1-26.
- Pearman, J. V. 1936. The taxonomy of the Psocoptera: preliminary sketch. *Proceedings Royal Entomological Society of London (B)* 5: 58-62.
- Ribaga, C. 1905. Descrizione di nuovi Copeognati. *Redia* 2: 99-110.
- Ribaga, C. 1908. Un nuovo Copeognato dell' Isola di Giava. *Redia* 5: 20-26.
- Roesler, R. 1944. Die Gattungen der Copeognathen. *Stettiner Entomologische Zeitung* 105: 117-166.
- Smithers, C. N. 1972. The classification and phylogeny of the Psocoptera. *Australian Museum Memoirs* 14: 1-349.
- Yoshizawa, K. 2016. Phylogenetic placement and higher systematics of Psocodea. *Japanese Journal of Entomology*, (N. S.), 19(3): 112-120. (In Japanese, with English abstract).
- Yoshizawa, K. & Johnson, K. P. 2014. Phylogeny of the suborder Psocomorpha: congruence and incongruence between morphology and molecular data (Insecta: Psocodea: 'Psocoptera'). *Zoological Journal of the Linnean Society* 171: 716-731.
- Yoshizawa, K., Mockford, E. L. & Johnson, K. P. 2014. Molecular systematics of the bark lice infraorder Caeciliusetae (Insecta: Psocodea). *Systematic Entomology* 39: 279-285.

**ADDITIONS AND CORRECTIONS (PART 17) TO LIENHARD & SMITHERS, 2002:  
"PSOCOPTERA (INSECTA) – WORLD CATALOGUE AND BIBLIOGRAPHY"**

**Charles LIENHARD** (Geneva Natural History Museum, Switzerland)  
E-mail: charleslienhard@bluewin.ch

## **1. Introduction**

This is the 17th part of a series of "Additions and Corrections to the World Catalogue and Bibliography" (Lienhard & Smithers, 2002) published in "Psocid News". Parts 1-16 were published in Psocid News no. 4-19 (see below); a **Synthesis of Parts 1-10** is given by Lienhard (2016d).

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). 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 1-17)**

Country checklists of Psocoptera species extracted from Lienhard & Smithers (2002) are given by Lienhard (2016b).

All additional species records are mentioned in the "Additions and Corrections to the World Catalogue" and all countries mentioned in Parts 1 to 17 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** given by Lienhard (2016d).

- 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)

### **Synthesis of Parts 1-10, see Lienhard (2016d)**

- 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): 1-17 (= Lienhard, 2015)
- Part 15 – Psocid News, no. 18 (2016): 1-12 (= Lienhard, 2016a)
- Part 16 – Psocid News, no. 19 (2017): 1-18 (= Lienhard, 2017)
- Part 17 – Psocid News, no. 20 (2018) (= present issue)

**(I)** Albania (Parts 14, 16), Austria (Parts 1, 3, 4, 5, 6, 8, 9), Bahrain (Part 8), Belgium (Parts 3, 6, 8, 10, 16, 17), Bosnia-Hercegovina (Part 14), Bulgaria (Parts 8, 14, 16, 17), Croatia (Parts 6, 7, 11, 12), Cyprus (Part 11), Czech Republic (Parts 1, 4, 5, 6, 7, 8, 10, 11, 13, 14, 16), Denmark (Parts 10, 12), Egypt (Part 6), Europe (Parts 10, 11, 12), Finland (Parts 1, 7, 10, 11, 12, 13, 15), 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, 16), Great Britain (Parts 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17), Greece (Parts 5, 6, 11, 14, 17), Greenland (Part 15), Hungary (Parts 1, 3, 10), Iceland (Part 10), Iran (Parts 6, 8, 15, 16, 17), Ireland (Parts 6, 9, 13, 17), Israel (Parts 4, 6, 8, 11, 15, 16), Italy (Parts 1, 3, 5, 6, 7, 8, 9, 10, 17), Kosovo (Part 14), Lebanon (Parts 6, 7, 9, 10, 11, 13, 14), Lithuania (Part 8), Luxembourg (Parts 1, 3, 7, 8, 10, 13, 17), Macedonia (Part 14), Malta (Parts 15, 16), Montenegro (Part 14), Morocco (Parts 10, 15), Netherlands (Parts 4, 7, 9, 11, 14, 16, 17), Norway (Parts 4, 10, 13), Oman (Part 8), Poland (Part 13), Portugal (Parts 6, 7), Romania (Parts 10, 14, 16, 17), Russia (Parts 6, 8, 10, 12, 13, 14, 16), Saudi Arabia (Parts 8, 15), Serbia (Part 14), Slovakia (Parts 1, 11, 13), Spain (Parts 1, 5, 7, 8, 9, 11, 12, 13, 17), Sweden (Part 8, 10, 17), Switzerland (Parts 1, 3, 4, 6, 7, 8, 11, 12), Turkey (Parts 5, 10, 15), UAE (Parts 8, 9), Ukraine (Part 6), Yemen (Parts 4, 8)

**(II)** Ascension Island (Parts 11, 15), Azores (Parts 5, 11), Canary Islands (Parts 1, 4, 5, 10, 11), Cape Verde Islands (Parts 5, 11, 15), Gough Island (Parts 5, 6), Madeira (Parts 5, 8, 15), 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, 15, 16)

**(IV)** Antigua (Part 15), Aruba (Part 15), Belize (Parts 1, 4, 6, 8, 9, 10, 15), Costa Rica (Parts 1, 6, 8, 15, 17), Cuba (Parts 6, 11), Curaçao (Part 15), Dominica (Parts 5, 6, 11), Dominican Republic (Parts 4, 6, 7, 8, 12, 13, 14), Guadeloupe (Part 15), Guatemala (Parts 1, 4, 7, 8, 11, 15, 16, 17), Haiti (Parts 1, 4), Hispaniola (Part 10), Honduras (Parts 8, 15), Jamaica (Parts 7, 8, 9, 15), Mexico (Parts 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17), Middle America (Part 11), Nicaragua (Parts 1, 3, 4, 6, 7, 8, 13), Panama (Parts 4, 6, 8, 17), Puerto Rico (Parts 1, 7, 10, 13), Trinidad (Parts 1, 16)

**(V)** Argentina (Parts 3, 4, 8, 9, 14), Bolivia (Parts 1, 5, 9, 10, 17), Brazil (Parts 1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17), Chile (Parts 1, 4, 6, 8), Colombia (Parts 1, 10, 11, 12, 13, 14, 15, 16, 17), Ecuador (Parts 1, 6, 8, 13, 15, 16), Paraguay (Parts 13, 14, 15), Peru (Parts 1, 5, 6, 8, 9, 10, 11, 12, 13, 14, 16, 17), Suriname (Part 10), Venezuela (Parts 1, 4, 6, 7, 8, 10, 15, 17)

**(VI)** Ghana (Part 4), Guinea (Part 1), Kenya (Parts 4, 15, 16), Liberia (Part 15), Madagascar (Part 5), Malawi (Part 3), Mozambique (Part 15), Namibia (Parts 1, 6, 7, 8, 10), Rwanda (Part 15), Senegal (Part 15), South Africa (Parts 3, 6, 7, 8, 11), Tanzania (Parts 3, 4), Togo (Part 15), Uganda (Part 6)

**(VII)** Reunion (Part 15)

**(VIII)** Brunei (Parts 5, 6), China (Parts 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17), Hong Kong (Part 5), India (Parts 3, 5, 6, 7, 11, 15), Indonesia (Parts 1, 3, 5, 6, 10, 15), Japan (Parts 1, 4, 6, 7, 8, 9, 10, 12, 16), Kazakhstan (Part 13), Korea (Part 17), Kuril Islands (Part 4), Kyrgyzstan (Part 5), Laos (Parts 5, 6, 17), Malaysia (Parts 1, 5, 6, 8, 10, 14, 15), Myanmar (Parts 6, 8, 13, 14, 16, 17), 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, 15), Sri Lanka (Parts 4, 6), Taiwan (Parts 1, 6, 7, 8, 13, 15, 17), Thailand (Parts 1, 4, 5, 6, 9, 11, 15), USSR (Parts 4, 9), Vietnam (Parts 4, 5, 6, 8, 13, 14, 15, 17)

**(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, 16), Subantarctic islands (Part 13), Tasmania (Part 9)

**(X)** Easter Island (Parts 13, 16), Fiji (Parts 8, 15), 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, 15, 16, 17)

### 3. Additions to the Catalogue

#### Acercaria / Paraneoptera

Prokop *et al.*, 2017: Introduction of the new superorder **Clareocercaria** (= Acercaria s.l.) and phylogenetic analysis of this group which contains also the Psocodea.

#### Psocodea

Phylogeny, evolution: Beutel *et al.*, 2017.

#### Psocoptera

Collins & Hespenheide, 2016: Venezuela (V) (bird as predator). Rasnitsyn *et al.*, 2016 (A) (several families in Cretaceous amber). Rydell *et al.*, 2016: Sweden (I) (bats as predators). Silva-Neto *et al.*, 2016e (method for storage of slides and capsule with thorax in alcohol). Erwin & Henry, 2017 (Carabid beetles under webbing of psocids). Lienhard 2017 (Additions to the World Catalogue and Bibliography, Part 16). Maute *et al.*, 2017 (locust control, psocids as non-target insects). Ross, 2017 (A) (checklist of species from Burmese amber). Yoshizawa, 2017 (Newsletter). Xu Si-Yuan *et al.*, 2017: China (VIII) (larval Erythraeidae mite parasitic on psocid).

#### Prionoglarididae

Azar *et al.*, 2017: Species checklist and definition of new tribe **Siamoglaridini** Azar, Huang & Nel (*in Azar et al.*, 2017: 147), within Prionoglaridinae (for *Siamoglaris* Lienhard and *Palaeosiamoglaris* Azar, Huang & Nel).

Yoshizawa *et al.*, 2017a: Monophyly of family supported by mitochondrial phylogeny.

**Neotrogla** Lienhard. Behaviour: Kamimura & Yoshizawa, 2017 (sex role reversal); Zwart, 2017: p. 47 (scenario of 'phallic woman' phantasm is something biologically real in *Neotrogla*).

**Neotrogla** spec. Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

**Neotrogla curvata** Lienhard & Ferreira, 2013. Brazil (V): Angarten *et al.*, 2017 (in cave). Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure)

**Palaeosiamoglaris\*\*** Azar, Huang & Nel, 2017, *in Azar et al.*, 2017: 147. Gender: F. Type species: *Palaeosiamoglaris lienhardi* Azar, Huang & Nel.

**Palaeosiamoglaris burmica\*** Azar, Huang & Nel, 2017, *in Azar et al.*, 2017: 149. Myanmar (VIII), in Cretaceous amber (A).

**Palaeosiamoglaris inexpectata\*** Azar, Huang & Nel, 2017, *in Azar et al.*, 2017: 150. Myanmar (VIII), in Cretaceous amber (A).

**Palaeosiamoglaris lienhardi\*** Azar, Huang & Nel, 2017, *in Azar et al.*, 2017: 148 (several times misspelled *leinhardi*). Myanmar (VIII), in Cretaceous amber (A).

**Prionoglaris dactyloides** Lienhard. Greece (I): Beron, 2016 (in caves).

**Prionoglaris stygia** Enderlein. Greece (I): Beron, 2016 (in caves). Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure). Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

**Speleketor irwini** Mockford. Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

#### Psyllipsocidae

**Dorypteryx domestica** (Smithers). Great Britain (I): Robinson & Allan, 2017 (in Museum). Parasit.: Rueckert & Devetak, 2017 (Gregarine species *Enterocystis dorypterygis*; potential biological control). Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

**Dorypteryx longipennis** Smithers. Great Britain (I): Robinson & Allan, 2017 (in Museum).

**Psyllipsocus ramburii** Selys-Longchamp. Greece (I): Beron, 2016 (in caves). Italy (Island of Sardinia) (I): Mucedda *et al.*, 2013 (in caves). Mexico (IV): Reddell, 1982 (in cave).

**Psyllipsocus yucatan** Gurney. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

#### Trogiidae

**Cerobasis guestfalica** (Kolbe). Bulgaria (I): Georgiev, 2017d. Greece (I): Georgiev, 2017c. Biol.: Ma & Schwander, 2017 (parthenogenesis believed to be endosymbiont-induced by *Wolbachia*).

**Lepinotus inquilinus** Heyden. Bulgaria (I): Georgiev, 2017d.

**Lepinotus reticulatus** Enderlein. Greece (I): Georgiev, 2017c. Iran (I): Khandehroo *et al.*, 2015. Romania (I): Chiriliuc & Andriescu, 2016 (collected from dry hibernating stems by "Schmitz" photo selector). Korea (VIII): Soysouvanh *et al.*, 2017.

**Trogium pulsatorium** (Linnaeus). Korea (VIII): Soysouvanh *et al.*, 2017. Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

## **Psoquillidae**

*Psoquila* spec. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Psoquila marginepunctata* Hagen. Netherlands (I): Noordijk *et al.*, 2017.

## **Lepidopsocidae**

Lepidopsocidae gen. spec. Genet.: Liu Xiaochen *et al.*, 2017 (mitochondrial genome). Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

*Echmepteryx hageni* (Packard). Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure). Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

## **Troctomorpha**

Phylog.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure contains an autapomorphy of Troctomorpha and a synapomorphy of Troctomorpha and Psocomorpha).

## **Electrentomidae**

*Manicapsocus alettae* Smithers. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

## **Compsocidae**

*Burmacompsocus coniugans\** Sroka & Nel, 2017: 598. Myanmar (VIII), Cretaceous Burmese amber (A).

## **Troctopsocidae**

Troctopsocidae gen. spec. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Selenopsocus* spec. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

## **Musapsocidae**

*Musapsocus* spec. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

## **Amphientomidae**

*Ancyllopsocus macrurus* Li Fasheng. Korea (VIII): Soysouvanh *et al.*, 2017 (misspelled as *Ancylentomus macrurus*).

*Stimulopalpus japonicus* Enderlein. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure). Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

## **Pachytroctidae**

*Tapinella* spec. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

## **Liposcelididae**

*Embidopsocus* spec. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Liposcelis* spec. Iran (I): Kahrarian, 2017. Romania (I): Chiriliuc & Andriescu, 2016 (collected from dry hibernating stems by "Schmitz" photo selector). Genet.: Beukeboom, 2017 (commentary to Hodson *et al.*, 2017); Hodson *et al.*, 2017 (sex determination).

*Liposcelis arenicola* Günther. Greece (I): Georgiev, 2017c.

*Liposcelis bostrychophila* Badonnel. Bulgaria (I): Georgiev, 2017d. Greece (I): Georgiev, 2017c. Anat.: Polilov, 2016 (adult and first instar nymph); Makarova & Polilov, 2017 (brain structure, also in nymphs). Biol.: Healy *et al.*, 2017 (*Rickettsia felis* as a symbiont); Ma & Schwander, 2017 (parthenogenesis believed to be endosymbiont-induced by *Rickettsia*). Genet.: Liu Xiaochen *et al.*, 2017 (mitochondrial genome); Sun En-Tao *et al.*, 2017 (genetic diversity in China) (VIII). Pest: Arthur *et al.*, 2017 (control by freezing); Guo Shan-Shan *et al.*, 2017a, 2017b (control); Ishibashi *et al.*, 2017 (respiratory allergy); Li Heng Yu *et al.*, 2017 (control); Liu Li-Jun *et al.*, 2017 (molecular identification).

*Liposcelis brunnea* Motschulsky. Liu Li-Jun *et al.*, 2017 (molecular identification).

*Liposcelis corrodens* (Heymons). Bulgaria (I): Georgiev, 2017e. Iran (I): Kahrarian, 2017. Pest: Liu Li-Jun *et al.*, 2017 (molecular identification).

*Liposcelis decolor* (Pearman). Bulgaria (I): Georgiev, 2017e. Greece (I): Georgiev, 2017c. Iran (I): Kahrarian, 2017. Genet.: Liu Xiaochen *et al.*, 2017 (mitochondrial genome). Pest: Arthur *et al.*, 2017 (control by freezing); Liu Li-Jun *et al.*, 2017 (molecular identification).

- Liposcelis divinatoria* (Müller). Korea (VIII): Soysouvanh *et al.*, 2017.
- Liposcelis edaphica* Lienhard. Iran (I): Kahrarian, 2017.
- Liposcelis entomophila* (Enderlein). Korea (VIII): Soysouvanh *et al.*, 2017. Genet.: Liu Xiaochen *et al.*, 2017 (mitochondrial genome). Pest: Arthur *et al.*, 2017 (control by freezing); Jing Tian-Xing *et al.*, 2017 (sensitivity to insecticides); Liu Li-Jun *et al.*, 2017 (molecular identification).
- Liposcelis formicaria* (Hagen). Bulgaria (I): Georgiev, 2017d.
- Liposcelis keleri* Günther. Iran (I): Kahrarian, 2017.
- Liposcelis kyrosensis* Badonnel. Greece (I): Georgiev, 2017c.
- Liposcelis mendax* Pearman. Pest: Liu Li-Jun *et al.*, 2017 (molecular identification).
- Liposcelis meridionalis* (Rosen). Bulgaria (I): Georgiev, 2017a.
- Liposcelis paeta* Pearman. Genet.: Liu Xiaochen *et al.*, 2017 (mitochondrial genome). Pest: Arthur *et al.*, 2017 (control by freezing); Liu Li-Jun *et al.*, 2017 (molecular identification).
- Liposcelis pearmani* Lienhard. Bulgaria (I): Georgiev, 2017b. Greece (I): Georgiev, 2017c. Pest: Liu Li-Jun *et al.*, 2017 (molecular identification).
- Liposcelis priesneri* Enderlein. Bulgaria (I): Georgiev, 2017b. Iran (I): Kahrarian, 2017.
- Liposcelis rufa* Broadhead. Bulgaria (I): Georgiev, 2017d. Pest: Liu Li-Jun *et al.*, 2017 (molecular identification).
- Liposcelis sculptilimacula* Li Zihong & Li Fasheng. Genet.: Liu Xiaochen *et al.*, 2017 (Misspelled *Liposcelis sculptilis*; see Lienhard, 2003d: 700 and Lienhard, 2017: 6) (mitochondrial genome).
- Liposcelis silvarum* (Kolbe). Iran (I): Kahrarian, 2017.
- Liposcelis tricolor* Badonnel. Greece (I): Georgiev, 2017c. Pest: Liu Li-Jun *et al.*, 2017 (molecular identification).

## Psocomorpha

Phylog.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure contains a synapomorphy of Troctomorpha and Psocomorpha).

## Archipsocidae

*Archipsocus* spec. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Archipsocus nomas* Gurney. Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

## Amphipsocidae

*Amphipsocus japonicus* (Enderlein). Korea (VIII): Soysouvanh *et al.*, 2017. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Kolbia fusconervosa* Enderlein. Korea (VIII): Soysouvanh *et al.*, 2017.

*Kolbia quisquiliarum* Bertkau. Belgium (I): Lock, 2017a.

## Stenopsocidae

*Cubipilis aphidiformis* (Enderlein). Korea (VIII): Soysouvanh *et al.*, 2017.

*Malostenopsocus* Li Fasheng. Generic diagnosis: Liang Feiyang *et al.*, 2017: 590.

*Malostenopsocus lacteus*\* Liang Feiyang, Li Fasheng & Liu Xingyue 2017: 590. Laos (VIII).

*Stenopsocus immaculatus* (Stephens). Bulgaria (I): Georgiev, 2017d. Korea (VIII): Soysouvanh *et al.*, 2017. Genet.: Liu Xiaochen *et al.*, 2017 (mitochondrial genome).

*Stenopsocus nigricellus* Okamoto. Morph.: Ogawa & Yoshizawa, 2017a (thoracic musculature); Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Stenopsocus wangi*\* Liang Feiyang, Li Fasheng & Liu Xingyue 2017: 592. Laos (VIII).

*Stenopsocus abnormis*\* Liang Feiyang, Li Fasheng & Liu Xingyue 2017: 597. Laos (VIII).

*Stenopsocus externus* Banks. China (including Taiwan), Laos, Vietnam (VIII): Liang Feiyang *et al.*, 2017 (fig.).

## Dasydemellidae

*Matsumuraiella radiopicta* Enderlein. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

## Paracaeciliidae

*Chilenocaecilius ornatipennis* (Blanchard). Great Britain (I): Alexander, 2017 (Scotland and England). Ireland (I): Lienhard *et al.*, 2017 (figs of female).

*Paracaecilius japonicus* (Enderlein). Korea (VIII): Soysouvanh *et al.*, 2017.

## **Caeciliusidae**

*Caecilius fuscopterus* (Latreille). Bulgaria (I): Georgiev & Todorov, 2017.

*Stenocaecilius analis* (Banks). Parasit.: Triapitsyn, 2017 (*Alaptus immaturus* in eggs).

*Stenocaecilius quercus* (Edwards). Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

*Valenzuela corsicus* (Kolbe). Belgium (I): Lock, 2017a. Luxembourg (I): Lock & Van Butsel, 2017.

*Valenzuela flavidus* (Stephens). Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Valenzuela gynapterus* (Tetens). Belgium (I): Lock, 2017a.

*Valenzuela oyamai* (Enderlein). Korea (VIII): Soysouvanh *et al.*, 2017.

## **Peripsocidae**

*Peripsocus didymus* Roesler. Bulgaria (I): Georgiev, 2017d. Korea (VIII): Soysouvanh *et al.*, 2017.

*Peripsocus quercicola* Enderlein. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

## **Ectopsocidae**

*Ectopsocopsis cryptomeriae* (Enderlein). Korea (VIII): Soysouvanh *et al.*, 2017.

*Ectopsocus briggsi* McLachlan. Bulgaria (I): Georgiev, 2017d; Georgiev & Todorov, 2017. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Ectopsocus meridionalis* Ribaga. Bulgaria (I): Georgiev, 2017d.

*Ectopsocus petersi* Smithers. Spain (Mallorca Island) (I): Lock, 2017b.

*Ectopsocus vachoni* Badonnel. Bulgaria (I): Georgiev, 2017b. Greece (I): Georgiev, 2017c.

*Ectopsocus vishnyakovae* Schmidt. Iran (I): Khandehroo *et al.*, 2015.

## **Elipsocidae**

*Cuneopalpus cyanops* (Rostock). Bulgaria (I): Georgiev, 2017b; Georgiev & Todorov, 2017.

*Elipsocus moebiusi* Tetens. Bulgaria (I): Georgiev, 2017b.

## **Lachesillidae**

*Lachesilla* Westwood. Checklist of species of the *corona* group, with distribution: Garcia Aldrete, 2017b.

Key to species of the *riegeli* group: Garcia Aldrete, 2017c. Total of described species in the genus is 339: Garcia Aldrete, 2017d: 226.

*Lachesilla anna* Sommerman. Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

*Lachesilla batesi*\* Garcia Aldrete, 2017d: 202 (assigned to *corona* species group). Guatemala (IV).

*Lachesilla blandfordi*\* Garcia Aldrete, 2017d: 202 (assigned to *corona* species group). Guatemala (IV).

*Lachesilla brailovskyana*\* Garcia Aldrete, 2017b: 172 (assigned to *corona* species group). Mexico (IV).

*Lachesilla buenoi*\* Garcia Aldrete, 2017b: 172 (assigned to *corona* species group). Mexico (IV).

*Lachesilla cameronii*\* Garcia Aldrete, 2017d: 205 (assigned to *corona* species group). Mexico (IV).

*Lachesilla casasolai*\* Garcia Aldrete, 2016: 117 (assigned to *texcocana* species group). Mexico (IV).

*Lachesilla cercade*\* Garcia Aldrete, 2017b: 173 (assigned to *corona* species group). Mexico (IV).

*Lachesilla championi*\* Garcia Aldrete, 2017d: 205 (assigned to *corona* species group). Panama (IV).

*Lachesilla chiquitana*\* Garcia Aldrete, 2017c: 356 (assigned to *riegeli* species group). Bolivia (V).

*Lachesilla distanti*\* Garcia Aldrete, 2017d: 208 (assigned to *corona* species group). Mexico (IV).

*Lachesilla drucei*\* Garcia Aldrete, 2017d: 208 (assigned to *corona* species group). Mexico (IV).

*Lachesilla foreli*\* Garcia Aldrete, 2017d: 211 (assigned to *corona* species group). Mexico (IV).

*Lachesilla godmani*\* Garcia Aldrete, 2017d: 211 (assigned to *corona* species group). Mexico (IV).

*Lachesilla gorhami*\* Garcia Aldrete, 2017d: 212 (assigned to *corona* species group). Guatemala, Mexico (IV).

*Lachesilla horni*\* Garcia Aldrete, 2017d: 216 (assigned to *corona* species group). Guatemala (IV).

*Lachesilla jacobyi*\* Garcia Aldrete, 2017d: 216 (assigned to *corona* species group). Mexico (IV).

*Lachesilla pedicularia* (Linnaeus). Romania (I): Chiriliuc & Andriescu, 2016 (collected from dry hibernating stems by "Schmitz" photo selector). Korea (VIII): Soysouvanh *et al.*, 2017.

*Lachesilla quercus* (Kolbe). Bulgaria (I): Georgiev & Todorov, 2017.

*Lachesilla salvini*\* Garcia Aldrete, 2017d: 219 (assigned to *corona* species group). Guatemala (IV).

*Lachesilla sharpi*\* Garcia Aldrete, 2017d: 219 (assigned to *corona* species group). Guatemala (IV).

*Lachesilla walsinghami*\* Garcia Aldrete, 2017d: 222 (assigned to *corona* species group). Mexico, Guatemala (IV).

*Lachesilla waterhousi*\* Garcia Aldrete, 2017d: 222 (assigned to *corona* species group). Guatemala, Mexico (IV).

*Lachesilla willistoni*\* Garcia Aldrete, 2017d: 225 (assigned to *corona* species group). Costa Rica (IV).

*Prolachesilla* Mockford & Sullivan. Key to species (p. 441) and distribution (Fig. 26): Sandoval Arango *et al.*, 2017.

*Prolachesilla boliviiana*\* Sandoval Arango, Gonzalez Obando & Garcia Aldrete, 2017: 441. Bolivia (V).

*Prolachesilla casasolai*\* Sandoval Arango, Gonzalez Obando & Garcia Aldrete, 2017: 442. Mexico (V).

*Prolachesilla casasolaoides*\* Sandoval Arango, Gonzalez Obando & Garcia Aldrete, 2017: 446. Mexico (V).

*Prolachesilla oaxacana*\* Sandoval Arango, Gonzalez Obando & Garcia Aldrete, 2017: 446. Mexico (V).

#### Mesopsocidae

*Idatenopsocus orientalis* (Vishnyakova). Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Mesopsocus immunis* (Stephens). Bulgaria (I): Georgiev, 2017b.

#### Philotarsidae

*Aaroniella badonneli* (Danks). Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

#### Trichopsocidae

*Trichopsocus clarus* (Banks). Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Trichopsocus dalii* (McLachlan). Bulgaria (I): Georgiev, 2017d.

#### Pseudocaeciliidae

*Calopsocus furcatus* (New). Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Heterocaecilius solocipennis* (Enderlein). Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

*Pseudocaecilius maculosus* Enderlein. Korea (VIII): Soysouvanh *et al.*, 2017.

*Trimerocaecilius popovi* Meinander. Bulgaria (I): Georgiev, 2017d.

#### Ptiloneuridae

Ptiloneuridae gen. spec. Mexico (IV): Reddell, 1982 (in cave).

*Euplocania* Enderlein. Checklist of Colombian species with distribution, definition of species groups, key to Colombian species: Gonzalez-Obando *et al.*, 2017b.

*Euplocania badonneli* New & Thornton. Colombia (V): Gonzalez-Obando *et al.*, 2017b.

*Euplocania caquetaensis*\* Gonzalez-Obando, Garcia Aldrete & Carrejo, 2017b: 85. Colombia (V).

*Euplocania gaitanae*\* Gonzalez-Obando, Garcia Aldrete & Carrejo, 2017b: 89. Colombia (V).

*Euplocania laelsa*\* Gonzalez-Obando, Garcia Aldrete & Carrejo, 2017b: 92. Colombia (V).

*Euplocania nasa*\* Gonzalez-Obando, Garcia Aldrete & Carrejo, 2017b: 95. Colombia (V).

*Euplocania yalcona*\* Gonzalez-Obando, Garcia Aldrete & Carrejo, 2017b: 97. Colombia (V).

*Loneura* Navas. Key to species: Mendivil Nieto *et al.*, 2017.

*Loneura andina* Garcia Aldrete, Mendivil Nieto & Gonzalez Obando, 2012. Description of female: Mendivil Nieto *et al.*, 2017: 518. Colombia (V).

*Loneura dapaensis*\* Mendivil Nieto, Garcia Aldrete & Gonzalez Obando, 2017: 498. Colombia (V).

*Loneura deibyi*\* Mendivil Nieto, Garcia Aldrete & Gonzalez Obando, 2017: 501. Colombia (V).

*Loneura eberhardi*\* Mendivil Nieto, Garcia Aldrete & Gonzalez Obando, 2017: 504. Colombia (V).

*Loneura farallonensis*\* Mendivil Nieto, Garcia Aldrete & Gonzalez Obando, 2017: 507. Colombia (V).

*Loneura gorgonaensis* Garcia Aldrete, Gonzalez & Sarria, 2011. Colombia (V): Mendivil Nieto *et al.*, 2017.

*Loneura monserratae*\* Mendivil Nieto, Garcia Aldrete & Gonzalez Obando, 2017: 510. Colombia (V).

*Loneura monticola* Garcia Aldrete, Gonzalez & Sarria, 2011. Colombia (V): Mendivil Nieto *et al.*, 2017.

*Loneura quimbaya*\* Mendivil Nieto, Garcia Aldrete & Gonzalez Obando, 2017: 513. Colombia (V).

*Loneura univalle*\* Mendivil Nieto, Garcia Aldrete & Gonzalez Obando, 2017: 515. Colombia (V).

*Triplocaenia* Roesler. Checklist of species with distribution, definition of species groups, key to Colombian species: Gonzalez-Obando *et al.*, 2017a.

*Triplocaenia amacayacuensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 10. Colombia (V).

*Triplocaenia anchicayaensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 10. Colombia (V).

*Triplocaenia andaqui*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 14. Colombia (V).

*Triplocaenia arhuaca*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 17. Colombia (V).

- Triplocanaria asisensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 20. Colombia (V).  
*Triplocanaria awa*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 22. Colombia (V).  
*Triplocanaria bicornuta*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 25. Colombia (V).  
*Triplocanaria bubuae*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 28. Colombia (V).  
*Triplocanaria calima*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 28. Colombia (V).  
*Triplocanaria camentosa*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 32. Colombia (V).  
*Triplocanaria cantatis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 34. Colombia (V).  
*Triplocanaria caribe*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 37. Colombia (V).  
*Triplocanaria chocoensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 38. Colombia (V).  
*Triplocanaria dimitrii*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 40. Colombia (V).  
*Triplocanaria embera*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 43. Colombia (V).  
*Triplocanaria erwini* Silva Neto, Rafael & Garcia Aldrete, 2015. Description of female: Gonzalez-Obando *et al.*, 2017a: 89. Colombia (V).  
*Triplocanaria felidiaensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 45. Colombia (V).  
*Triplocanaria furcata* New. Description of female: Gonzalez-Obando *et al.*, 2017a: 103. Colombia (V).  
*Triplocanaria furcatoides*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 89. Colombia (V).  
*Triplocanaria garciamarquezi*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 48. Colombia (V).  
*Triplocanaria guane*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 51. Colombia (V).  
*Triplocanaria huiulaensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 93. Colombia (V).  
*Triplocanaria huitota*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 51. Colombia (V).  
*Triplocanaria humboldtiana*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 55. Colombia (V).  
*Triplocanaria inga*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 57. Colombia (V).  
*Triplocanaria kichwa*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 59. Colombia (V).  
*Triplocanaria korebaju*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 59. Colombia (V).  
*Triplocanaria lamasi* Silva Neto, Rafael & Garcia Aldrete, 2014. Description of female: Gonzalez-Obando *et al.*, 2017a: 103. Colombia (V).  
*Triplocanaria lamasoides* Silva Neto, Rafael & Garcia Aldrete, 2015. Colombia (V): Gonzalez-Obando *et al.*, 2017a.  
*Triplocanaria lamensuraensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 95. Colombia (V).  
*Triplocanaria lapayaensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 62. Colombia (V).  
*Triplocanaria leguizamoensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 98. Colombia (V).  
*Triplocanaria lithophila*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 62. Colombia (V).  
*Triplocanaria mariacarmenae*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 66. Colombia (V).  
*Triplocanaria matildae*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 68. Colombia (V).  
*Triplocanaria mocoaensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 70. Colombia (V).  
*Triplocanaria motilonia*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 73. Colombia (V).  
*Triplocanaria otunquimbayaensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 98. Colombia (V).  
*Triplocanaria panchei*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 73. Colombia (V).  
*Triplocanaria pericosensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 76. Colombia (V).  
*Triplocanaria robustoides*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 78. Colombia (V).  
*Triplocanaria rugosa*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 78. Colombia (V).  
*Triplocanaria sarmaca*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 82. Colombia (V).  
*Triplocanaria sarriae*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 101. Colombia (V).  
*Triplocanaria sevillaensis*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 84. Colombia (V).  
*Triplocanaria yanacona*\* Gonzalez-Obando, Carrejo-Gironza & Garcia Aldrete, 2017a: 84. Colombia (V).

## Epipsocidae

- Bertkauia lucifuga* (Rambur). Bulgaria (I): Georgiev, 2017d.  
*Cuscopsocus*\*\* Garcia Aldrete, 2017a: 121. Gender: M. Type species: *Cuscopsocus spinosus* Garcia Aldrete.  
*Cuscopsocus spinosus*\* Garcia Aldrete, 2017a: 122. Peru (V).  
*Goja* spec. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).  
*Ianthorntonia dorbignyi*\* Garcia Aldrete, 2017e: 124. Bolivia (V).

***Ianthorntonia marshalli*** Garcia Aldrete, 2004g. Description of female: Garcia Aldrete, 2017e: 125. Bolivia (V).

#### **Hemipsocidae**

***Hemipsocus chloroticus*** (Hagen). Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

#### **Psilosocidae**

***Psilosocus malayanus*** New & Lee. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure; species name misspelled *malayensis*).

#### **Psocidae**

***Amphigerontia anchorae*** Li Fasheng. Korea (VIII): Soysouvanh *et al.*, 2017.

***Amphigerontia contaminata*** (Stephens). Bulgaria (I): Georgiev, 2017d. Korea (VIII): Soysouvanh *et al.*, 2017.

***Amphigerontia montivaga*** (Chapman). Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

***Blaste conspurcata*** (Rambur). Bulgaria (I): Georgiev, 2017d.

***Dictyopsocus pennicornis*** (Burmeister). Brazil (V): Oliveira *et al.*, 2017 (figs).

***Loensia fasciata*** (Fabricius). Korea (VIII): Soysouvanh *et al.*, 2017.

***Longivalvus hyalospilus*** Li Fasheng, 2002a. Genet.: Liu Xiaochen *et al.*, 2017 (mitochondrial genome). Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

***Metylophorus*** spec. Morph.: Ogawa & Yoshizawa, 2017b (in-flight wing-coupling structure).

***Metylophorus nebulosus*** (Stephens). Bulgaria (I): Georgiev, 2017d. Korea (VIII): Soysouvanh *et al.*, 2017.

***Neoblaste papillosa*** Thornton. Korea (VIII): Soysouvanh *et al.*, 2017.

***Neopsocus rhenanus*** Kolbe. Bulgaria (I): Georgiev & Todorov, 2017.

***Psococerastis albimaculata*** Li Fasheng & Yang Chikun. Genet.: Liu Xiaochen *et al.*, 2017 (mitochondrial genome). Phylog.: Yoshizawa *et al.*, 2017a (mitochondrial genome).

***Psococerastis gibbosa*** (Sulzer). Bulgaria (I): Georgiev, 2017d.

***Psococerastis tokyoensis*** (Enderlein). Korea (VIII): Soysouvanh *et al.*, 2017.

***Psocus bipunctatus*** (Linnaeus). Bulgaria (I): Georgiev, 2017d; Georgiev & Todorov, 2017. Korea (VIII): Soysouvanh *et al.*, 2017.

***Sigmatoneura kolbei*** (Enderlein). Korea (VIII): Soysouvanh *et al.*, 2017.

***Trichadenopsocus alternatus*** Li Fasheng, 2002a. Korea (VIII): Soysouvanh *et al.*, 2017.

***Trichadenotecnum*** Enderlein. Phylog., Biogeography: Yoshizawa *et al.*, 2017b.

***Trichadenotecnum innuptum*** Betz. Bulgaria (I): Georgiev, 2017d.

***Trichadenotecnum majus*** (Kolbe). Bulgaria (I): Georgiev, 2017d.

## **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 16 of the "Additions"; see also **Synthesis of Parts 1-10** in Lienhard (2016d).

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.

For a **subject bibliography** see below and Lienhard (2016c).

Alexander, K. N. A. 2017. *Chilenocaecilius ornatipennis* (Blanchard) (Psocodea: 'Psocoptera', Paracaeciliidae) in Scotland and England. *Entomologist's Monthly Magazine* 153(1): 44.

Angarten, N. B. de O., Ramos, A. M., Anastacio, E. M. F. & Tagliari, P. D., 2017. Caracterização da fauna de invertebrados em cavidades naturais no âmbito do licenciamento ambiental da ferrovia de integração oeste-leste. *Anais do 34º Congresso Brasileiro de Espeleologia, Ouro Preto MG, 13-18 de junho de 2017, Sociedade Brasileira de Espeleologia*, pp. 9-21.

Arthur, F. H., Hartzer, K. L., Throne, J. E. & Flinn, P. W. 2017. Freezing for control of stored-product psocids. *Journal of Stored Products Research* 72: 166-172. (**Only abstract seen**).

- Azar, D., Huang Diying, El-Hajj, L., Cai Chenyang & Nel, A. 2017. New Prionoglarididae from Burmese amber (Psocodea: Trogiomorpha: Prionoglaridetae). *Cretaceous Research* 75: 146-156, 15 figs.
- Beron, P. 2016. Faune cavernicole de la Grèce. *Musée National d'Histoire Naturelle, Académie Bulgare des Sciences, East-West, Sofia*, 229 pp. (Psoc.: p. 80).
- Beukeboom, L. W. 2017. An extraordinary sex determination mechanism in a book louse. *Genetics* 206(2): 751-753.
- Beutel, R. G., Yavorskaya, M. I., Mashimo, Y., Fukui, M. & Meusemann, K. 2017. The phylogeny of Hexapoda (Arthropoda) and the evolution of megadiversity. *Proceedings of the Athropodan Embryological Society of Japan* 51: 1-15.
- Chiriliuc, L. A. & Andriescu, I. D. 2016. Species of Psocoptera (Insecta, Psocoptera) associated with the plant *Tanacetum vulgare* (L.) (Asterales, Asteraceae) in the North-East of Romania. *Analele Stiintifice ale Universitatii "Alexandru Ioan Cuza" din Iasi Sectiunea Biologie Animala* 62: 13-21, 5 figs.
- Collins, C. T. & Hespenheide, H. A. 2016. Diet of the Pygmy Palm-Swift (*Tachornis furcata*). *Ornitologia Neotropical* 27: 63-66. **(Only abstract seen)**.
- Erwin, T. L. & Henry, S. C. 2017. *Hyboptera* Chadoir, 1872 of the Cryptobatida group of subtribe Agrina: A taxonomic revision with notes on their ways of life (Insecta, Coleoptera, Carabidae, Lebiini). *ZooKeys* 714: 61-127. **(Only abstract seen)**.
- Garcia Aldrete, A. N. 2016. A new *Lachesilla* species, in species group *Texcocana*, endemic to the Sierra Juarez, Oaxaca, Mexico (Psocodea: 'Psocoptera': Psocomorpha: Lachesillidae). *Dugesiana* 23(2): 117-119, 6 figs.
- Garcia Aldrete, A. N. 2017a. A new monotypic genus of Epipsocidae (Psocodea: 'Psocoptera': Psocomorpha) from Cusco, Peru. *Dugesiana* 24(2): 121-123, 6 figs.
- Garcia Aldrete, A. N. 2017b. New species of *Lachesilla* (Psocodea: Psocomorpha: Lachesillidae), in species group *Corona*, from Guerrero and Chiapas, Mexico. *Dugesiana* 24(2): 171-176, 14 figs.
- Garcia Aldrete, A. N. 2017c. A new *Lachesilla* from the Bolivian Chiquitania, in species group *Riegeli* (Psocodea: Psocomorpha: Lachesillidae). *Acta Zoologica Mexicana* (Nueva Serie) 33(2): 355-358, 4 figs.
- Garcia Aldrete, A. N. 2017d. New species of *Lachesilla* (Psocodea: Psocomorpha: Lachesillidae), in species group *corona*, from southern Mexico and Central America. *Zootaxa* 4347(2): 201-227, 71 figs.
- Garcia Aldrete, A. N. 2017e. A new species of Ianthorntonia Garcia Aldrete, from Bolivia, and description of the female Ianthorntonia marshalli Garcia Aldrete (Psocodea: Psocomorpha: Epipsocetae: Epipsocidae). *EntomoBrasilis* 10(2): 123-126, 11 figs.
- Georgiev, D. G. 2017a. *Liposcelis meridionalis* (Rosen, 1911) (Psocoptera: Liposcelididae) new to the Bulgarian fauna. *Ecologia Balkanica* 9(1): 103-104, 2 figs.
- Georgiev, D. 2017b. New barkfly records from Bulgaria (Insecta: Psocoptera). *Klapalekiana* 53: 7-9, 4 figs.
- Georgiev, D. 2017c. Psocoptera records from the island of Samothraki (N-Aegean, Greece). *Parnassiana Archives* 5: 51-55, 3 figs.
- Georgiev, D. 2017d. Little known and newly recorded species of Psocoptera in Bulgaria. *Ecologica Montenegrina* 11: 74-79, 2 figs.
- Georgiev, D. G. 2017e. Two species of the genus *Liposcelis* Motschulsky, 1852 new to the fauna of Bulgaria found in the building of the Natural History Museum Plovdiv (Insecta: Psocoptera). *Bulletin of the Natural History Museum Plovdiv* 2: 2 pp. 1 fig. (online 21 October 2017).
- Georgiev, D. G. & Todorov, O. B. 2017. Reports of *Caecilius fuscopterus* (Latreille, 1799) and *Lachesilla quercus* (Kolbe, 1880) in Bulgaria with some additional barkfly records (Insecta: Psocoptera). *Bulletin of the Natural History Museum Plovdiv* 2: 2 pp. 1 fig. (online 21 October 2017).
- Gonzalez-Obando, R., Carrejo-Gironza, N. & Garcia Aldrete, A. N. 2017a. New species of Colombian *Triplocania* Roesler (Psocodea: 'Psocoptera': Ptiloneuridae). *Zootaxa* 4336(1): 1-113, 374 figs.
- Gonzalez-Obando, R., Garcia Aldrete, A. N. & Carrejo, N. S. 2017b. Five new species of the genus *Euplocania* Enderlein (Psocodea, 'Psocoptera', Psocomorpha, Ptiloneuridae) from Colombia. *ZooKeys* 711: 81-101, 48 figs.
- Guo Shan-Shan, Zhang Wen-Juan, You Chun-Xue, Liang Jun-Yu, Yang Kai, Geng Zhu-Feng, Du Shu-Shan & Wang Cheng-Fang 2017a. Chemical composition of essential oil extracted from *Laggera pterodonta* and its bioactivities against two stored product insects. *Journal of Food Processing and Preservation* 41(2): article number e12941. **(Only abstract seen)**.
- Guo Shan-Shan, Zhang Wen-Juan, Yang Kai, Liang Jun-Yu, You Chun-Xue, Wang Cheng-Fang, Li Yin-Ping, Geng Zhu-Feng, Deng Zhi-Wei & Du Shu-Shan 2017b. Repellence of the main components from the essential oil of *Glycosmis lucida* Wall. ex Huang against two stored product insects. *Natural Product Research* 31(10): 1201-1204. **(Only abstract seen)**.

- Healy, S. P., Brown, L. D., Hagstrom, M. R., Foil, L. D. & Macaluso, K. R. 2017. Effect of *Rickettsia felis* strain variation on infection, transmission, and fitness in the cat flea (Siphonaptera: Pulicidae). *Journal of Medical Entomology* 54(4): 1037-1043. (**Only abstract seen**).
- Hodson, C. N., Hamilton, P. T., Dilworth, D., Nelson, C. J., Curtis, C. I. & Perlman, S. J. 2017. Paternal genome elimination in *Liposcelis* booklice (Insecta: Psocodea). *Genetics* 206(2): 1091-1100. (**Only abstract seen**).
- Ishibashi, O., Sakuragi, K., Fukutomi, Y., Kawakami, Y., Kamata, Y., Sakurai, M., Nakayama, S., Uchiyama, H., Kobayashi, H., Kojima, H. & Inui, T. 2017. Lip b 1 is a novel allergenic protein isolated from the booklouse, *Liposcelis bostrychophila*. *Allergy* 72(6): 918-926. (**Only abstract seen**).
- Jing Tian-Xing, Wu Yu-Xian, Li Ting, Wei Dan-Dan, Smagghe, G. & Wang Jin-Jun 2017. Identification and expression profiles of fifteen delta-class glutathione S-transferase genes from a stored-product pest, *Liposcelis entomophila* (Enderlein) (Psocoptera: Liposcelididae). *Comparative Biochemistry and Physiology B-Biochemistry & Molecular Biology* 206: 35-41. (**Only abstract seen**).
- Kahrarian, M. 2017. New records of Psocoptera (Psocodea: Insecta) in Iran. *Natura Somogyiensis* 30: 35-38.
- Kamimura, Y. & Yoshizawa, K. 2017. Sex role reversal (4 pp., 1 fig.). In: Vonk, J. & Shackelford, T. K. (eds). Encyclopedia of animal cognition and behavior. Springer International Publishing. Online publication, September 2017, [https://doi.org/10.1007/978-3-319-47829-6\\_2012-1](https://doi.org/10.1007/978-3-319-47829-6_2012-1)
- Khandehroo, F., Moravvej, G., Sadeghi, H. & Fekrat, L. 2015. First record of *Lepinotus reticulatus* and *Ectopsocus vishnyakovae* (Insecta: Psocoptera) from Iran. *Journal of Entomological Society of Iran* 35(1): 73-74.
- Li Heng Yu, Chen Xu Bo, Liu Qi Zhi & Liu Zhi Long 2017. Chemical composition and insecticidal properties of the essential oil of *Bidens frondosa* L. (Asteraceae) against looklice (*Liposcelis bostrychophila*). *Tropical Journal of Pharmaceutical Research* 16(1): 171-177. (**Only abstract seen**).
- Liang Feiyang, Li Fasheng & Liu Xingyue 2017. The bark louse family Stenopsocidae (Psocodea: Psocomorpha) newly recorded from Laos, with description of three new species. *Zootaxa* 4243(3): 589-599, 8 figs.
- Lienhard, C. 2017. Additions and Corrections (Part 16) to Lienhard & Smithers, 2002: "Psocoptera (Insecta) - World Catalogue and Bibliography". *Psocid News* 19: 1-18.
- Lienhard, C., Telfer, M. G. & Anderson, R. 2017. *Chilenocaecilius ornatipennis* (Blanchard, 1851) (Psocodea: 'Psocoptera', Paracaeciliidae) in Ireland, first Palaearctic record of this South American genus and species. *Entomologist's Monthly Magazine* 153: 25-30, 6 figs.
- Liu Li-Jun, Pang Ao-Han, Feng Shi-Qian, Cui Bing.Yi, Zhao Zi-Hua, Kucerova, Z., Stejskal, V., Opit, G., Aulicky, R., Cao Yang, Li Fu-Jun, Wu Yi, Zahng Tao & Li Zhi-Hong 2017. Molecular identification of ten species of stored-product psocids through microarray method based on ITS2 rDNA. *Scientific Reports* 7: article number 16694.
- Liu Xiaochen, Li Hu, Cai Yao, Song Fan, Wilson, J.-J. & Cai Wanzhi 2017. Conserved gene arrangement in the mitochondrial genomes of barklouse families Stenopsocidae and Psocidae. *Frontiers of Agricultural Science and Engineering* 4(3): 358-365, 5 figs.
- Lock, K. 2017a. *Kolbia quisquiliarum* Bertkau, 1882, *Valenzuela corsicus* (Kolbe, 1882) and *Valenzuela gynapterus* (Tetens, 1891) new to Belgium (Psocoptera: Amphipsocidae, Caeciliusidae). *Bulletin de la Société royale belge d'Entomologie* 153: 43-45, 3 figs.
- Lock, K. 2017b. *Ectopsocus petersi* Smithers, 1978 new to Spain (Psocoptera: Ectopsocidae). *Bulletin de la Société royale belge d'Entomologie* 153: 136-138, 3 figs.
- Lock, K. & Van Butsel, J. 2017. *Valenzuela corsicus* (Kolbe, 1882) new to the Grand Duchy of Luxembourg (Psocoptera: Caeciliusidae). *Entomologie faunistique Faunistic Entomology* 70: 121-122, 1 fig.
- Ma, W.-J. & Schwander, T. 2017. Patterns and mechanisms in instances of endosymbiont-induced parthenogenesis. *Journal of Evolutionary Biology* 30(5): 868-888.
- Makarova, A. A. & Polilov, A. A. 2017. Peculiarities of the structure and fine ultrastructure of the insect brain as related to miniaturization. 3. Barklice (Psocoptera, Liposcelididae). *Zoologichesky Zhurnal* 96(3): 275-288. (**Only abstract seen**).
- Maute, K., French, K., Story, P., Bull, C. M. & Hose, G. C. 2017. Short and long-term impacts of ultra-low-volume pesticide and biopesticide applications for locust control on non-target arid zone arthropods. *Agriculture Ecosystems & Environment* 240: 233-243. (**Only abstract seen**).
- Mendivil Nieto, J. A., Garcia Aldrete, A. N. & Gonzalez Obando, R. 2017. Seven new species of *Loneura* Navas (Insecta: Psocodea: 'Psocoptera': Ptiloneuridae) from Valle del Cauca, Colombia. *Zootaxa* 4227(4): 495-523, 88 figs.
- Mucedda, M., Grafitti, G. & Marcia, P. 2013. Fauna cavernicola e pipistrelli nelle grotte della Provincia di Sassari. *Grafiche Ghiani, Monastir*, 48 pp. (Psoc.: p. 17).

- Noordijk, J., Heijerman, T. & Brooks, M. 2017. De kosmopolitische stofluis *Psoquilla marginepunctata* voor het eerst gevonden in Nederland (Psocodea: Psoquillidae). *Nederlandse Faunistische Mededelingen* 49: 33-39, 9 figs.
- Ogawa, N. & Yoshizawa, K. 2017a. Morphological dissection of behavior: thoracic musculature clarifies independent development of jumping mechanisms between sister groups, planthoppers and leafhoppers (Insecta: Hemiptera: Auchenorrhyncha). *Organisms Diversity and Evolution* 17(3): 521-530, 6 figs.
- Ogawa, N. & Yoshizawa, K. 2017b. Origin and transformation of the in-flight wing-coupling structure in Psocodea (Insecta: Paraneoptera). *Journal of Morphology*, 14 pp. (online 11 December 2017).
- Oliveira, J. A., Silva-Neto, A. M., Mello Mendes, D. M. & Garcia Aldrete, A. N. 2017. New records of *Dictyopsocus pennicornis* (Burmeister) (Psocodea 'Psocoptera': Psocidae: Psocinae). *EntomoBrasilis* 10(2): 127-130, 26 figs.
- Polilov, A. A. 2016. Anatomy of the adult and first instar nymph of the book louse, *Liposcelis bostrychophila* (Psocoptera, Liposcelididae). *Zoologichesky Zhurnal* 95(11): 1305-1321. (**Only abstract seen**).
- Prokop, J., Pecharova, M., Garrouste, R., Beattie, R., Chintauan-Marquier, I. C. & Nel, A. 2017. Redefining the extinct orders Miomoptera and Hypoperlida as stem acercarian insects. *BMC Evolutionary Biology* 17: 205: 20 pp., 6 figs.
- Rasnitsyn, A. P., Bashkuev, A. S., Kopylov, D. S., Lukashevich, E. D., Ponomarenko, A. G., Popov, Yu. A., Rasnitsyn, D. A., Ryzhkova, O. V., Sidorchuk, E. A., Sukatsheva, I. D. & Vorontsov, D. D. 2016. Sequence and scale of changes in the terrestrial biota during the Cretaceous (based on materials from fossil resins). *Cretaceous Research* 61: 234-255, 11 figs.
- Reddell, J. R. 1982. A checklist of the cave fauna of Mexico. VII. Northern Mexico. *Association for Mexican Cave Studies Bulletin* 8: 249-283. [= *Texas Memorial Museum Bulletin* 28: 249-283]. (Psoc.: 272).
- Robinson, J. & Allan, M. 2017. *Dorypteryx longipennis* Smithers, 1991, (Psocoptera: Psyllipsocidae) new to Scotland. *Entomologist's Monthly Magazine* 153: 80.
- Ross, A. J. 2017. Burmese (Myanmar) amber taxa, on-line checklist v.2017.3
- Rueckert, S. & Devetak, D. 2017. Gregarines (Apicomplexa, Gregarinina) in psocids (Insecta, Psocoptera) including a new species description and their potential use as pest control agents. *European Journal of Protistology* 60: 60-67, 2 figs.
- Rydell, J., Bogdanowicz, W., Boonman, A., Pettersson, S., Suchecka, E. & Pomorski, J. J. 2016. Bats may eat diurnal flies that rest on wind turbines. *Mammalian Biology* 81(3): 331-339. (**Only abstract seen**).
- Sandoval Arango, S., Gonzalez Obando, R. & Garcia Aldrete, A. N. 2017. New species of *Prolachesilla Mockford & Sullivan* (Psocodea: 'Psocoptera': Lachesillidae: Graphocaeciliini) from Bolivia and Mexico. *Zootaxa* 4244(3): 440-450, 26 figs.
- Silva-Neto, A. M., Garcia Aldrete, A. N. & Rafael, J. A. 2016e. A storage method for 'Psocoptera' (Insecta: Psocodea) in "CD Box". *EntomoBrasilis* 9(3): 220-223, 17 figs.
- Soysouvanh, P., Cho, G. & Hong, K.-J. 2017. Taxonomic review of the psocids (Psocoptera) in Korea. *Korean Journal of Applied Entomology* 56(1): 69-76, 35 figs.
- Sroka, P. & Nel, A. 2017. New species of Compsocidae (Insecta, Psocodea) from Cretaceous Burmese amber. *Zootaxa* 4320(3): 597-600, 10 figs.
- Sun En-Tao, Wang Yi-Nan, Wang Kang, Xu Shu-Jun, Nan Dan-Yang, Chen Wen-Jie & Zhang Ying-Ying 2017. Assessment of genetic diversity and differentiation of *Liposcelis bostrychophila* (Psocoptera: Liposcelidae) in China using inter-simple sequence repeat (ISSR) fingerprinting. *Applied Entomology and Zoology* 52(2): 241-246. (**Only abstract seen**).
- Triapitsyn, S. V. 2017. Revision of *Alaptus* (Hymenoptera: Mymaridae) in the Holarctic region, with taxonomic notes on some extrazonal species. *Zootaxa* 4279(1): 1-92.
- Xu Si-Yuan, Yi Tian-Ci & Jin Dao-Chao 2017. A new species of larval *Marantelophus* (Acari: Prostigmata: Erythraeidae) parasitic on insects from China. *Systematic and Applied Acarology* 22(7): 1012-1021. (**Only abstract seen**).
- Yoshizawa, K. (ed.) 2017. Psocid News, The Psocidologists' Newsletter. No. 19 (February 28, 2017). *Systematic Entomology, Faculty of Agriculture, Hokkaido University, Sapporo*, 19 pp.
- Yoshizawa, K., Johnson, K. P., Sweet, A. D., Yao, I., Ferreira, R. L. & Cameron, S. L. 2017a. Mitochondrial phylogenomics and genome rearrangements in the barklice (Insecta: Psocodea). *Molecular Phylogenetics and Evolution* 119 (2018): 118-127, 4 figs (published online 24 October 2017).
- Yoshizawa, K., Johnson, K. P., Yao, I., Casasola Gonzalez, J. A., Bess, E. & Garcia Aldrete, A. N. 2017b. Multiple trans-Beringia dispersals of the barklouse genus *Trichadenotecnum* (Insecta: Psocodea: Psocidae). *Biological Journal of the Linnean Society* 121: 501-513, 5 figs.

Zwart, H. 2017. "Extimate" technologies and techno-cultural discontent: A Lacanian analysis of pervasive gadgets. *Techné: Research in Philosophy and Technology* 21(1): 24-55.

## 5. Corrections to Lienhard & Smithers, 2002

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

- 540: Gadeau de Kerville, H. 1932. Mélanges entomologiques. 5e Mémoire. II. Catalogue embryonnaire des Nevroptères, Mégaloptères, Rhaphidioptères, Mecoptères, Psocoptères, Plécoptères, Ephéméroptères et Trichoptères de la Normandie. *Bulletin de la Société des Amis des Sciences naturelles de Rouen* 66-67: 349-401. (Psoc.: pp. 367-374). [Corrections underlined]
- 564: The reference Karny, H. H. 1921 has to be replaced by the following: Karny, H. 1921. Zur Systematik der orthopteroiden Insekten. *Treubia* 1: 163-269. (Corrodentia: 207-210).

## 6. Subject Bibliography for Part 17 of the Additions

**NOTE:** The Subject Bibliography for Lienhard & Smithers (2002) and for Parts 1-15 of the Additions is given by Lienhard (2016c), that one for Part 16 of the Additions by Lienhard (2017).

### Behaviour

2017 Kamimura & Yoshizawa, 2017 (Add. 17) (*Neotrogla*, sex role reversal)

2017 Zwart, 2017 (Add. 17) (p. 47: scenario of 'phallic woman' phantasm is something biologically real in *Neotrogla*)

### Biogeography

2017 Oliveira *et al.*, 2017 (Add. 17) (*Dictyopsocus pennicornis*)

2017 Yoshizawa *et al.*, 2017b (Add. 17) (*Trichadenotecnum*, trans-Beringia dispersals)

### Biology, life history, physiology, genetics

2017 Beukeboom, 2017 (Add. 17) (commentary to Hodson *et al.*, 2017)

2017 Hodson *et al.*, 2017 (Add. 17) (genetics, sex determination, *Liposcelis*)

2017 Liu Xiaochen *et al.*, 2017 (Add. 17) (mitochondrial genome, *Liposcelis* etc.)

2017 Ma & Schwander, 2017 (Add. 17) (parthenogenesis believed to be endosymbiont-induced in *Liposcelis* and *Cerobasis*)

2017 Sun En-Tao *et al.*, 2017 (Add. 17) (*Liposcelis*, genetic diversity in China)

### Ecology

1982 Reddell, 1982 (Add. 17) (in cave, Mexico)

2013 Mucedda *et al.*, 2013 (Add. 17) (*Psyllipsocus ramburii* in caves, Italia)

2016 Beron, 2016 (Add. 17) (Greece, in caves)

2016 Chiriliuc & Andriescu, 2016 (Add. 17) (psocids collected from dry hibernating stems by "Schmitz" photo selector)

2017 Angarten *et al.*, 2017 (Add. 17) (*Neotrogla curvata* in Brasilian cave)

2017 Erwin & Henry, 2017 (Add. 17) (Carabid beetles under webbing of psocids)

2017 Maute *et al.*, 2017 (Add. 17) (locust control, psocids as non-target insects)

### General treatises, keys, bibliographies

2017 Lienhard, 2017 (Add. 17) (additions to the World Catalogue and Bibliography, Part 16)

### Morphology, anatomy

2016 Polilov, 2016 (Add. 17) (*Liposcelis*, adult and first instar nymph)

2017 Makarova & Polilov, 2017 (Add. 17) (*Liposcelis*, brain structure, also in nymphs)

2017 Ogawa & Yoshizawa, 2017a (Add. 17) (*Stenopscocus*, thoracic musculature)

2017 Ogawa & Yoshizawa, 2017b (Add. 17) (in-flight wing-coupling structure)

### Palaeontology

2016 Rasnitsyn *et al.*, 2016 (Add. 17) (Cretaceous amber, several families)

2017 Azar *et al.*, 2017 (Add. 17) (Burmese amber, Prionoglarididae)

- 2017 Prokop *et al.*, 2017 (Add. 17) (superorder Clareocercaria = Acercaria s.l.)  
2017 Ross, 2017 (Add. 17) (checklist of species from Burmese amber)  
2017 Sroka & Nel, 2017 (Add. 17) (Cretaceous Burmese amber, *Burmacompsocus*)

### Pests

- 2017 Arthur *et al.*, 2017 (Add. 17) (*Liposcelis*, control by freezing)  
2017 Guo Shan-Shan *et al.*, 2017a, 2017b (Add. 17) (*Liposcelis*, control)  
2017 Ishibashi *et al.*, 2017 (Add. 17) (*Liposcelis*, respiratory allergy)  
2017 Jing Tian-Xing *et al.*, 2017 (Add. 17) (*Liposcelis*, sensitivity to insecticides)  
2017 Li Heng Yu *et al.*, 2017 (Add. 17) (*Liposcelis*, control)  
2017 Liu Li-Jun *et al.*, 2017 (Add. 17) (*Liposcelis*, molecular identification)  
2017 Robinson & Allan, 2017 (Add. 17) (*Dorypteryx* spp. in Museum)  
2017 Rueckert & Devetak, 2017 (Add. 17) (Gregarine species *Enterocystis dorypterygis* in *Dorypteryx domestica*) (potential biological control)  
2017 Sun En-Tao *et al.*, 2017 (Add. 17) (*Liposcelis*, genetic diversity in China)

### Phylogeny, evolution, classification

- 2017 Beutel *et al.*, 2017 (Add. 17) (Psocodea)  
2017 Ogawa & Yoshizawa, 2017b (Add. 17) (in-flight wing-coupling structure in Psocodea)  
2017 Prokop *et al.*, 2017 (Add. 17) (superorder Clareocercaria = Acercaria s.l.)  
2017 Yoshizawa *et al.*, 2017a (Add. 17) (mitochondrial phylogenomics)  
2017 Yoshizawa *et al.*, 2017b (Add. 17) (*Trichadenotecnum*)

### Predators, parasites, parasitoids, symbionts

- 2016 Collins & Hespenheide, 2016 (Add. 17) (bird as predator, Venezuela)  
2016 Rydell *et al.*, 2016 (Add. 17) (bats as predators, Sweden)  
2017 Healy *et al.*, 2017 (Add. 17) (*Rickettsia felis* as a symbiont, *Liposcelis*)  
2017 Ma & Schwander, 2017 (Add. 17) (parthenogenesis believed to be endosymbiont-induced in *Liposcelis* and *Cerobasis*)  
2017 Rueckert & Devetak, 2017 (Add. 17) (Gregarine species *Enterocystis dorypterygis* in *Dorypteryx domestica*)  
2017 Triapitsyn, 2017 (Add. 17) (*Alaptus immaturus* in eggs of *Stenocaecilius analis*)  
2017 Xu Si-Yuan *et al.*, 2017 (Add. 17) (larval Erythraeidae mite parasitic on psocid)

### Techniques

- 2016 Chiriliuc & Andriescu, 2016 (Add. 17) ("Schmitz" photo selector)  
2016 Silva-Neto *et al.*, 2016e (Add. 17) (storage of slides and capsule with thorax in alcohol)  
2017 Liu Li-Jun *et al.*, 2017 (Add. 17) (molecular identification by microarray method)

## **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).

Psocid News (ISSN 1348-1770) is only distributed electronically and is available at:

- PsocoNet Homepage <<http://www.psocodea.org>>
- Hokkaido University Collection of Scholarly and Academic Papers (HUSCAP) <<http://hdl.handle.net/2115/35519>>
- National Diet Library Homepage <<http://www.ndl.go.jp/en/>>.

**Disclaimer.** "Psocid News" is not a published work within the meaning of ICZN.

**Next issue.** About Feb. 2019. Please let me have all contributions by Jan. 31 2019.

**Editorial address.** Psocid News is edited by Kazunori Yoshizawa at the Systematic Entomology, Faculty of Agriculture, Hokkaido University, Sapporo, 060-8589 JAPAN.

Telephone: +81-11-706-2424

Faxsimile: +81-11-706-4939

E-mail: [psocid@res.agr.hokudai.ac.jp](mailto:psocid@res.agr.hokudai.ac.jp)

Web page: <http://www.psocodea.org>