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Commentaries on synonyms within Palaearctic Erythraeidae (Acari: Actinotrichida: Parasitengona)

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Abstract: New subjective synonym of genus level, nine new subjective synonyms and new primary homonym of species level, and new combination within Palaearctic Erythraeidae were proposed.

Key words: Taxonomy, nomenclature, Erythraeoidea, new synonyms, new homonym, new combination.

INTRODUCTION

In the course of the extensive study on Palearctic Erythraeidae that was carried out by the author, certain taxonomical decisions on subjective synonymy had to be made. A number of decisions were based on the type material made available by scientific institutions. Other decisions had to rely on descriptions and/or illustrations from original works or redescriptions because the type specimens of certain taxa did not exist. The intention of the author was to straighten out the nomenclature and taxonomy within Erythraeidae and eliminate *nomina dubia* that were the result of inadequate original descriptions and/or the non-existence of type specimens. In the process of making taxonomic decisions, I always tried to protect the names given by the oldest authors for the purpose of preservation of nomenclatural stability. In reference to species of the genus *Erythraeus* represented by postlarval forms, all synonyms and one homonym are given and all are based on verifiable descriptions or museum material. Genus *Erythraeus* is a very special case of complicated nomenclatural situation which has never been resolved until now and therefore it used to be selectively or unreliably interpreted by certain authors (cf. Beron 2008, Mąkol & Wohltmann 2012).

In the part "Remarks on Taxonomy", the comments are given only to the decisions on new synonyms and homonyms. The exception is the expanded discussion on the complex nomenclatural situation of *Erythraeus nivalis* (Heer, 1845) (Gabryś 1990, 2016, Gabryś & Roland 2016).

TAXONOMY

Erythraeus adpendiculatus (Schrank, 1781)
Acarus adpendiculatus Schrank, 1781: 518
Erythraeus adpendiculatus: Oudemans 1937: 1962
Rhyncholophus rubescens Dugès, 1834: 33
Rhyncholophus electoralis C. L. Koch, 1837: f. 16, t. 7
Rhyncholophus electoralis: Canestrini 1885: 341
Erythraeus hibernans Oudemans, 1902: 36 (Gabryś & Roland 2016 as **syn. nov.**: 421)
Erythraeus glabrisetosus Willmann, 1953: 493 (Gabryś & Roland 2016 as **syn. nov.**: 421)

Erythraeus cinereus (Dugès, 1834)
Rhyncholophus cinereus Dugès, 1834: 31
Rhyncholophus cinereus: Canestrini 1885: 337
Erythraeus cinereus: Oudemans 1937: 1971
Rhyncholophus similis Canestrini, 1885: 338 (Gabryś & Roland 2016 as **syn. nov.**: 418)

Erythraeus nivalis (Heer, 1845)
Rhyncholophus nivalis Heer, 1845: 13
Erythraeus nivalis Schweizer, 1951: 123 **syn. et. hom. nov.**
Erythraeus nivalis: Schweizer & Bader 1963: 270
Rhyncholophus gracilipes Kramer, 1897: 77 **syn. nov.**
Rhyncholophus intermedius Trägårdh, 1902: 4
Erythraeus phalangioides [sic!] var. *gracilipes*: Trägårdh 1904: 59

Erythraeus opilionoides (C. L. Koch, 1837)
Rhyncholophus opilionoides C. L. Koch, 1837: f. 16, t. 3
Erythraeus opilionides [sic!]: Willmann 1949: 128, 1951b: 148
Rhyncholophus phalangioides [sic!]: Canestrini 1885: 339
Erythraeus germanicus Oudemans, 1903: 88 (Gabryś & Roland 2016 as **syn. nov.**: 422)
Erythraeus styriacus Turk, 1981: 208 (Gabryś & Roland 2016 as **syn. nov.**: 422)

Erythraeus phalangoides (De Geer, 1778)
Acarus phalangoides De Geer, 1778: 134
Erythraeus phalangioides [sic!]: Latreille 1806: 146
Rhyncholophus Hermann [sic!] Dugès, 1834: 30 (Gabryś & Roland 2016 as **syn. nov.**: 421)
Rhyncholophus Degeer [sic!] Dugès, 1834: 30
Rhyncholophus arenicola Andersén, 1863: 183 (Gabryś & Roland 2016 as **syn. nov.**: 421)

Erythraeus regalis (C. L. Koch, 1837)
Rhyncholophus regalis C. L. Koch, 1837: f. 16, t. 5
Erythraeus regalis: Trägårdh, 1904: 61
Rhyncholophus communis George, 1910: 427
Rhyncholophus niger George, 1912: 252

Erythraeus rupestris (Linnaeus, 1758)
Acarus rupestris Linnaeus, 1758: gen. 235, n. 25
Erythraeus rupestris: Brébisson 1827: 265
Erythraeus rupestris: Johnston 1848: 294
Rhyncholophus imperialis C. L. Koch, 1837: f. 16, t. 6
Erythraeus imperialis: Willmann 1949: 128, 1952: 168

Charletonia cardinalis (C. L. Koch, 1837)
Rhyncholophus cardinalis C. L. Koch, 1837: f. 16, t. 10
Rhyncholophus principalis C. L. Koch, 1837: f. 16, t. 8 **syn. nov.**

Charletonia geisleri (Krausse, 1924) **comb. nov.**
Monotrombidium Geisleri [sic!] Krausse, 1924: 1 **gen. syn. nov.**

Abrolophus artemisiae (Schrank, 1803)
Acarus artemisiae Schrank, 1803: 211
Balaustium lapidarium Willmann, 1953: 494 **syn. nov.**

Abrolophus miniatus (Hermann, 1804)
Trombidium miniatum Hermann, 1804: 28
Rhyncholophus macilentus C. L. Koch, 1837: f. 16, t. 20 **syn. nov.**

Abrolophus quisquiliarus (Hermann, 1804)
Trombidium quisquiliarum Hermann, 1804: 32
Rhyncholophus lentiginosus C. L. Koch, 1837: f. 16, t. 22 **syn. nov.**

Balaustium murorum (Hermann, 1804)
Trombidium murorum Hermann, 1804: 28
Rhyncholophus crocatus C. L. Koch, 1837: f. 16, t. 15 **syn. nov.**
Belaustium [sic!] *bulgariense* Oudemans, 1926: 122 (non Willmann 1951a, 1954) **syn. nov.**
Balaustium florale Grandjean, 1947: 327 **syn. nov.**

REMARKS ON TAXONOMY

The decision on conspecificity of *Erythraeus hibernans* described from Italy with *E. adpendiculatus* was based on the type specimen from A. C. Oudemans' collection, Nationaal Natuurhistorisch Museum, Leiden, The Netherlands (see Buitendijk 1945: 350) and the description and illustration (Oudemans 1904); *nota bene*, the specimen labelled as a "Nymph" appeared to be a male. The decision on conspecificity of *Erythraeus glabrisetosus* with *E. adpendiculatus* was based on the original description (Willmann 1953), referring especially to the structure of idiosomal setae, crista metopica and eyes.

"*Rhyncholophus similis*" was described from Sardinia by Canestrini (1885) who stressed its resemblance to "*Rh. cinereus*" that he redescribed in the same paper. The studies on European population of *Erythraeus cinereus* revealed that this species is distinctly sexually dimorphic. Individuals described as *E. similis* are females of *E. cinereus*. The observation made by Canestrini (1885) appeared very accurate (see Gabryś & Roland 2016).

Erythraeus nivalis was described originally from Switzerland (as "Schneemilbe"!) within the genus *Rhyncholophus* Dugès, 1834 (Heer 1845). Oudemans (1937) placed the species within *Erythraeus* Latreille, 1806 basing on the original description. Trägårdh (1904) illustrated and interpreted dorsal idiosomal setae and palp of "*Erythraeus phalangioides* [sic!] var. *gracilipes* (Kram.)", and decided that *Rhyncholophus gracilipes* Kramer, 1897 and *Rhyncholophus intermedius* Trägårdh, 1902 were the synonyms of "*Erythraeus phalangioides* [sic!] var. *gracilipes* (Kram.)". Schweizer (1951) described *Erythraeus nivalis* from Switzerland, and Schweizer & Bader (1963) included that species in their monograph with no changes in the name of the author and the date of the description ("Schweizer, 1951"). They did not give the new name to the species either, although they acknowledged R. V. Southcott for "indicating the existence of *Rhyncholophus nivalis* Heer, 1845". It must be stressed that *Rhyncholophus* Dugès, 1834 is the accepted synonym of *Erythraeus* Latreille, 1806. During my studies on the specimens of *E. nivalis* from the collection of Joseph Schweizer, Naturhistorisches Museum, Basel, Switzerland (slides 55a and 55b, 'Grimsel Eisental, 2800 m u. Stein, 9 VIII. 1916'), I found that they not only agreed with the original description (Schweizer 1951) but also that they were conspecific with *E. phalangioides* [sic!] var. *gracilipes* Trägårdh, 1904. To maintain the nomenclatural stability and protect the names given by the oldest author, I decided to designate *Erythraeus nivalis* Schweizer, 1951 the synonym and homonym of *Erythraeus nivalis* (Heer, 1845). Consequently, *Rhyncholophus gracilipes* Kramer, 1897, *Rhyncholophus intermedius* Trägårdh, 1902 and *E. phalangioides* [sic!] var. *gracilipes* sensu Trägårdh, 1904 become synonyms, and *Erythraeus nivalis* Schweizer, 1951 and *E. nivalis* sensu Schweizer & Bader (1963) – synonyms and homonyms of *Erythraeus nivalis* (Heer, 1845). *Nota bene*, all localities of this species suggest its arctic-alpine character, which is in agreement with the suggestion of the author of the original description.

Erythraeus germanicus described from Germany was found to be conspecific with *E. opilionoides* basing on the specimen from the type series deposited in A. C. Oudemans' collection, Nationaal Natuurhistorisch Museum, Leiden, The Netherlands (Museum Leiden Verz. A. C. Oudemans Cat. No / .)(see also Buitendijk 1945: 350). The slide described as: "onder Bast van abies excelsa – achim in de Badener Berge By Bremen J. D. Aefken 5. IV. 1901" contains a female.

Erythraeus styriacus described from Austria was proved to be conspecific with *E. opilionoides* basing on paratypes from Zoologisches Institut und Zoologisches Museum,

Universität Hamburg, Germany. Three specimens enclosed in two slides were examined: 1."Paratypus Erythraeus styriacus Turk Eing. Nr. A 9/81 Adultus. Zool. Mus. Hamburg; Weinzödl bei Graz (Klettergarten) leg. R. Turk" contains an adult of unknown sex; the identification of the sex was impossible due to poor maceration; 2."Paratypen Erythraeus styriacus Turk Eing. Nr. A 10/81 Adulti, Zool. Mus. Hamburg; Weinzödl bei Graz (Klettergarten) leg. R. Turk" – contains two adults, 2a – bigger and 2b – smaller, of unknown sex; again poor maceration did not allow the determination of the sex.

The dimensions of the body and the structure of opisthosomal setae and legs in *Rhyncholophus Hermann* [sic!] Dugès, 1834 from France and *Rhyncholophus arenicola* Andersén, 1863 from Norway indicate that both of them are deutonymphs of *Erythraeus phalangoides* (De Geer, 1778).

Rhyncholophus principalis described from Germany, has never been redescribed. Basing on the original description, especially of the structure of idiosomal setae, palps, and leg proportions it is possible to determine that we deal with the deutonymph of *Charletonia cardinalis*. To preserve the stability in nomenclature, I propose to consider *Rh. principalis* a junior synonym of the well-known *Charletonia cardinalis* although *Rh. principalis* was described in the same publication before *Rh. cardinalis* (C. L. Koch, 1837). Beron (2008) as well as Mąkol & Wohltmann (2012) placed *Rh. principalis* within the genus *Erythraeus* erroneously.

Monotrombidium Geisleri [sic!] described from Italy (Elba Island), shows characters typical of the genus *Charletonia* Oudemans, 1910. Southcott (1961: 569-570) did not comment either on the generic affiliation of the species or on the status of the genus because the original description was unavailable. However, the analysis of the work by Krausse (1924) proves that the species "*geisleri*" definitely belongs to the genus *Charletonia*. The characteristic shape of palptarsus is the determining character. In light of this finding, the genus *Monotrombidium* Krausse, 1924 becomes junior subjective synonym of *Charletonia* Oudemans, 1910. The very poor description makes the status of the species '*geisleri*' difficult to determine.

Willmann (1953) described *Balaustium lapidarium* from the Alps. *B. lapidarium* is conspecific with *Abrolophus artemisiae* (Schrank, 1803), which I suggested in my earlier work (Gabryś 1990). Beron (2008) and Mąkol & Wohltmann (2012) placed *B. lapidarium* in the list of synonyms of *A. artemisiae*, but with no comments or annotations. In this situation, I decide to formally synonymize *B. lapidarius* Willmann, 1953 with *A. artemisiae* (Schrank, 1803) basing on data from the original description. The type specimen of *A. artemisiae* does not exist, therefore my interpretation is based on the specimen from A. C. Oudemans' collection, Nationaal Natuurhistorisch Museum, Leiden, The Netherlands, where it was labelled as "Belaustium [sic!] artemisiae (Schrank 1803)(miniatus Herm 1804)". Buitendijk (1945: 348) cited the species with the incorrect date of description as "*Balaustium artemisiae* (Schrank, 1883)".

Rhyncholophus macilentus C. L. Koch, 1837 has never been redescribed. Basing on literature data, I decided to consider it a synonym of *Abrolophus miniatus* (Hermann, 1804).

Likewise, I decided to consider *Rhyncholophus lentiginosus* C. L. Koch, 1837 a synonym of *Abrolophus quisquiliarus* (Hermann, 1804) basing on the original description.

The original description and the illustration of *Rhyncholophus crocatus* C. L. Koch, 1837 prove that it belongs to the genus *Balaustium* von Heyden, 1826. Basing on the original description and in purpose to maintain nomenclatural stability, I consider *Rh. crocatus*

a synonym of *Balaustium murorum* (Hermann, 1804). Beron (2008) and Mąkol & Wohltmann (2012) placed *Rh. crocatus* within the genus *Erythraeus*, which was incorrect.

Belaustium [sic!] *bulgariense* Oudemans, 1926 described from Bulgaria was considered conspecific with *Balaustium murorum* basing on the specimen from A. C. Oudemans' collection, Nationaal Natuurhistorisch Museum, Leiden, The Netherlands (see also Buitendijk 1945: 348), which was one deutonymph divided and mounted in two slides. One slide contains the total preparation and the other slide – the palp. The slides were described as: 1. "Balaustium bulgarense [sic!] Oudms. 1926. Museum Leiden Verz. A. C. Oudemans Cat. No / 3531) Rilo Gebergte 2500 m. Maritza See Bulgarija don. Karl Viets. Jan 1926"; 2. as in "1" but the left part of the label contains also the word "palp" and "Cat. No. 2/ 3531". The structure and dimensions of opisthosomal setae, nonsensillary setae AL (= AM), palps, legs, palptibial claw, presence of three distinct semipectinalae on palpgenu prove that *Belaustium* [sic!] *bulgariense* Oudemans, 1926 and *Balaustium murorum* (Hermann, 1804) are conspecific. The status of *Balaustium bulgariense* sensu Willmann (1951a, 1954), remains unclear, therefore it is excluded from the present consideration until the type material is examined.

The description of deutonymphs of *Balaustium florale* Grandjean, 1947 (Grandjean 1959) proves implies that it is conspecific with *Balaustium murorum* (Hermann, 1804). The studies on the specimens from the collection of François Grandjean confirmed that. I was able to examine the specimens thanks to Observatoire oceanologique de Banyuls, Universite de Paris, Laboratoire Arago, Banyuls-sur-Mer, France.

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REFERENCES

Andersén C.H. 1863. Bidrag till kännedomen om Nordiska Acarider. *Öfvers af K. Vet.-Akad. Förh.* 3, 20(4): 181–193.

Beron P. 2008. Acarorum Catalogus I. Acariformes: Calyptostomatoidea (Calyptostomatidae), Erythraeoidea (Smarididae, Erythraeidae). Edition of Pensoft Publishers and the National Museum of Natural History, Sofia. Bulgarian Academy of Sciences, Sofia-Moscow: 1–271.

Brébisson J. B. G. de. 1827. Catalogue des arachnides, des myriapodes et des insectes-aptères que l'on trouve dans le département du Calvados. *Mémoires de la Société lineenne de Normandie* 1826–1827, 3: 254–274.

Buitendijk A. M. 1945. Voorloopige Catalogus van de Acari in de Collectie-Oudemans. *Zoologische Mededeelingen* 24(3–4): 282–391.

Canestrini G. 1885. Prospetto dell'acarofauna italiana. *Atti del Reale Istituto Veneto di Scienze*, *Lettere ed Arti* 6(3): 319–354.

De Geer C. 1778. 'Mémoires pour Servir a l'Histoire des Insectes.' Vol. VII (Stockholm): 1–950 + 49 Pl.

Dugès 1834. Recherches sur l'ordre des Acariens en général et la famille des Trombidiés en particulier. *Annales des sciences naturelles*. *Zoologie* 2(1): 5–46, pl. 1.

Gabryś G. 1990. Erythraeidae (Acari, Actinedida) Polski [Erythraeidae (Acari, Actinedida) of Poland] PhD, manuscript. Wrocław: 1–290 [in Polish].

Gabryś G. 2016. *Erythraeus gorcensis* sp. nov. for misidentified *Erythraeus acis* sensu Schweizer, 1951 non Berlese, 1882 (Acari: Actinotrichida: Erythraeidae). *Annals of the Upper Silesian Museum* (*Bytom*). *Natural History*. [*Rocznik Muzeum Górnośląskiego w Bytomiu. Przyroda*] 22 (online 002): 1–4 [online].

Gabryś G., Roland E. 2016. A redescription of *Erythraeus acis* (Berlese, 1882) non Schweizer, 1951 (Acari: Actinotrichida: Erythraeidae) with notes on some related species from the Palaearctic region. *Annales Zoologici* 66(3): 417–430.

George C. F. 1910. Some British earth mites. Rhyncholophidae. Naturalist, London 647: 427–428.

George C. F. 1912. *Rhyncholophus niger*. Naturalist, London 667: 252.

Grandjean F. 1947. Au sujet des Erythroides. *Bulletin du Muséum national d'histoire naturelle*. Paris ser. 2, 19, 4: 327–334.

Grandjean F. 1959. Les stases du développement ontogénétique chez *Balaustium florale* (Acarien, Erythroide). Deuxième partie. *Annales de la Société Entomologique de France* 128: 159–177.

Heer O. 1845. Ueber die obersten Gränzen des thierischen und pflanzlichen Lebens in unseren Alpen. *An die Zürcherische Jugend* 47: 1–19.

Hermann J. F. 1804. Mémoire aptérologique. Published posthumously by Fréderic-Louis Hammer. F.G. Levrault, Strasbourg, pp. viii + 144, 9 pl.

Heyden C. H. G. von. 1826. Versuch einer systematischen Eintheilung der Acariden. Isis von Oken 18, 6: 609–613.

Johnston G. 1848. The Acariens of Berwickshire specifically described. History of the Berwickshire Naturalist's Club, *Proceedings* 2: 289–316.

Koch C. L. 1837. Deutschlands Crustaceen, Myriapoden und Arachniden. Ein Beitrag zur Deutschen Fauna von C. L. Koch. *Regensburg fasc*. 10–16.

Kramer P. 1897. Grönländische Milben. *Bibliotheca zoologica* 20(3): 77–83.

Krausse A. 1924. Eine neue Trombidiiden-Gattung von der Insel Elba. *Bolletino dei Musei di Zoologia ed Anatomia comparata della R. Università di Torino. Nuova serie N*. 28, Vol. 39: 1–3.

Latreille P. A. 1806. Genera crustaceorum et insectorum secudnum ordinem naturalem in familias disposita, iconibus exemplisque plurimis explicata. Ed. Argentorati-A. Koenig, I: 146.

Linné C. v. 1758. Systema naturae. 10th ed. Stockholm. gen. 235, n. 25.

Mąkol J., Wohltmann A. 2012. An annotated checklist of terrestrial parasitengona (Actinotrichida: Prostigmata) of the world, excluding Trombiculidae and Walchiidae. *Annales Zoologici* 62(3): 359–562.

Oudemans A. C. 1902. Acarologische Aanteekeningen. *Entomologische Berichten* 1(6): 36–39.

Oudemans A. C. 1903. Acarologische Aanteekeningen VI. *Entomologische Berichten* 1(12): 80–88.

Oudemans A. C. 1904. Notes sur les Acariens. X série. (1). Parasitidae (vel Gamasidae) Thrombididae et Oribatidae d'Italie. *Mémoires de la Société Zoologique de France* 16 (‚1903'): 5–32.

Oudemans A. C. 1910. Acarologische Aanteekeningen XXXII. *Entomologische Berichten* 3(53): 67–74.

Oudemans A. C. 1926. Acarologische Aanteekeningen LXXXII. *Entomologische Berichten* 7(150): 119–126.

Oudemans A. C. 1937. Kritisch Historisch Overzicht der Acarologie 3, C-G, E. J. Brill, Leiden: 799–3379.

Schrank F. de P. 1781. *Acarus adpendiculatus*, Lungenmoosmilbe. Enumeratio insectorum Austriae indigenorum 3(6–11) Augsburg, 518.

Schrank F. de P. 1803. Fauna Boica. Durchgedachte Geschichte der in Baiern einheimischen und zahmen Thiere. *Fauna Boica* 3: 1–372.

Schweizer J. 1951. Die Landmilben des Schweizerischen Nationalparkes. 2. Trombidiformes Reuter 1909. *Ergebnisse der wissenschaftlichen Untersuchung des schweizerischen Nationalparks* 3 (*Neue Folge*) 23: 51–172.

Schweizer J., Bader C. 1963. Die Landmilben der Schweiz (Mittelland, Jura und Alpen). Trombidiformes Reuter. *Denkschriften der Schweizerischen Naturforschenden Gesellschaft* 84(2): 209–378 + VI.

Southcott R. V. 1961. Studies on the systematics and biology of the Erythraeoidea (Acarina), with a critical revision of the genera and subfamilies. *Australian Journal of Zoology* 9(3): 367–610.

Trägårdh I. 1902. Beiträge zur Kenntnis der Schwedischen Acaridenfauna. I. Lappländische Trombidiiden und Oribatiden. Bihang till Kongl. *Svenska Vet.-Akad. Handlingar* 28, 4, 5: 1–26.

Trägårdh I. 1904. Monographie der arktischen Acariden. *Fauna arctica*, Jena 4(1): 1–78.

Turk R. 1981. *Erythraeus styriacus* n.sp., eine neue Milbenart aus Mittel- und Südeuropa (Acari, Trombidiformes). *Mitteilungen des naturwissenschaftlichen Vereins fur Steiermark* 111: 207–219.

Willmann C. 1949. Beiträge zur Kenntnis des Salzgebietes von Ciechocinek. 1. Milben aus den Salzwiesen und Salzmooren von Ciechocinek an der Weichsel. Veröffentlichungen aus dem Überseemuseum Bremen, Museum für Natur-, Völker- und Handelskunde A 1: 106–135, 141–142.

Willmann C. 1951a. *Neobalaustium caspersi*, eine neue Milbe aus Bulgarien. *Zoologischer Anzeiger* 146(11–12): 349–354.

Willmann C. 1951b. Untersuchungen über die terrestrische Milbenfauna im pannonischen Klimagebiet Österreichs. *Sitzungsberichte der Österreichischen Akademie der Wissenschaften* 160(1–2): 91–176.

Willmann C. 1952. Die Milbenfauna der Nordseeinsel Wangerooge. *Veröffentlichungen des Instituts für Meeresforschung in Bremerhaven* 1: 139–186.

Willmann C. 1953. Neue Milben aus den östlichen Alpen. *Sitzungsberichte der Österreichischen Akademie der Wissenschaften* 162(6): 449–519.
Willmann C. 1954. Mährische Acari hauptsächlich aus dem Gebiete des mährischen Karstes gesammelt von Prof. Dr K. Absolon, Brno. *Československá Parasitologie* 1: 213–272.

STRESZCZENIE

Uwagi o synonimii w obrębie Erythraeidae (Acari: Actinotrichida: Parasitengona) z regionu Palearktyki

W pracy zaproponowano nowy subiektywny synonim szczebla rodzajowego, dziewięć nowych subiektywnych synonimów szczebla gatunkowego, pierwotny homonim szczebla gatunkowego oraz nową kombinację w obrębie roztoczy z rodziny Erythraeidae, występujących w regionie Palearktyki.

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