

Beitr. Ent.	Berlin	ISSN 0005-805X
47(1997)2	S. 359-364	04.08.1997

The genus- and family-group names of the Dytiscidae - additions and corrections

(Coleoptera)

ANDERS N. NILSSON & ROBERT E. ROUGHLEY

Summary

A previous review of genus- and family-group names of the water-beetle family Dytiscidae is updated. Additions include the names described within the last six years and some older, previously overlooked names, chiefly given by GISTEL. Type species are designated for *Hydatoporus* GISTEL, *Hyobius* GISTEL, *Icmaleus* GISTEL, and *Prosciastes* GISTEL. Actobaenidae GISTEL is considered a senior subjective synonym of Hyphydrini SHARP. Conservation of Hyphydrini is recommended.

Zusammenfassung

Eine frühere Revision der Gattungs- und Familiengruppennamen der Dytiscidae wird aktualisiert. Die Ergänzungen enthalten die in den vergangenen sechs Jahren beschriebenen Namen, und einige ältere, früher übersehene Namen, hauptsächlich von GISTEL. Für *Hydatoporus* GISTEL, *Hyobius* GISTEL, *Icmaleus* GISTEL, und *Prosciastes* GISTEL werden Typusarten designiert. Actobaenidae GISTEL wird als ein älteres subjektives Synonym von Hyphydrini SHARP erkannt. Die Konservierung von Hyphydrini wird empfohlen.

Acknowledgements

Dr. A. F. NEWTON, Jr., Chicago, is thanked for providing important information and valuable advice.

Introduction

The genus- and family-group names of the Dytiscidae were reviewed by NILSSON et al. (1989). There are several reasons why this list now needs to be updated. First, a few older works including descriptions of such names had been overlooked. Moreover, several new genera have been described during the passed six years. Finally, the status of some of the names have changed due to new views on classification. The same format as used by NILSSON et al. (1989) is used in the listing below.

Recently, LAWRENCE & NEWTON (1995) published a comprehensive review of the family-group names of all Coleoptera. Of the six currently recognized subfamilies of Dytiscidae, the citations of authors and years for three of them differ from that used by NILSSON et al. (1989). The opinions of LAWRENCE & NEWTON (1995) are adopted here as being correct.

Genus-group names

Additions

Actobaena GISTEL, 1856: *Myster. eur. Insectenwelt*: 355.

Type species: *Hyphydrus fabricii* CRISTOFORI, 1832: *Cat. Cristofori & Jan* 3(1): 14 [repl. name for *Dytiscus gibbus* FABRICIUS, 1777: *Gen. Ins.*: 238 = *Dytiscus ovatus* LINNAEUS, 1761: *Faun. Suec. ed. 2*: 547], by monotypy.

Current status. - Junior subjective synonym of *Hyphydrus* ILLIGER.

Boongurrus LARSON, 1994: *J. Aust. ent. Soc.* 33: 217.

Type species: *Boongurrus rivulus* LARSON, 1994: *J. Aust. ent. Soc.* 33: 220, by original designation.

Current status. - Genus of Bidessini SHARP.

Carabdytes BALKE, HENDRICH & WEWALKA, 1992: *Ent. Z.* 102: 94.

Type species: *Carabdytes upin* BALKE, HENDRICH & WEWALKA, 1992: *Ent. Z.* 102: 94, by original designation.

Current status. - Genus of Colymbetini ERICHSON.

Comaldessus SPANGLER & BARR, 1995: *Ins. Mundi* 9: 301.

Type species: *Comaldessus stygius* SPANGLER & BARR, 1995: *Ins. Mundi* 9: 302, by original designation.

Current status. - Genus of Bidessini SHARP.

Heteroelytrus ÁDÁM in MAHUNKA, 1993: *Fauna Bükk natn. Park* 1: 81, nomen novum for *Acilius* LEACH.

Type species: *Dytiscus sulcatus* LINNAEUS, 1758: *Syst. Nat. ed. 10*, 1:412, fixed under Article 67h of the Code.

Current status. - Junior synonym of *Acilius* LEACH.

Hydatoporus GISTEL, 1856: *Myster. eur. Insectenwelt*: 355.

Type species: *Dytiscus palustris* LINNAEUS, 1761: *Faun. Suec. ed. 2*: 216, DESIGNATED HERE.

Current status. - Junior subjective synonym of *Hydroporus* CLAIRVILLE.

Hyobius GISTEL, 1856: *Myster. eur. Insectenwelt*: 354.

Type species: *Dytiscus fenestratus* FABRICIUS, 1781: *Spec. Ins.* 1: 294, DESIGNATED HERE.

Current status. - Junior objective synonym of *Ilybius* ERICHSON.

Hyphovatus WEWALKA & BISTRÖM, 1994: *Koleopt. Rdsch* 64:37.

Type species: *Hyphydrus dimorphus* BISTRÖM, 1984: *Annl. ent. fenn.* 50:21, by original designation.

Current status. - Genus of Hyphydrini SHARP.

Icmaleus GISTEL, 1856: *Myster. eur. Insectenwelt*: 355.

Type species: *Dytiscus transversalis* PONTOPPIDAN, 1763: *Dansk. Atlas* 1: 677, DESIGNATED HERE.

Current status. - Junior objective synonym of *Hydaticus* LEACH.

Mesovatellus TRÉMOUILLES, 1995: *Fauna Agua dulce Rep. Argent.* 37(1): 26.

Type species: *Derovatellus bruchi* ZIMMERMANN, 1919: *Arch. Naturgesch.* 83(1917):125, by original designation.

Current status. - Genus of Vatellini SHARP.

Plateocolymbus GISTEL, 1857: *Vacuna* 2: 606.

Type species: *Colymbetes lineatus* REDTENBACHER in HÜGEL, 1844: *Kashmir* 4:(2): 503, pl. 23:5, by monotypy.

Current status. - Placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

Prosciastes GISTEL, 1856: *Myster. eur. Insectenwelt*: 355.

Type species: *Dytiscus cinereus* LINNAEUS, 1758: *Syst. Nat. ed.* 10, 1: 412, DESIGNATED HERE.

Current status. - Junior objective synonym of *Graphoderus* DEJEAN.

Rhithrodytes BAMEUL, 1989: *Annl. Soc. ent. Fr. (N.S.)* 25: 482.

Type species: *Dytiscus crux* FABRICIUS, 1792: *Ent. Syst.* 1: 199, by original designation.

Current status. - Genus of Hydroporini ERICHSON.

Scaphinectes ÁDÁM in MAHUNKA, 1993: *Fauna Bükk natn. Park* 1: 81, nomen novum for *Trochalus* DEJEAN.

Type species: *Dytiscus roeselii* FÜESSLY, 1775: *Verz. Schweiz. Ins.*: 18 [= *Dytiscus laterimarginalis* DE GEER, 1774: *Mém. Hist. Ins.* 4:396], fixed under Article 67h of the Code.

Current status. - Subgenus of *Cybister* CURTIS.

Stygoporus LARSON & LABONTE, 1994: *Coleopt's Bull.* 48:371.

Type species: *Stygoporus oregonensis* LARSON & LABONTE, 1994: *Coleopt's Bull.* 48:374, by original designation.

Current status. - Genus of Hydroporini ERICHSON.

Corrections

Australonectes GUÉORGUIEV, 1972. Change "Current status" to: - Subgenus or junior subjective synonym of *Platynectes* RÉGIMBART.

Laccornis GOZIS, 1914. Change "Current status" to: - Genus of Laccornini WOLFE & ROUGHLEY.

Leucorea LAPORTE, 1835. Change "Current status" to: - Placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

Meladema LAPORTE, 1835. Change "Current status" to: - Genus of Colymbetini ERICHSON.

Nipponhydrus GUIGNOT, 1954. Change "Current status" to: - Junior subjective synonym of *Allopachria* ZIMMERMANN (NILSSON & WEWALKA 1994).

Platynectes RÉGIMBART. Change year of description to 1879.

Potamonectes ZIMMERMANN, 1921. Change "Current status" to: - Junior subjective synonym of *Nebrioporus* RÉGIMBART (NILSSON & ANGUS 1992).

Scutopterus DEJEAN, 1833. Change "Current status" to: - Placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

Trichonectes GUIGNOT, 1941. Change "Current status" to: - Junior subjective synonym of *Stictotarsus* ZIMMERMANN (NILSSON & ANGUS 1992).

Trochalus DEJEAN, 1833 (not LAPORTE, 1832). Change "Current status" to: - Preoccupied, replaced by *Scaphinectes* ÁDÁM.

Vatellus AUBÉ, 1837. Change "Current status" to: - Genus of Vatellini SHARP.

Zimmermannius GUIGNOT, 1941. Change "Current status" to: - Subgenus of *Nebrioporus* RÉGIMBART (NILSSON & ANGUS 1992).

Family-group names

Additions

Actobaenidae GISTEL, 1856: *Myster. eur. Insectenwelt*: 355.

Type genus: *Actobaena* GISTEL.

Current status. - Senior subjective synonym of Hyphydrini SHARP.

Carabdytini PEDERZANI, 1995: *Atti Acc. Rov. Agiati, a. 244 (1994), ser. VII, vol. IV, B*:45.

Type genus: *Carabdytes* BALKE et al.

Current status. - Junior subjective synonym of Colymbetini ERICHSON.

Laccornini WOLFE & ROUGHLEY, 1990: *Quaest. ent.* 26: 302 (as tribe of Hydroporinae).

Type genus: *Laccornis* GOZIS.

Current status. - Tribe of Hydroporinae ERICHSON.

Corrections

Agabetini VAN DEN BRANDEN, 1885.

Current status. - Add: or subfamily of Dytiscidae (BURMEISTER 1990).

Dytiscidae (LEACH) in BREWSTER, 1815: *Edinburgh Encycl.* 9:84 (as Dyticides, tribe of Coleoptera).

Type genus: *Dytiscus* LINNAEUS.

Current status. - Family of Coleoptera.

Hydroporinae AUBÉ in DEJEAN, 1836: *Icon. Hist. Nat. Col. Eur.* 5: 14 (as Hydroporides, tribe of Dytiscides).

Type genus: *Hydroporus* CLAIRVILLE.

Current status. - Subfamily of Dytiscidae LEACH.

Ilybiini ACLOQUE, 1896: *Faune Fr.* 2: 81, 83 (as Ilybii, subfamily of Dytiscidae).

Type genus: *Ilybius* ERICHSON.

Current status. - Junior subjective synonym of Agabini THOMSON.

Laccophilinae GISTEL, 1856: *Myster. eur. Insectenwelt*: 354 (as Laccophilidae, family of Hydatocantharina).

Type genus: *Laccophilus* LEACH.

Current status. - Subfamily of Dytiscidae LEACH.

Notes

LAWRENCE & NEWTON (1995) cited SCHELLENBERG as the author of the names described in *Helvetische Entomologie* (1806), within the Dytiscidae including the generic names *Colymbetes* and *Hydroporus*. NILSSON et al. (1989) cited CLAIRVILLE as the author of the same work, following the well-documented view of MÉQUIGNON (1940). It is now clear that the latter view is correct (NEWTON, in litt.).

Hydroporinae was attributed to ERICHSON 1837 by NILSSON et al. (1989), whereas LAWRENCE & NEWTON (1995) referred it to AUBÉ 1836. However, the AUBÉ page cited by the latter authors was actually published in 1837, following the publication dates given by GUIGNOT (1931-1933). A closer look revealed that AUBÉ used "Hydroporides" already on page 14, which was published in 1836, and thus takes priority over ERICHSON.

GISTEL's (1856, 1857) works were over-looked by NILSSON et al. (1989). Of GISTEL's generic names only *Plateocolymbus* has priority of the names listed as valid by NILSSON et al. (1989). NILSSON (1993) applied for the conservation of *Platynectes* RÉGIMBART, and later (ICZN 1995) this was admitted and *Plateocolymbus* GISTEL was suppressed. Among the family-group names, GISTEL (1856) was the first to use Laccophilinae. Moreover, his Actobaenidae turns out to be a senior subjective synonym of Hyphydrini SHARP. As Actobaenidae has not been cited as a valid name since it was first described, it should be suppressed and the well-known Hyphydrini conserved.

ÁDÁM (1993) recently provided two replacement names in the genus-group. The replacement of *Trochalus* with *Scaphinectes* is here accepted as valid, whereas the suggested replacement of *Acilius* with *Heteroelytrus* is not motivated. The *Acilius* homonymy was regulated in Opinion 619 (ICZN 1961), in which the younger homonym (RAFINESQUE, 1815) was suppressed.

Some of the conservations of well-known generic names suggested by NILSSON et al. (1989) have now been given formal status. *Meladema* LAPORTE, 1835, was conserved by the suppression of *Scutopterus* DEJEAN, 1833 (NILSSON, 1992; ICZN, 1993), and *Vatellus* AUBÉ, 1837, was conserved by the suppression of *Leucorea* LAPORTE, 1835 (NILSSON, 1991; ICZN, 1992).

References

- ÁDÁM, L. 1993: Haliplidae, Gyrinidae, Noteridae, Dytiscidae, Laccophilidae and Hydroporidae (Coleoptera) of the Bükk National Park, pp. 77-87. - In: MAHUNKA, S. (Ed.). Natural history of the national parks of Hungary. 7. The fauna of the Bükk National Park. Vol. 1. Magyar Természettudományi Múzeum, Budapest.
- AQLOQUE, A. 1896: Faune de France. Coléoptères. Paris. J.-B. Baillière et Fils. 466 pp.
- BALKE, M.; HENDRICH, L. & WEWALKA, G. 1992: *Carabdytes upin* n. gen., n. sp. aus Neuguinea (Coleoptera: Dytiscidae). - Ent. Z. 102: 93-100.
- BAMEUL, F. 1989: Description de *Rhithrodytes*, nouveau genre d'Hydroporinae d'Europe et d'Afrique du Nord: analyse phylogénétique et biogéographie (Coleoptera: Dytiscidae). - Anns Soc. ent. Fr. (N.S.) 25: 481-503.
- BURMEISTER, E.-G. 1990: The systematic position of the genus *Agabetes* CROUCH within Dytiscidae (Coleoptera, Adephaga). - Quaest. Ent. 26: 221-238.
- GISTEL, J. 1856: Die Mysterien der europäischen Insectenwelt. - T. Dannheimer, Kempten.
- GISTEL, J. 1857: Vacuna oder die Geheimnisse aus der organischen und leblosen Welt, vol. 2. - Schorner'sche Buchhandlung, Straubing.
- GUIGNOT, F. 1931-1933: Les Hydrocanthares de France. - Douladoure, Toulouse.

- ICZN. 1961: Opinion 619. *Acilius* LEACH, 1817 (Insecta, Coleoptera); preservation by use of the plenary powers to vary the ruling given in Opinion 522. - Bull. zool. Nomencl. **18**: 369-371.
- ICZN. 1992: Opinion 1681. *Vatellus* AUBÉ, [1837] (Insecta, Coleoptera): conserved. - Bull. zool. Nomencl. **49**: 165-166.
- ICZN. 1993: Opinion 1725. *Meladema* LAPORTE, 1835 (Insecta, Coleoptera): conserved. - Bull. zool. Nomencl. **50**: 169-170.
- ICZN. 1995: Opinion 1796. *Platynectes* RÉGIMBART, 1879 (Insecta, Coleoptera): conserved. - Bull. zool. Nomencl. **52**: 102-103.
- LARSON, D. J. 1994: *Boongurrus rivulus*, a new genus and species of water beetle (Coleoptera: Dytiscidae: Bidessini) from northern Queensland, Australia. - J. Aust. ent. Soc. **33**: 217-221.
- LARSON, D. J. & LABONTE, J.R. 1994: *Stygoporus oregonensis*, a new genus and species of subterranean water beetle (Coleoptera: Dytiscidae: Hydroporini) from the United States. - Coleopt's Bull. **48**: 371-379.
- LAWRENCE, J. F. & NEWTON, A. F. Jr. 1995: Families and subfamilies of Coleoptera (with selected genera, notes, references and data on family-group names), pp. 780-1006. - In: PAKALUK, J. & SLIPINSKI, S. A. (Eds.). Biology, phylogeny, and classification of Coleoptera: papers celebrating the 80th birthday of ROY A. CROWSON. Muzeum i Instytut Zoologii PAN, Warszawa.
- MÉQUIGNON, A. 1940: Observations sur quelques noms de genre. IV. Un point de bibliographie: CLAIRVILLE ou SCHELLENBERG? - Bull. Soc. ent. Fr. **45**: 16-18.
- NILSSON, A. N. 1991: *Vatellus* AUBÉ, 1837 (Insecta, Coleoptera): proposed conservation. - Bull. zool. Nomencl. **48**: 36-37.
- NILSSON, A. N. 1992: *Meladema* LAPORTE, 1835 (Insecta, Coleoptera): proposed conservation. - Bull. zool. Nomencl. **49**: 32-34.
- NILSSON, A. N. 1993: *Platynectes* RÉGIMBART, 1879 (Insecta, Coleoptera): proposed conservation. - Bull. zool. Nomencl. **50**: 212-214.
- NILSSON, A. N. & ANGUS, R. B. 1992: A reclassification of the *Deronectes*-group of genera (Coleoptera: Dytiscidae) based on a phylogenetic study. - Ent. scand. **23**: 275-288.
- NILSSON, A. N.; ROUGHLEY, R. E. & BRANCUCCI, M. 1989: A review of the genus- and family-group names of the family Dytiscidae LEACH (Coleoptera). - Ent. scand. **20**: 287-316.
- NILSSON, A. N. & WEWALKA, G. 1994: Two new species of the genera *Allopachria* and *Agabus* from Taiwan (Coleoptera, Dytiscidae). - Linzer biol. Beitr. **26**: 991-998.
- PEDERZANI, F. 1995: Keys to the identification of the genera and subgenera of adult Dytiscidae (sensu lato) of the world (Coleoptera Dytiscidae). - Atti Acc. Rov. Agiati, a. 244 (1994), ser. VII, **4(B)**: 5-83.
- SPANGLER, P. J. & BARR, C. B. 1995: A new genus and species of stygobiontic dytiscid beetle, *Comaldessus stygius* (Coleoptera: Dytiscidae: Bidessini) from Comal Springs, Texas. - Ins. Mundi **9**: 301-308.
- TRÉMOUILLES, E. R. 1995: Insecta Coleoptera Dytiscidae: Methlinae - Hydroporinae. - Fauna Agua dulce Rep. Argent. **37(1)**: 1-82.
- WOLFE, G. W. & ROUGHLEY, R. E. 1990: A taxonomic, phylogenetic, and zoogeographic analysis of *Laccornis* GOZIS (Coleoptera: Dytiscidae) with the description of *Laccornini*, a new tribe of Hydroporinae. - Quaest. Ent. **26**: 273-354.

Authors' addresses:

ANDERS N. NILSSON
Department of Biology, BIG
University of Umeå
S-901 87 Umeå
Sweden

ROBERT E. ROUGHLEY
Department of Entomology
University of Manitoba
Winnipeg, Manitoba
Canada R3T 2N2