

Additional notes on the synonymy of the family names in Diptera

by

A. C. VAN BRUGGEN

(Division of Entomology, Pretoria, South Africa)

For long zoology has struggled with the heavy burden of synonymy in the names of families. This is partly due to the fact that the existing code of zoological nomenclature does not lay down definite rules for the synonymy of these taxa, although it does so for the formation of the names of these units. However, the draft of the new code (*Bull. Zool. Nomenclat.* 14, pts. 1—9, 1957) makes provision for the synonymy of the family names more or less along the same lines as that for the names of genera and species. This will very probably meet with a number of difficulties, but in the end a certain stabilization of family names may result. In entomology the orders Diptera and Lepidoptera are well-known for the large number of synonyms in their family names. The difficulties that arise from this synonymy are a constant source of annoyance and trouble for students of the groups.

SABROSKY (1939) published the first account of the family nomenclature of the Diptera. He gives a list of the synonymy and draws attention to various relevant questions, e.g. the now already notorious case of the names given by MEIGEN in 1800 and 1803 (summarized by SABROSKY, 1952)¹). The present author has found a number of synonyms not mentioned by SABROSKY; the names are listed here alphabetically with comments.

Some general remarks on family nomenclature in Diptera may first be presented. A number of names are based on genera ending in *-mya* or *-myia*. For grammatical reasons only the ones ending in *-myia* can be accepted. *Myia* is a Latin transcription of the Greek word *μύια*, meaning: fly. Some of the names have already been emended, e.g. *Chyromya* Robineau Desvoidy, 1830, *Chyromyia* Schiner emend., 1864. Accordingly the family names have to end in *myiidae* instead of in *-myidae*.

Other family names are based on genera ending on *-cera*, *-cerus*, etc. These have to be constructed along the lines given by GRENSTED (1948); thus, e.g. *Acroceratidae*, *Blephariceratidae*, *Tetanoceratidae* have to be rejected in favour of *Acroceridae*, *Blephariceridae*, *Tetanoceridae*.

Some family names have different spellings because of emendations of the generic names on which they are based, e.g. *Asteiidae* - *Astiidae*, *Ogcodidae* - *Oncodidae*, *Trypaneidae* - *Trupaneidae*. Most of these names are not discussed here, nor are those that are to be rejected on grammatical grounds. The lists and indexes of the International Trust for Zoological Nomenclature (see References) refer to Opinions and Directions on some Diptera families, e.g. *Dolichopodidae* and *Stratiomyiidae*. Much useful information was extracted from NEAVE's nomenclator (1939—1940, 1950). No claim for completeness is made, especi-

¹) The general opinion nowadays is that the names of MEIGEN's earlier paper must be rejected in favour of those in his paper of 1803. In the present paper recommendations are made along these lines.

ally since at the present time there is still some confusion about the delimitation of the families (Acalyptrates, Muscoid flies).

LIST OF NAMES

- Acanthomeridae = Pantophthalmidae. According to AUSTEN (1923) *Acanthomera* Wiedemann, 1821 is a synonym of *Pantophthalmus* Thunberg, 1819.
- Astheniidae = Blephariceridae. *Asthenia* Westwood, 1842 is a junior homonym of *Asthenia* Huebner [1825] and of *Asthenia* Westwood, 1841, both in the order Lepidoptera. *Blepharicera* Macquart, 1843 is a nomen novum for *Asthenia* Westwood, 1842. *Blepharocera* is an (invalid?) emendation by AGASSIZ, 1846. Therefore the name Astheniidae is not available.
- Ceroplastidae = Platyuridae.
- Chaetopsidae = Ulidiidae. Chaetopsidae should be rejected because it can cause confusion, since three genera could be involved: *Chaetops* Swainson, 1832 (Aves), *Chaetopsia* Gebien, 1925 (Coleoptera), and *Chaetopsis* Loew, 1868 (Diptera).
- Chaoboridae = Corethridae. According to CURRAN (1934) *Corethra* Meigen, 1803 is a synonym of *Chaoborus* Lichtenstein, 1800. For that reason Corethridae as a family name cannot be used.
- Corethridae, see Chaoboridae.
- Euphrosynidae = Macroceridae. Euphrosynidae should be rejected since it is based on *Euphrosyne* Meigen, 1800.
- Euribiidae = Trypetidae. For the family Trypetidae the following names are known: Euribiidae, Tephritidae, Trupaneidae, Trypaneidae, Trypetidae. Euribiidae is to be rejected because it is based on a genus erected by MEIGEN in his 1800 paper. For further perusal of the name giving of the family the student is referred to MUNRO (1947).
- Henopidae = Acroceridae.
- Hybotidae = Empididae.
- Leptidae = Rhagionidae. The history of this case is as follows. FABRICIUS erected in 1775 a genus *Rbagio* and in the same year the genus *Rbagium* (Coleoptera). He considered the latter name a homonym of the former and made a nomen novum for *Rbagio*: *Leptis* Fabricius, 1805. According to the present rules of nomenclature this was unnecessary; therefore the use of the family name Leptidae is not recommended.
- Limnobiidae = Limoniidae. *Limnobia* Meigen, 1818 is an invalid emendation of *Limonia* Meigen, 1803.
- Liponeuridae = Blephariceridae.
- Loxoceridae = Psilidae. Loxoceridae should be dropped owing to its infrequent use.
- Macroceridae, see Euphrosynidae.
- Oncodidae = Acroceridae. Sometimes also spelt Ogcodidae, based on *Ogcodes* Latreille, 1796, valid emendation of BLANCHARD, 1840: *Oncodes*. The emendation is valid because in Greek the letter "gamma" before a guttural is pronounced as "n", or conversely, "n" (Greek letter "nu") before a guttural is written as "gamma" and must therefore be transliterated as "n".

- Orphnephilidae = Thaumaleidae. According to CURRAN (1934) *Orphnephila* Haliday, 1832 is a synonym of *Thaumalea* Ruthe, 1831; therefore Orphnephilidae is not available as a family name.
- Oscinidae = Chloropidae. For this case the student is referred to Opinion 348, 1955.
- Phytomyzidae = Agromyzidae. The latter name should be conserved for the family on accounts of its more frequent use.
- Platystomidae = Otitidae (olim Ortalidae, vide e.g. SABROSKY, 1939, p. 610).
- Platyuridae = Ceroplatidae.
- Rhyphidae = Anisopodidae. Rhyphidae as a family name is not available since *Rhyphus* Latreille, 1804 is a synonym of *Anisopus* Meigen, 1803 (vide CURRAN, 1934).
- Solvidae = Xylomyiidae.
- Stenoxenidae = Chironomidae. Some authors, e.g. CURRAN (1934) classify the genus *Stenoxenus* Coquillet, 1899 with the Ceratopogonidae.
- Sylvicolidae = Anisopodidae.
- Titaniidae, see Oscinidae.
- Trixoscelidae = Chyromyiidae. The genus *Trixoscelis* Rondani, 1856 has been included in Geomyzidae, Helomyzidae, and Opomyzidae by various authors. There is some confusion about the orthography of the genus in question. RONDANI erected the genus *Trixoscelis* from the Greek words *θρίξ* (genit. *τριχός*) = hair, bristle, and *οὐλίς* = haunch. This apparently wrongly constructed name was corrected by CZERNY in 1927: *Trichoscelis*. Grammatically this is the only possible Latin transcription of the combination of Greek words. But *Trichoscelis* Rondani emend. Czerny is a junior homonym of *Trichoscelis* Dejean, 1835 (Coleoptera) nec Amyot & Serville, 1843 (Hemiptera). Now there are two possibilities, either to introduce an altogether new name for the genus or to propose another emendation. In order not to add to the existing confusion *Thrixoscelis* could be used for the genus, although perhaps a linguistic monster. According to Greek spelling the "th" in the relevant word has to be associated with "x", or otherwise the "t" with the "ch".

The author will be indebted to anyone drawing his attention to mistakes, omissions, and additional names. The writer is much obliged to his colleague Dr. H. K. MUNRO for constant interest and criticism.

References

- AUSTEN, E. E., 1923, A revision of the family Pantophthalmidae (Diptera) with descriptions of new species and a new genus. — *Proc. Zool. Soc. Lond.* 2: 551—598.
- CURRAN, C. H., 1934, The families and genera of North American Diptera. — New York.
- GRENSTED, L. W., 1948, A note on the family name Trichoceridae. — *Ent. Monthl. Mag.* 84: 280—281.
- MUNRO, H. K., 1947, African Trypetidae. — *Mem. Et. Soc. S. Afr.* 1: 1—2.
- NEAVE, S. A., 1939—1940, 1950, Nomenclator zoologicus. — London, vols. I—V.
- NOMENCLATURE, International Trust for Zoological — Official index of rejected and invalid generic names in zoology, first instalment, 1958;

- Official list of generic names in zoology, first instalment, 1958.
 Official index of rejected and invalid family-group names in zoology, first instalment, 1958;
 Official list of family-group names in zoology, first instalment, 1958.
 SABROSKY, C. W., 1939, A summary of family nomenclature in the order Diptera. — *Verb. VII. Intern. Kongr. Entom. Berlin, 1938*, 1 : 599—612.
 ———, 1952, Meigen, 1800: a proposal for stability and uniformity. — *Bull. Zool. Nomencl.* 6 : 131—141.

De donkere vorm van *Apatete tridens* Schiff. (Lep., Noctuida). In *Ent. Ber.* 19 : 71—74 (1959) vermeldde ik het eerste exemplaar hiervan, dat de heer BOGAARD in 1958 te Hendrik-Ido-Ambacht gevangen had. Aan het slot van het artikel schreef ik, dat van een snelle uitbreiding van deze vorm op dat ogenblik nog niets bleek. Nu, nauwelijks een jaar later, ben ik er al van overtuigd, dat de donkere *tridens* zich even snel onder de soort verbreidt als dat bij *Apatete psi* gebeurd moet zijn. Ik heb al exemplaren gezien uit Limburg, Noord-Brabant, Noord-Holland en Gelderland en bovendien nog van een andere vindplaats in Zuid-Holland. Soms kan ik zo wel zien, of ik met een donkere *psi* of een donkere *tridens* te doen heb, maar vaak is het onmogelijk zonder genitaal-onderzoek met zekerheid de soort te determineren. Helaas kan dat alleen bij de mannetjes.

Het is natuurlijk zeer interessant, dat we nu precies weten, wanneer het eerste exemplaar in ons land werd aangetroffen en dat we de verspreiding van de vorm kunnen volgen. Ik zou het daarom bijzonder op prijs stellen, als iedere verzamelaar zoveel mogelijk op deze donkere vormen wil letten. Probeer van donkere wijfjes eieren te krijgen, zodat we de beschikking krijgen over met zekerheid determineerbare donkere exemplaren van dat geslacht. Kweek ook alle rupsen op, die u van de twee soorten vindt, maar houd ze apart en schrijft later op het etiket niet alleen vindplaats en datum, maar ook de naam van de soort. Dat bespaart heel wat werk. — LPK.

Rupsen van *Ectropis bistortata* Goeze schadelijk op *larix* (Lep., Geom.). In de boswachterij Grollo werden in 1959 verschillende *larix*-percelen kaalgevreten door spanner-rupsen. De soort werd niet herkend. Uit een mij toegezonden partij poppen kwamen eind 1959 en begin 1960 (door forceren) verscheidene imagines, welke tot de zo gewone *Ectropis bistortata* bleken te behoren.

Voor zover ik weet is dit de eerste maal, dat deze soort in ons land schadelijk geworden is. In Duitsland was dit reeds jaren bekend. Hoewel de rups polyfaag is, zou toch eerder een schadelijk optreden in loofhout te verwachten zijn. Uit de poppen kwamen nogal wat parasieten. Afwachten dus, of de plaag zich in 1960 zal herhalen.

W. J. BOER LEFFEF, Korteweg 53, Apeldoorn (Med. R. I. V. O. N.).

Papilio machaon L. Ik kan mededelen, dat ik deze soort zeker in 4 à 5 jaar niet meer heb waargenomen. Mijn laatste exemplaar, dat ik kweekte, dateert uit 1953. En dat was er dan nog maar één!

Toen ik daarna het plan opvatte een flinke partij rupsen te kweken, was er geen enkele meer te vinden en dat is tot op heden zo gebleven. Ik woon betrekkelijk dicht bij landerijen, waar wortelen in overvloed verbouwd worden, dus aan gebrek aan de voedselplant kan het niet liggen. Er moeten stellig andere factoren in het spel zijn.

W. OORD, Potterstraat 16, Deventer.