Case 2292

Histoire abrégée des insectes qui se trouvent aux environs de Paris (Geoffroy, 1762): proposed conservation of some generic names (Crustacea and Insecta)

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Abstract. Geoffroy's Histoire abrégée des insectes qui se trouvent aux environs de Paris (1762) was rejected for nomenclatural purposes and placed on the Official Index in 1954 (Opinion 228). Many of the 59 new generic names proposed by Geoffroy are in current use and 16 names with authorship from Geoffroy (1762) have already been conserved and placed on the Official List. The purpose of this application is to conserve the following 24 additional names from Geoffroy (1762): Crustacea: Asellus; Hymenoptera: Diplolepis, Eulophus, Urocerus; Lepidoptera: Pterophorus; Coleoptera: Altica, Anthrenus, Anthribus, Bostrichus, Cerocoma, Copris, Crioceris, Cryptocephalus, Diaperis, Galeruca, Gyrinus, Hydrophilus, Notoxus, Omalisus, Platycerus, Prionus, Ptilinus, Pyrochroa and Stenocorus.

A. Introduction

A.1 In 1762 Geoffroy published a two volume work entitled Histoire abrégée des insectes qui se trouvent aux environs de Paris. In this work Geoffroy proposed 59 new generic names of which four could be regarded as emendations or incorrect spellings of Linnaean names — Dyticus for Dytiscus, Mantes for Mantis, Hepa for Nepa and Tinaea for Tinea. The present-day placement of the 59 new generic names is 1 pseudoscorpion, 2 Crustacea and the rest Insecta (1 Thysanura, 2 Orthoptera, 1 Plecoptera, 2 Homoptera, 3 Heteroptera, 1 Neuroptera, 6 Diptera, 4 Hymenoptera, 2 Lepidoptera and 34 Coleoptera). In 1954 the International Commission on Zoological Nomenclature rejected Geoffroy's work for nomenclatural purposes on the grounds that it was not consistently binominal (Opinion 228). The Commission invited specialists to submit 'applications for the validation [conservation], under the plenary powers, of any names, the rejection of which would, in their opinion, lead to instability or confusion in the nomenclature of the group concerned'. Up to the end of 1990, 18 of the generic names proposed by Geoffroy had been conserved by the Commission and placed on the Official List of Generic Names in Zoology. Sixteen of these 18 names were attributed to Geoffroy (1762); authorship of Crioceris was attributed to Müller (1764) and of Pterophorus to Schaeffer (1766).

A.2 Two years after publication of Geoffroy's work, O.F. Müller (1764) published *Fauna Insectorum Fridrichsdalina* containing a table comparing the generic

In 1978 Dr Kerzhner submitted an application to the Commission in which he considered all Geoffroy's new generic names and proposed the conservation with authorship from Geoffroy (1762) of 29 of them that were then in current usage. Owing to the limited resources of the Commission's Secretariat it has not been feasible until now to complete this very extensive case. Editor.

classifications of Linnaeus (1758) and Geoffroy (1762). Müller listed all Geoffroy's generic names (with the exception of Tetigonia and with Cistela and Omalisus misspelt) with Geoffroy's original diagnoses. A direct consequence of this, coupled with the rejection by the Commission of Geoffroy's 1762 work, is that Geoffroy's generic names can be taken as available from Müller's 1764 work; under Article 50a of the Code authorship is 'Geoffroy in Müller'. It could be argued that Geoffroy's names are listed by Müller in synonymy with Linnaean names and therefore are not available from Müller's work. I asked Professor H.D. Cameron (Professor of Greek and Latin in the Department of Classical Studies at the University of Michigan) for his opinion. His report makes it clear that Müller did not synonymise Geoffroy's names with Linnaeus's. Since the purpose of the present application is to conserve names from Geoffroy (1762), the availability of Geoffroy's names in Müller's work (1764) is of importance only in connection with names placed on the Official Index of Rejected and Invalid Generic Names in Zoology. However, the long-standing confusion on the authorship of Geoffroy's names in Müller (1764) can now be resolved once and for all and I include Professor Cameron's important statement as an Appendix to this application.

- A.3 Nearly all Geoffroy's generic names were subsequently used by Schaeffer (1766) and all except *Tetigonia* by Schluga (1767). Both works are consistently binominal (Article 11c(i)) and both contain diagnoses and illustrations of Geoffroy's genera. Müller (1764), Schaeffer (1766) and Schluga (1767) did not include nominal species for Geoffroy's genera. The first consistently binominal works in which nominal species are referred to Geoffroy's genera are Linnaeus, 1767; Forster, 1770; Scopoli, 1772; De Geer, 1774, 1775; Fabricius, 1775; Müller, 1776; Fourcroy, 1785; and Olivier, 1791.
- A.4 Several species in Geoffroy's work were provided with a reference to Linnaeus (1758 or occasionally 1746), but the identity with Linnaean species was not always correctly determined. For the other species, binominal names were given in Fourcroy (1785), a work of which Fourcroy was only the publisher as clearly indicated in the preface. All diagnoses in Fourcroy were reprinted from Geoffroy (1762) or added by Geoffroy and subsequently published in the second edition (Geoffroy, 1799). All binominal names were given by Geoffroy. It follows that the correct authorship of new names in Fourcroy (1785) is Geoffroy in Fourcroy (Article 50a). Type species for Geoffroy's genera, where not fixed by subsequent monotypy, were designated by a number of authors including Latreille (1810), Curtis (1824–1839), Schönherr (1823) and Westwood ([1838]–1840).
- A.5 The majority of Geoffroy's generic names were widely used as valid names by subsequent authors. However, some of the names were used in a very different sense and this was a source of confusion and instability, especially in 19th century coleopteran names. In the first third of the 20th century the use of almost all the names was more or less stabilised, standard practice being to attribute authorship to Geoffroy for those names used in their original or near-original sense. For a number of names used not in the sense of Geoffroy but following Linnaeus, Fabricius or Kugelann authorship was attributed to those authors. Several names that were the source of greatest confusion have gradually disappeared from use.
- **A.6** The availability of Geoffroy's (1762) names has been discussed by a number of authors such as Bedel (1882, p. 4), Bergroth (1907, pp. 575–576) and Seidlitz (1908). Neave (1939–1940) supplied nearly all with a second or even a third reference

but these references are not consistent. Nearly half are references to Müller, 1764 (or rarely to Geoffroy in Müller, 1764); others include Linnaeus (1767), Schluga (1767), Fabricius (1775), Müller (1776), Laicharting (1781), Fourcroy (1785) and Olivier (1791).

- A.7 Many specialists continue to use the authorship of Geoffroy, 1762, or even prefer to cite all the authorship used in the literature (see Arnett, 1963, p. 937). It is obviously desirable to end this chaos and arbitrary attribution to different authors and dates. Accordingly I have examined all Geoffroy's generic names. Those which are in need of further consideration are dealt with in Sections B — K of this paper. Against each name I have proposed appropriate action, in 24 cases that the Commission should use its plenary powers to conserve that name with the authorship of Geoffroy (1762). If my proposals are accepted 40 of Geoffroy's 59 new generic names will have been conserved by use of the Commission's plenary powers. The disposition of the remaining 19 names may be summarized as follows. In eight cases (Bruchus, Byrrhus, Crabro, Cucujus, Melolontha, Mylabris, Peltis and Tritoma) the same name was used by a subsequent author (in the first two instances Linnaeus (1767), in Peltis Kugelann (1792) and in the others Fabricius (1775)) in a taxonomic sense different from Geoffroy's; on the grounds of usage the conservation of these junior homonyms is desirable. Crabro Fabricius, 1775 has already been conserved; the conservation of Bruchus Linnaeus, 1767 and Mylabris Fabricius, 1775 has been proposed by Borowiec (BZN 45: 194-196) and that of the others is proposed herein. In five cases (Forbicina, Mantes, Hepa, Dyticus and Tinaea) senior synonyms from Linnaeus, 1758 are in use. The names Binoculus, Acrydium, Tetigonia, Formicaleo, Cistela and Rhinomacer have been replaced in general usage by synonyms. All these names are discussed below. Five generic names established by Linnaeus (1758), namely Attelabus, Buprestis, Cantharis, Chermes and Cicindela, were intentionally used by Geoffroy (1762) in a sense different from that of Linnaeus. They can be treated either as misidentifications, or as junior homonyms of Linnaean names. In either case they are invalid and do not require action.
- A.8 I am aware that it has been the Commission's practice in recent years to consider applications for the conservation of a single name or a very few names from a single taxonomic group, as for the 16 names conserved from Geoffroy (1762) over the last 37 years. However, I believe that it would be in the interests of nomenclatural stability for this application, initially put forward by me 13 years ago, to be considered as a whole. It has been prepared so that each name is subject to separate consideration by the Commission. This means that the Commission's ruling on names that receive clear support from zoologists will not be delayed even if there are other names that generate some opposition. I therefore urge fellow zoologists to submit their views to the Commission on the proposals put forward against each of those generic names that fall within their specialist area.
- **A.9** The table below lists all the new generic names proposed by Geoffroy. I have given the relevant Opinion number against those names already placed on the Official List or Official Index, even if attributed to an author other than Geoffroy. I have given the page number in this application for those names considered here for the first time and also for names already ruled on by the Commission but on which I comment further. I have grouped the names in alphabetical order in systematic groups following accepted systematic order except that the Coleoptera are placed at the end.

New Generic Names Proposed by Geoffroy (1762)

Arachnida, Pseudoscorpionida

Chelifer Placed on Official List in Opinion 1542 (1989)

Crustacea

Asellus Considered on p. 111 (B.1)

Binoculus Placed on Official Index in Opinion 502 (1958), considered further on p. 111 (B.2)

Insecta, Thysanura

Forbicina Considered on p. 112 (C.1)

Insecta, Orthoptera

Acrydium Considered on p. 112 (D.1)

Mantes Placed on Official Index in Opinion 299 (1954), considered further on p. 112 (D.2)

Insecta, Plecoptera

Perla Placed on Official List in Opinion 645 (1963)

Insecta, Homoptera

Psylla Placed on Official List in Opinion 731 (1965)

Tetigonia Placed on Official Index in Opinion 299 (1954), considered further on p. 114 (E.1)

Insecta, Heteroptera

Corixa Placed on Official List in Opinion 281 (1954)

Hepa Considered on p. 114 (F.1)

Naucoris Placed on Official List in Opinion 681 (1963)

Insecta, Neuroptera

Formicaleo Considered on p. 114 (G.1)

Insecta, Diptera

Bibio Placed on Official List in Opinion 441 (1957)

Nemotelus Placed on Official List in Opinion 441 (1957)

Scatopse Placed on Official List in Opinion 441 (1957)

Stomoxys Placed on Official List in Opinion 441 (1957)

Stratiomys Placed on Official List in Opinion 442 (1957)

Volucella Placed on Official List in Opinion 441 (1957)

Insecta, Hymenoptera

Crabro Placed on Official Index in Opinion 144 (1943) and Direction 4 (1954), considered further on p. 115 (H.1)

Diplolepis Considered on p. 115 (H.2)

Eulophus Considered on p. 116 (H.3)

Urocerus Considered on p. 116 (H.4)

Insecta, Lepidoptera

Pterophorus Placed on Official List in Opinion 703 (1964), considered further on p. 117 (J.1)

Tinaea Placed on Official Index in Opinion 450 (1957), considered further on p. 117 (J.2)

Insecta, Coleoptera

Altica Considered on p. 117 (K.1)

Anaspis Placed on Official List in Opinion 1273 (1984)

Anthrenus Considered on p. 118 (K.2)

Anthribus Considered on p. 118 (K.3)

Bostrichus Considered on p. 119 (K.4)

Bruchus Considered on p. 119 (K.5)

Byrrhus Considered on p. 119 (K.6)

Cerocoma Considered on p. 119 (K.7)

Cistela Considered on p. 119 (K.8)

Clerus Placed on Official List in Opinion 1273 (1984)

Copris Considered on p. 120 (K.9)

Crioceris Placed on Official List in Opinion 908 (1970), considered further on p. 120 (K.10)

Cryptocephalus Considered on p. 120 (K.11)

Cucujus Considered on p. 120 (K.12)

Diaperis Considered on p. 121 (K.13)

Dyticus Placed on Official Index in Opinion 619 (1961), considered further on p. 121 (K.14)

Galeruca Considered on p. 121 (K.15)

Gyrinus Considered on p. 121 (K.16)

Hydrophilus Considered on p. 121 (K.17)

Lampyris Placed on Official List in Opinion 1273 (1984)

Luperus Placed on Official List in Opinion 1273 (1984)

Melolontha Considered on p. 121 (K.18)

Mylabris Considered on p. 121 (K.19)

Notoxus Considered on p. 122 (K.20)

Omalisus Considered on p. 122 (K.21)

Peltis Considered on p. 122 (K.22)

Platycerus Considered on p. 123 (K.23)

Prionus Considered on p. 123 (K.24)

Ptilinus Considered on p. 123 (K.25)

Pyrochroa Considered on p. 124 (K.26)

Rhinomacer Considered on p. 124 (K.27)

Scolytus Placed on Official List in Opinion 683 (1963)

Stenocorus Considered on p. 125 (K.28)

Tritoma Considered on p. 125 (K.29)

B. Crustacea

B.1 Asellus Geoffroy, 1762, vol. 2, p. 671. Type species by subsequent monotypy (Fourcroy, 1785, p. 541) Oniscus aquaticus Linnaeus, 1758 (p. 637), the only species included by reference in this genus by Geoffroy in 1762. I propose that Asellus Geoffroy, 1762 be ruled an available name and placed on the Official List.

B.2 *Binoculus* (Geoffroy, 1762, vol. 2, p. 658 — unavailable name) Geoffroy in Müller, 1764, p. xxiv. Opinion 502 (1958) recorded placement on the Official Index of the names *Binoculus* Geoffroy, 1764 (as published in a rejected work) and *Binoculus* Müller, 1776 (p. 200) (suppressed under the plenary powers). The correct date for Geoffroy's work is 1762, since the date of 1764 refers only to the new title page to Geoffroy's work (see Hagen, 1862–1863). For *Binoculus* Müller, 1776 the correct reference should be to Geoffroy in Müller, 1764 because the use of *Binoculus* in Müller (1776) was merely a use of the name first made available by Geoffroy in Müller, 1764.

I propose that the entries on the Official Index be corrected as follows: *Binoculus* Geoffroy, 1764 to read *Binoculus* Geoffroy, 1762 and *Binoculus* Müller, 1776 to read *Binoculus* Geoffroy in Müller, 1764.

- **B.3** The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to rule that the generic name Asellus Geoffroy, 1762 is available despite publication in a suppressed work;
 - (2) to rule that:
 - (a) the authorship of *Binoculus* Geoffroy, 1764 should be corrected to Geoffroy, 1762;
 - (b) the authorship of *Binoculus* Müller, 1776 should be amended to Geoffroy in Müller, 1764;
 - (3) to place on the Official List of Generic Names in Zoology the name *Asellus* Geoffroy, 1762 (gender: masculine), type species, by subsequent monotypy (Fourcroy, 1785), *Oniscus aquaticus* Linnaeus, 1758;
 - (4) to place on the Official List of Specific Names in Zoology the name *aquaticus* Linnaeus, 1758, as published in the binomen *Oniscus aquaticus* (specific name of the type species of *Asellus* Geoffroy, 1762);
 - (5) to amend the following entries on the Official Index of Generic Names in Zoology:
 - (a) Binoculus Geoffroy, 1764 to record authorship from Geoffroy, 1762 in accordance with the ruling in (2)(a) above;
 - (b) *Binoculus* Müller, 1776 to record authorship from Geoffroy in Müller, 1764 in accordance with the ruling in (2)(b) above.

C. Insecta, Thysanura

C.1 Forbicina (Geoffroy, 1762, vol. 2, p. 611 — unavailable name) Geoffroy in Müller, 1764, p. xxiv. Two taxonomic species are included in the genus by Geoffroy (1762) and are the first subsequently included nominal species (Fourcroy, 1785, p. 525). Fourcroy includes Lepisma saccharina Linnaeus, 1758 (type species of Lepisma Linnaeus, 1758, as designated by Latreille (1810, p. 423)) and Forbicina saltatrix Geoffroy in Fourcroy, 1785 (p. 525) (a nomen dubium). In the 19th and early 20th centuries Forbicina was used in various senses as a valid name, but it is not in use now. I am unable to find a type designation for this genus. In the absence of such I here designate Lepisma saccharina Linnaeus, 1758 as type species so that Forbicina Geoffroy in Müller, 1764 becomes a junior objective synonym of Lepisma.

D. Insecta, Orthoptera

- **D.1** Acrydium (Geoffroy, 1762, vol. 1, p. 390 unavailable name) Geoffroy in Müller, 1764, p. xvii. The Commission is currently considering an application from K.H.L. Key (BZN 45: 191–193) proposing, among other actions, the suppression of Acrydium Müller, 1764. In commenting on this application, I pointed out (BZN 46: 42–43) that the author of Acrydium was Geoffroy in Müller. I support Key's proposal for the suppression of Acrydium Geoffroy in Müller, 1764 and therefore do not propose any action to conserve Acrydium Geoffroy, 1762.
- **D.2** Mantes (Geoffroy, 1762, vol. 1, p. 399 unavailable name) Geoffroy in Müller, 1764, p. xvii. Mantis Linnaeus, 1758, p. 425 and 1767, p. 689. In Opinion 299 Mantes Geoffroy, 1762 was placed on the Official Index as published in a rejected work. This

does not affect the status of *Mantes* Geoffroy in Müller which remains an available name. The type species by subsequent monotypy (Fourcroy, 1785, p. 183) is indicated as *Gryllus gongylodes* Linnaeus, 1758 (an oriental species, now in the genus *Gongylus* Thunberg, 1815). It is clear from the distribution, description and figure in Geoffroy (1762) that the type species was misidentified and that Geoffroy was dealing with *Gryllus religiosus* Linnaeus, 1758 (now in the genus *Mantis*). As the name *Mantes* is not in use it is desirable to suppress the name *Mantes* Geoffroy in Müller, 1764.

The name *Mantis* should also be considered. Linnaeus used the name in 1758 (p. 425) as an 'intermediate term' between the generic name and the specific name but not, according to Opinion 279 (1954), thereby giving it subgeneric status. In 1767 (p. 689) he used it as a generic name. *Mantis* Linnaeus, 1767 was placed on the Official List (Opinion 149) and *Mantis* Linnaeus, 1758 on the Official Index (Opinion 299). Brünnich (1764, p. 60) used *Mantis* with a description apparently corresponding to Linnaeus's (1758), but Brünnich's work was not dealt with in Opinion 279; hence, *Mantis* Brünnich, 1764 is an available name predating *Mantis* Linnaeus, 1767. Since it is possible that other works used the nominal genus *Mantis* between 1758 and 1767, it is desirable to conserve the name *Mantis* Linnaeus, 1758 as a genus-group name (for comparable rulings see Opinions 158, 299 and 450, in which ten similar names were conserved as from Linnaeus, 1758). *Mantis* Linnaeus, 1758 should be placed on the Official List instead of *Mantis* Linnaeus, 1767.

An additional matter is the type species of *Mantis* which was given on the Official List as *Gryllus religiosus* Linnaeus, 1758, as designated by Latreille (1810). However, under Article 68e(i) the type species is, by Linnaean tautonymy, *Gryllus gongylodes* Linnaeus, 1758, the only species assigned by Linnaeus (in both 1758 and 1767) to *Mantis* in the synonymy of which is given a pre-Linnaean reference (viz. *Aldr[ovandus]*, *ins.*, *t.* 13, *f.* 21, Mantis) with the single word '*Mantis*'. Since acceptance of *G. gongylodes* as type species of *Mantis* would lead to a change in widely known generic and family-group names it is desirable to confirm Latreille's designation of *G. religiosus* as the type species of *Mantis*.

I propose the suppression of the name *Mantes* Geoffroy in Müller, 1764 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy and the conservation of the name *Mantis* Linnaeus, 1758 as a genus-group name with the type species *Gryllus religiosus* Linnaeus, 1758. Entries on the Official Lists and Indexes should be made or amended accordingly.

- **D.3** The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers:
 - (a) to suppress the generic name *Mantes* Geoffroy in Müller, 1764 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (b) to rule that the genus-group name *Mantis* Linnaeus, 1758 is an available name;
 - (c) to rule that the type species of *Mantis* Linnaeus, 1758, by subsequent designation by Latreille (1810), is *Gryllus religiosus* Linnaeus, 1758;
 - (2) to amend the entries on the relevant Official Lists relating to *Mantis* Linnaeus, 1767 and *Gryllus religiosus* Linnaeus, 1758 to record the rulings in (1)(b) and (c) above, namely that the authorship of *Mantis* is Linnaeus, 1758;

(3) to place on the Official Index of Rejected and Invalid Names in Zoology the name *Mantes* Geoffroy in Müller, 1764, as suppressed in (1)(a) above.

E. Insecta, Homoptera

- E.1 Tetigonia (Geoffroy, 1762, vol. 1, p. 429 unavailable name) Geoffroy in Fourcroy, 1785, p. 193. In Opinion 299 the names Tetigonia Fourcroy, 1785 (the authorship of which should be corrected to Geoffroy in Fourcroy) and Tetigonia Blanchard, 1852 were placed on the Official Index as junior homonyms of Tettigonia Linnaeus, 1758. However, under Article 56b these names are not homonyms since there is a one letter difference in the spelling. The type species of Tetigonia Geoffroy in Fourcroy, 1785 by subsequent designation (Blanchard, 1845, pp. 420, 425, as 'Tettigonia Geoff.') is Cicada viridis Linnaeus, 1758 (p. 438), a species included in Tetigonia by Geoffroy (1762, p. 417) (see his 'Remarque' on pp. 428-429) with a reference to Linnaeus (1758) and one of the first included nominal species (Fourcroy, 1785, pp. 190, 193). Tetigonia Blanchard, 1852 is a later use of Tetigonia Geoffroy in Fourcroy, 1785. As Tetigonia Geoffroy in Fourcroy, 1785 is a senior objective synonym of Cicadella Latreille, 1817, already placed on the Official List in Opinion 647 (1963), I propose suppression of Tetigonia Geoffroy in Fourcroy, 1785 and emendation of the relevant entry on the Official Index. I also propose deletion of the entry on the Official Index for Tetigonia Blanchard, 1852 since this name was nothing more than a later use of Tetigonia Geoffroy in Fourcroy, 1785.
- **E.2** The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to suppress the generic name *Tetigonia* Geoffroy in Fourcroy, 1785 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (2) to amend the entry recorded as *Tetigonia* Fourcroy, 1785 on the Official Index of Rejected and Invalid Generic Names in Zoology in accordance with the ruling in
 (1) above and to record authorship from Geoffroy in Fourcroy, 1785;
 - (3) to delete the entry recorded as *Tetigonia* Blanchard, 1852 on the Official Index of Rejected and Invalid Generic Names in Zoology.

F. Insecta, Heteroptera

F.1 Hepa (Geoffroy, 1762, vol. 1, p. 479 — unavailable name) Geoffroy in Müller, 1764, p. xviii. Two species are included in the genus by Geoffroy (1762) and are the first subsequently included nominal species (Fourcroy, 1785, p. 222): Nepa cinerea Linnaeus, 1758 (type species of Nepa Linnaeus, 1758) and Nepa linearis Linnaeus, 1758 (type species of Ranatra Fabricius, 1790). Hepa was not used as a valid name after 1785. China (1941) designated Nepa cinerea Linnaeus, 1758 as type species of Hepa Geoffroy, 1762 and thus under Article 67f it also stands as type of Hepa Geoffroy in Müller, 1764; thus Hepa Geoffroy in Müller, 1764 became a junior objective synonym of Nepa.

G. Insecta, Neuroptera

G.1 Formicaleo (Geoffroy, 1762, vol. 2, p. 256 — unavailable name) Geoffroy in Müller, 1764, p. xx. The type of this genus is *F. nostras* Geoffroy in Fourcroy, 1785 (p. 360) by subsequent monotypy. In 1762 Geoffroy described this species, with a

reference to *Hemerobius formicaleo* Linnaeus, 1758 (now *Myrmeleon formicarius* Linnaeus, 1767*), but apparently he later correctly realised that his species was different from Linnaeus's. *F. nostras* is a senior subjective synonym of *Myrmeleon europeus* MacLachlan, 1873, which is the type species of *Euroleon* Esben-Petersen, 1918, a name in nearly general current usage. The use of *Formicaleo* as a valid name in the 19th and early 20th centuries has a complex and tangled history, and for a long period thereafter it was not used as valid. Recently (Leraut, 1980, pp. 240, 244, and at least four further publications) *Formicaleo* 'Müller, 1764' was used as the valid name instead of *Euroleon*, but some authors still use *Euroleon* as the valid name. In my opinion conservation of *Formicaleo* is undesirable because the name was a source of confusion in the past and if conserved would cause further confusion because the very similar name *Formicaleon* Banks, 1911 is widely used in the same group. I propose the suppression of *Formicaleo* Geoffroy in Müller, 1764, which should be placed on the Official Index.

- **G.2** The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to suppress the generic name *Formicaleo* Geoffroy in Müller, 1764 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (2) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Formicaleo* Geoffroy in Müller, 1764 as suppressed in (1) above.

H. Insecta, Hymenoptera

- **H.1** *Crabro* (Geoffroy, 1762, vol. 2, p. 261 unavailable name) Geoffroy in Müller, 1764, p. xxii. Opinion 144 and Direction 4 suppressed *Crabro* Geoffroy, 1762 for the purposes of both the Principle of Priority and the Principle of Homonymy in order to conserve *Crabro* Fabricius, 1775. The suppression automatically applied to *Crabro* Geoffroy in Müller, 1764, and this was not cancelled by the subsequent ruling (Opinion 228) that Geoffroy's 1762 work was unavailable. So that the conservation of *Crabro* Fabricius, 1775 is clear beyond doubt I propose the addition of the words 'and all uses of *Crabro* prior to that by Fabricius, 1775' to the entry for *Crabro* Geoffroy, 1762 on the Official Index.
- **H.2** *Diplolepis* Geoffroy, 1762, vol. 2, p. 308. Latreille (1810, p. 436) indicated as type species *Cynips quercusfolii* Linnaeus, 1758, which is the type species of *Cynips* Linnaeus, 1758. This is not an originally included species of *Diplolepis*; however, it is a senior synonym of *Diplolepis quercus* Geoffroy in Fourcroy, 1785 (p. 391) which is one of the first subsequently included nominal species (Fourcroy, 1785, p. 391). This synonymy was established long before Latreille's work (Fabricius, 1775, p. 315). Moreover, both Linnaeus (1758, pp. 553–554) and Geoffroy (1762) refer to the figures in Roesel's book in their descriptions. However, the synonymy was not cited by Latreille (1810) and this makes his type designation invalid (Article 69a(v)). No subsequent valid designations of this type species are known to me. Karsch (1880, p. 288) (see Rohwer & Fagan, 1917, p. 365) designated as type species *Cynips rosae* Linnaeus, 1758 (p. 553), the only species properly provided with a reference to Linnaeus in the work of Geoffroy and one of the first subsequently included nominal species (Fourcroy, 1785, p. 391). As

^{*}Although Myrmeleon formicarius is a junior synonym of Hemerobius formicaleo it is in general use and merits conservation.

a result the formerly well known name *Rhodites* Hartig, 1840 disappears as a junior synonym of *Diplolepis*. European workers at one time used *Rhodites*, but *Diplolepis* came into increased use among American authors, and after Weld's (1952) monograph the name was accepted in this sense by European authors too. Thus *Cynips rosae* is the valid type species under the Code, and it corresponds to the nearly general current usage of *Diplolepis*. I propose that *Diplolepis* Geoffroy, 1762 be ruled an available name and placed on the Official List.

- H.3 Eulophus Geoffroy, 1762, vol. 2, p. 312. Type species by subsequent monotypy (Olivier, 1791, p. 454) Ichneumon ramicornis Fabricius, 1781 (p. 441) (= Cynips eulophus Geoffroy in Fourcroy, 1785 (p. 389)), the only taxonomic species included in this genus by Geoffroy (1762). The long accepted synonymy of E. ramicornis (Fabricius, 1781) with E. larvarum (Linnaeus, 1758) was recently disproved by Graham (1988, p. 26). I propose that Eulophus Geoffroy, 1762 be ruled an available name and placed on the Official List.
- **H.4** *Urocerus* Geoffroy, 1762, vol. 2, p. 264. Type species by subsequent monotypy (Fourcroy, 1785, p. 363) *Ichneumon gigas* Linnaeus, 1758, p. 560, the only species included in *Urocerus* by Geoffroy (1762). I propose that *Urocerus* Geoffroy, 1762 be ruled an available name and placed on the Official List.
- **H.5** The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to rule that the following generic names are available despite publication in a suppressed work:
 - (a) Diplolepis Geoffroy, 1762;
 - (b) Eulophus Geoffroy, 1762;
 - (c) Urocerus Geoffroy, 1762;
 - (2) to confirm that all uses of the name *Crabro* prior to that by Fabricius (1775) are suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy;
 - (3) to place on the Official List of Generic Names in Zoology the following names conserved in (1) above:
 - (a) Diplolepis Geoffroy, 1762 (gender: feminine), type species, by subsequent designation by Karsch (1880), Cynips rosae Linnaeus, 1758;
 - (b) Eulophus Geoffroy, 1762 (gender: masculine), type species, by subsequent monotypy (Olivier, 1791) Ichneumon ramicornis Fabricius, 1781;
 - (c) Urocerus Geoffroy, 1762 (gender: masculine), type species, by subsequent monotypy (Fourcroy, 1785), Ichneumon gigas Linnaeus, 1758;
 - (4) to place on the Official List of Specific Names in Zoology the following names:
 - (a) gigas Linnaeus, 1758, as published in the binomen *Ichneumon gigas* (specific name of the type species of *Urocerus* Geoffroy, 1762);
 - (b) ramicornis Fabricius, 1781, as published in the binomen Ichneumon ramicornis (specific name of the type species of Eulophus Geoffroy, 1762);
 - (c) rosae Linnaeus, 1758, as published in the binomen Cynips rosae (specific name of the type species of Diplolepis Geoffroy, 1762);
 - (5) to amend the entry for *Crabro* Geoffroy, 1762 on the Official Index of Rejected and Invalid Generic Names in Zoology in accordance with the ruling in (2) above.

J. Insecta, Lepidoptera

- **J.1** Pterophorus Geoffroy, 1762, vol. 2, p. 90. This name was placed on the Official List in Opinion 703 (1964) with the incorrect authorship of Schäffer, 1766 and incorrect data on the type species. In fact the name was already available from Geoffroy in Müller, 1764. For uniformity with other cases I propose the conservation of Pterophorus with authorship of Geoffroy, 1762 under the plenary powers. The Official List states that Phalaena pentadactyla Linnaeus, 1758 is type by designation of Whalley (1961, p. 159), but the same species was earlier designated as type species by Curtis (1827, text for pl. 161) and Curtis's designation is available regardless of the authorship attributed to the name Pterophorus (Article 67f). However, the first valid designation is by Latreille (1810, p. 442), who designated as type Phalaena didactyla Linnaeus, 1758 (p. 542) ('Pterophorus didactylus, Fab.') (now in the genus Geina Tutt, 1906). Therefore the type designation corresponding to general current usage should be conserved. I propose that Pterophorus Geoffroy, 1762 be ruled an available name with Phalaena pentadactyla Linnaeus, 1758 as type species, and that the entries for Pterophorus and Phalaena pentadactyla on the Official List be amended accordingly.
- **J.2** *Tinaea* (Geoffroy, 1762, vol. 2, p. 173 unavailable name) Geoffroy in Müller, 1764, p. xix. *Tinaea* Geoffroy, 1762 (as published in a rejected work) was placed on the Official Index in Opinion 450 (1957), but this does not affect the status of *Tinaea* Geoffroy in Müller, 1764, which remains an available name. Corbet & Tams (1943) designated *Phalaena pellionella* Linnaeus, 1758 as type species of *Tinaea* Geoffroy, 1762 and it is therefore also type of *Tinaea* Geoffroy in Müller, 1764. As a result of this type designation *Tinaea* Geoffroy in Müller, 1764 becomes a junior objective synonym of *Tinea* Linnaeus, 1758.
- J.3 The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers:
 - (a) to rule that the generic name *Pterophorus* Geoffroy, 1762 is available despite publication in a suppressed work;
- (b) to set aside all fixations of type species for the nominal genus *Pterophorus* Geoffroy, 1762 prior to that by Curtis (1827) of *Phalaena pentadactyla* Linnaeus, 1758;
- (2) to amend the entry for *Pterophorus* Schäffer, 1766 on the Official List of Generic Names in Zoology to record authorship from Geoffroy, 1762 and the type species designation by Curtis (1827) as ruled in (1) above;
 - (3) to amend the entry for *pentadactyla*, *Phalaena*, Linnaeus, 1758 on the Official List of Specific Names in Zoology to record it as the type species of *Pterophorus* Geoffroy, 1762.

K. Insecta, Coleoptera

K.1 Altica Geoffroy, 1762, vol. 1, p. 244. Type species by subsequent designation (Latreille, 1810, p. 432) Chrysomela oleracea Linnaeus, 1758 (p. 372), a taxonomic species included in this genus by Geoffroy (1762) and one of the first subsequently included nominal species (Fabricius, 1775, p. 112). The unjustified emendation Haltica Illiger, 1801 was in general use for a long time, but in recent taxonomic literature Altica is used more often. I propose that Altica Geoffroy, 1762 be ruled an available name and placed on the Official List.

K.2 Anthrenus Geoffroy, 1762, vol. 1, p. 113. Geoffroy (1762) included in the genus two taxonomic species: Dermestes scrophulariae Linnaeus, 1758 (p. 356) (misidentification of Anthrenus pimpinellae Fabricius, 1775) and A. florilegus Geoffroy in Fourcroy, 1785 (p. 27) (junior synonym of A. verbasci Linnaeus, 1767). Fabricius (1775, p. 61) included four nominal species in the genus as follows (current generic and subgeneric nomenclature according to Mroczkowski, 1975): Anthrenus (Florilinus) museorum (Linnaeus, 1761); A. (A.) pimpinellae Fabricius, 1775; A. (A.) scrophulariae (Linnaeus, 1758); and A. (Nathrenus) verbasci (Linnaeus, 1767) (misidentification of A. museorum (Linnaeus)). Latreille (1810, p. 428) gave as type species 'Anthrenus verbasci, Fab.', which can be referred to A. verbasci Linnaeus or to A. museorum Linnaeus (verbasci sensu Fabricius). Westwood ([1838], p. 15) and Thomson (1859, p. 73) indicated as type species A. museorum. If any of these designations are accepted the current subgeneric names in this economically very important genus would be changed. Hope (1840, p. 108) indicated as type species A. pimpinellae but this type designation is not accepted by recent workers. Mroczkowski (1968, p. 139) seems to be the first who, in accordance with previous usage, designated Dermestes scrophulariae Linnaeus, 1758 as the type species of Anthrenus. I accordingly propose that Anthrenus Geoffroy, 1762 be ruled an available name and placed on the Official List, with Dermestes scrophulariae Linnaeus, 1758 as type species.

K.3 Anthribus Geoffroy, 1762, vol. 1, p. 306. Type species by subsequent designation (Jordan, 1931, p. 287) Anthribus fasciatus Forster, 1770 (p. 5)* (= A. marmoratus Geoffroy in Fourcroy, 1785 (p. 136)), a taxonomic species included in the genus by Geoffroy (1762) and one of the two first subsequently included nominal species (Forster, 1770, p. 5). The usage of the name Anthribus has a tangled history. Latreille (1810, p. 430) designated as type species Curculio latirostris Fabricius, 1775 (= A. ater Geoffroy in Fourcroy, 1785 (p. 137)), a junior synonym of Curculio resinosus Scopoli, 1763 (now in the genus Platyrhinus [Clairville], 1798)**. This taxonomic species was included in the genus by Geoffroy (1762) but does not belong to the first subsequently included nominal species. Although this concept of Anthribus was supported by Bradley (1946, p. 96) it was very rarely used. Schönherr (1823, col. 1135) designated as type species Curculio albinus Linnaeus, 1758 (now in the genus Platystomos Schneider, 1791). This was not one of Geoffroy's originally included taxonomic species nor was it one of the first subsequently included nominal species; it was first placed in Anthribus by Fabricius (1790, p. 220; 1792, p. 375). Anthribus, with type species albinus, has usage in the 19th and 20th centuries, including some recent papers. A. fasciatus was usually placed in the genus Brachytarsus Schönherr, 1823. Jordan (1931, p. 287) considered that Brachytarsus should be replaced by Anthribus. This concept of Anthribus (with fasciatus as type) was accepted by Hoffmann (1945, p. 152), Valentine (1960, p. 45), Angelov (1963, p. 139; 1981, p. 43), Silfverberg (1978, p. 118), Chao (1976, p. 339),

^{*}The availability of this and some other specific names was provided by Forster (1770) with a reference to a description in Geoffroy's (1762) work. These names are currently credited to the next work of the same author (Forster, 1771.)

^{**}The work of Clairville (1798, 1806) was published anonymously and in many reference books (Hagen, 1862–1863; Sherborn, 1902, 1922–1933; Neave, 1939–1940) is credited to J.R. Schellenberg. In fact, the original French text was written by J. de Clairville, the translation of the parallel German text was by L. Pool and the illustrations were by Schellenberg (see Méquignon, 1940; Strand, 1942; and especially Wolff, 1858–1862, p. 402).

Morimoto (1978, p. 35) and some other authors. I consider that it would be in the interests of nomenclatural stability for this concept to be accepted and propose that *Anthribus* Geoffroy, 1762 be ruled an available name and placed on the Official List.

- **K.4** Bostrichus Geoffroy, 1762, vol. 1, p. 301. Type species by subsequent designation (Latreille, 1810, p. 431) Dermestes capucinus Linnaeus, 1758 (p. 355) (= Bostrichus ruber Geoffroy in Fourcroy, 1785 (p. 133)), the only taxonomic species included in this genus by Geoffroy (1762) and one of the first subsequently included nominal species (Fabricius, 1775, p. 59). The often used emendation Bostrychus Agassiz, 1846 is unjustified and preoccupied by Bostrychus Lacépède, 1802 (Osteichthyes). I propose that Bostrichus Geoffroy, 1762 be ruled an available name and placed on the Official List.
- **K.5** Bruchus Geoffroy, 1762, vol. 1, p. 163. The Commission is currently considering an application from L. Borowiec (BZN 45: 194–196) for the conservation of the generic name Bruchus Linnaeus, 1767. I support this application and therefore do not propose any action to conserve Bruchus Geoffroy, 1762.
- K.6 Byrrhus (Geoffroy, 1762, vol. 1, p. 108 unavailable name) Geoffroy in Müller, 1764, p. xii. Geoffroy (1762) included five taxonomic species in the genus. The first one was provided with a reference to Xyloterus domesticus (Linnaeus, 1758) (IPIDAE) but was really Anobium punctatum (De Geer, 1774) (ANOBIIDAE). Other species were Stegobium paniceum (Linnaeus, 1758), Ernobius mollis (Linnaeus, 1758), Hadrobregmus pertinax (Linnaeus, 1758) and Ochina ptinoides (Marsham, 1802) (= Byrrhus fasciatus Geoffroy in Fourcroy, 1785 (p. 26), name preoccupied) all now placed in the Anobium domesticum' as type species of Byrrhus Geoffroy, but this designation is ambiguous because of misidentification of the Linnaean species by Geoffroy. The name Byrrhus was used only rarely and only in the past for species now placed in the ANOBIIDAE and seems never to have been used for species in the IPIDAE. Linnaeus (1767, p. 568) used the name Byrrhus in a different meaning for beetles now placed in the BYRRHIDAE. The type species of Byrrhus Linnaeus by subsequent designation (Latreille, 1810, p. 428) is Dermestes pilula Linnaeus, 1758 (p. 356). In accordance with current usage, I propose conservation of Byrrhus Linnaeus, 1767 by suppression of all previous uses of the name and the placing of Byrrhus Linnaeus, 1767 on the Official List.
- **K.7** *Cerocoma* Geoffroy, 1762, vol. 1, p. 357. Type species by subsequent monotypy (Fabricius, 1775, p. 262) *Meloe schaefferi* Linnaeus, 1758 (p. 420) (= *Cerocoma viridis* Geoffroy in Fourcroy, 1785 (p. 163)), the only taxonomic species included in this genus by Geoffroy (1762). I propose that *Cerocoma* Geoffroy, 1762 be ruled an available name and placed on the Official List.
- K.8 Cistela (Geoffroy, 1762, vol. 1, p. 115 unavailable name) Schaeffer, 1766, pl. xlv and text. Pistella Müller, 1764, p. xiii (misspelling of Cistela). Geoffroy (1762) included three taxonomic species in this genus, and Forster (1770, p. 4) first subsequently included three nominal species. All these species are placed in the genus Byrrhus Linnaeus, 1767 (BYRRHIDAE). Dermestes pilula Linnaeus, 1758, the type species of the genus Byrrhus Linnaeus, 1767 but not one of the nominal species included in Cistela by Forster (1770), was designated as type species of Cistela Geoffroy by Crotch (1870, p. 43). Fabricius (1775, pp. 116–118) included 13 nominal species in the genus; these are now placed in various families, three of them in the ALLECULIDAE. One of these three species, Chrysomela sulphurea Linnaeus, 1758 (now in the genus Cteniopus Solier, 1835) was designated as type of Cistela Fabricius by Latreille (1810, p. 429) and

another, Chrysomela ceramboides Linnaeus, 1758 (now in the genus Pseudocistela Crotch, 1873), by Curtis (1836, text for pl. 594). In the 19th and 20th centuries the name Cistela was used in the sense of Fabricius for various genera of the ALLECULIDAE, and for two genera of BYRRHIDAE (Byrrhus and Cytilus), i.e. in the sense of Geoffroy and Forster. The name is rarely used in modern literature. I propose the suppression of Cistela Schaeffer, 1766, the first available use of the name, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy. The name Pistella Müller, 1764, which was an unjustified emendation or misspelling of Cistela, was overlooked by all nomenclators, was never in use, and I propose its suppression also. The names should then be placed on the Official Index.

- **K.9** Copris Geoffroy, 1762, vol. 1, p. 87. Type species by subsequent designation (Latreille, 1810, p. 428) Scarabaeus lunaris Linnaeus, 1758 (p. 346), a taxonomic species included in this genus by Geoffroy (1762) and one of three first subsequently included nominal species (Müller, 1776, p. 55). I propose that Copris Geoffroy, 1762 be ruled an available name and placed on the Official List.
- **K.10** Crioceris Geoffroy, 1762, vol. 1, p. 237. This name was placed on the Official List in Opinion 908 (June 1970); authorship was attributed to Müller, 1764 (p. xiii) because Geoffroy's work had been suppressed; the type species was designated under the plenary powers as Chrysomela asparagi Linnaeus, 1758. Geoffroy established five generic names in the family CHRYSOMELIDAE; these five genera (Altica, Crioceris, Cryptocephalus, Galeruca and Luperus) are all widely distributed and have numerous species. It would be highly confusing if four of these generic names were attributed to Geoffroy (1762) as proposed in this application and the fifth (Crioceris) to Müller, 1764. It would be much more appropriate for the availability of Crioceris now to be taken as from Geoffroy, 1762. I propose that Crioceris Geoffroy, 1762 be ruled an available name and the Official List amended accordingly.
- **K.11** Cryptocephalus Geoffroy, 1762, vol. 1, p. 231. Type species by subsequent designation (Latreille, 1810, p. 432) Chrysomela sericea Linnaeus, 1758 (p. 374), a taxonomic species included in this genus by Geoffroy (1762) and one of the first subsequently included nominal species (Fabricius, 1775, p. 109). I propose that Cryptocephalus Geoffroy, 1762 be ruled an available name and placed on the Official List.
- K.12 Cucujus (Geoffroy, 1762, vol. 1, p. 123 unavailable name) Geoffroy in Müller, 1764, p. xvi. Geoffroy (1762) proposed this name in replacement of Buprestis Linnaeus, 1758, because he used the name Buprestis (as did Linnaeus in the pre-1758 editions of Systema Naturae) for carabids (Carabus and Cicindela of Linnaeus, 1758). Geoffroy included in Cucujus six taxonomic species, three with references to Linnaean species (but all were misidentified). All species of Geoffroy (the identity of C. viridis Geoffroy in Fourcroy, 1785 (p. 33) is unknown to me), and all mentioned Linnaean species belong to various genera of the BUPRESTIDAE. The name Cucujus was rarely used in this sense. Fabricius (1775, p. 204) used the name Cucujus in a different sense. The only species included by him in the genus was C. depressus Fabricius, 1775 (junior synonym of Meloe cinnabarina Scopoli, 1763 (p. 60)), the type by monotypy. Cucujus Fabricius is the type genus of the CUCUJIDAE. In accordance with general current usage I propose the conservation of Cucujus Fabricius, 1775 by suppression of all previous uses of the name Cucujus, and the placing of Cucujus Fabricius, 1775 on the Official List.

- **K.13** *Diaperis* Geoffroy, 1762, vol. 1, p. 337. Type species by subsequent monotypy (Müller, 1776, p. 74) *Chrysomela boleti* Linnaeus, 1758 (p. 371) (= *Diaperis fasciata* Geoffroy in Fourcroy, 1785 (p. 153)), the only taxonomic species included in this genus by Geoffroy (1762). I propose that *Diaperis* Geoffroy, 1762 be ruled an available name and placed on the Official List.
- **K.14** *Dyticus* (Geoffroy, 1762, vol. 1, p. 185 unavailable name) Geoffroy in Müller, 1764, p. xvi. Geoffroy (1762) consistently used the spelling *Dyticus* when he referred to this genus although he did cite the spelling *Dytiscus* when mentioning Linnaean names in the synonymies of the species. In Müller (1764) the spelling *Dyticus* was used without reference to *Dytiscus*. The type species of *Dyticus* [sic] was designated by Latreille (1810, pp. 167, 426) as *Dytiscus* [sic] *marginalis* 'Fabricius' (i.e. Linnaeus, 1758), thereby making *Dyticus* a junior objective synonym of *Dytiscus* Linnaeus, 1758. *Dyticus* was placed on the Official Index in Opinion 619 (1961) as a junior objective synonym; the author was given as Müller, 1776 as the first supposedly available use. The entry on the Official Index should be amended to attribute authorship of *Dyticus* to Geoffroy in Müller, 1764.
- **K.15** Galeruca Geoffroy, 1762, vol. 1, p. 251. Type species by subsequent designation (Latreille, 1810, p. 432) Chrysomela tanaceti Linnaeus, 1758 (p. 369), a taxonomic species included in this genus by Geoffroy (1762) and one of the first subsequently included nominal species (Müller, 1776, p. 83). I propose that Galeruca Geoffroy, 1762 be ruled an available name and placed on the Official List.
- **K.16** Gyrinus Geoffroy, 1762, vol. 1, p. 193. Type species by subsequent designation (Latreille, 1810, p. 426) Dytiscus natator Linnaeus, 1758 (p. 412), the only taxonomic species included in this genus by Geoffroy (1762) and one of two first subsequently included nominal species (Linnaeus, 1767, p. 567). I propose that Gyrinus Geoffroy, 1762 be ruled an available name and placed on the Official List.
- **K.17** *Hydrophilus* Geoffroy, 1762, vol. 1, p. 180. Type species by subsequent designation (Latreille, 1810, p. 428) *Dytiscus piceus* Linnaeus, 1758 (p. 411), a taxonomic species included in this genus by Geoffroy (1762) and one of the first subsequently included nominal species (De Geer, 1774, p. 371). I propose that *Hydrophilus* Geoffroy, 1762 be ruled an available name and placed on the Official List.
- K.18 Melolontha (Geoffroy, 1762, vol. 1, p. 195 unavailable name) Geoffroy in Müller, 1764, p. xiii. Geoffroy (1762) included five taxonomic species in the genus, all now placed in the subfamilies CLYTRINAE and CRYPTOCEPHALINAE of the family CHRYSOMELIDAE. Chrysomela quadripunctata Linnaeus, 1758 (now in Clytra) was designated as type species of Melolontha Geoffroy by Crotch (1870, p. 43). The name Melolontha was used in this sense only in the past and then only rarely. Fabricius (1775, p. 31) used the name Melolontha in a different sense for members of the family SCARABAEIDAE. Scarabaeus melolontha Linnaeus, 1758 (p. 351) (= Melolontha vulgaris Fabricius, 1775) is the type species of Melolontha Fabricius by absolute tautonomy. In accordance with general current usage I propose conservation of Melolontha Fabricius, 1775 by suppression of all previous uses of the name Melonotha, and the placing of Melolontha Fabricius, 1775 on the Official List.
- **K.19** *Mylabris* Geoffroy, 1762, vol. 1, p. 266. The Commission is currently considering an application by L. Borowiec (BZN **45**: 194–196) for the conservation of the generic name *Mylabris* Fabricius, 1775. I support this application and therefore do not propose any action to conserve *Mylabris* Geoffroy, 1762.

K.20 *Notoxus* Geoffroy, 1762, vol. 1, p. 356. Type species by subsequent designation (Latreille, 1810, p. 430) *Attelabus monoceros* Linnaeus, 1761 (p. 185) (= *Notoxus cucullatus* Geoffroy in Fourcroy, 1785 (p. 162)), the only taxonomic species included in this genus by Geoffroy (1762) and one of two first subsequently included nominal species (Fabricius, 1775, p. 158). I propose that *Notoxus* Geoffroy, 1762 be ruled an available name and placed on the Official List.

K.21 Omalisus Geoffroy, 1762, vol. 1, p. 179 (Omalysus Müller, 1764, p. xvi). Type species by subsequent monotypy (Fourcroy, 1785, p. 64) Omalisus fontisbellaquaei Geoffroy in Fourcroy, 1785 (p. 64), the only taxonomic species included in this genus by Geoffroy (1762). The unjustified emendation Homalisus Illiger, 1801 was in general use for a long time and was consistently used with the authorship of Geoffroy, 1762. The family-group name HOMALISIDAE (or HOMALISINAE) was widely used. However, in recent years usage has become more variable: some authors still use Homalisus, while some use Omalisus (Burakowski, 1988, p. 571) or Omalysus (Silfverberg, 1978, p. 117; Lawrence, 1987, p. 15). I propose that Omalisus Geoffroy, 1762 (in its original spelling) be ruled an available name and placed on the Official List.

K.22 Peltis (Geoffroy, 1762, vol. 1, p. 117 — unavailable name) Geoffroy in Müller, 1764, p. xiii. Geoffroy (1762) included ten taxonomic species in the genus. The identity is known to me of nine of these species: one is placed in the LEIODIDAE and eight (including both those that have a reference to Linnaeus, 1758) are placed in the SILPHIDAE. One of these species, Silpha quadripunctata Linnaeus, 1758 (type species of Xylodrepa Thomson, 1859) was designated by Crotch (1870, p. 43) as type species of Peltis Geoffroy. Müller (1776, pp. 63–65) was the first author to include nominal species in the genus. Of 26 nominal species included by him, 14 or 15 are Linnaean. At least eight of these species are placed in the SILPHIDAE and two (Silpha grossa Linnaeus, 1758 and S. ferruginea Linnaeus, 1758) to the family now named PELTIDAE or TROGOSSITIDAE. Some species are placed in other families.

Kugelann (1792, p. 508) used the name in a restricted sense for three species now placed in the PELTIDAE, among them *S. grossa* and *S. ferruginea* already included in *Peltis* by Müller, 1776. The same concept of *Peltis* was accepted by Illiger (1798, p. 369) and Fabricius (1801, p. 343). In the 19th century the name *Peltis* was sometimes used for various genera of SILPHIDAE and sometimes for PELTIDAE as now understood, in the latter case cited with Kugelann's authorship or, rarely, with Illiger's or Fabricius's authorship. Hope (1840, p. 150) designated *Silpha grossa* Linnaeus, 1758 (p. 361) as type species of '*Peltis* Fabricius' (Kugelann was shown as author of *Peltis* on p. 3). In the first half of the 20th century *Peltis* almost disappeared from usage, but after Crowson's works (1955, p. 82; 1964, p. 286) *Peltis* (in the sense of Kugelann) and PELTIDAE became widely used.

It is a matter for discussion whether the name *Peltis* should be attributed to Müller (1776), who was the first author to include in the genus species of the PELTIDAE as now understood, or to Kugelann (1792), who restricted the use of the name to species of the PELTIDAE alone (see above). As *Peltis* has been consistently used with Kugelann's authorship and has never been used with the authorship of Müller, I propose that Kugelann's authorship be accepted.

In accordance with current usage I propose conservation of *Peltis* Kugelann, 1792 by suppression of all previous uses of the name and the placing of *Peltis* Kugelann, 1792 on the Official List.

K.23 *Platycerus* Geoffroy, 1762, vol. 1, p. 59. Type species by subsequent designation (Latreille, 1810, p. 429) *Scarabaeus caraboides* Linnaeus, 1758 (p. 354), one of the taxonomic species included in the genus by Geoffroy (1762) and one of the first subsequently included nominal species (Fourcroy, 1785, p. 3). I propose that *Platycerus* Geoffroy, 1762 be ruled an available name and placed on the Official List.

K.24 *Prionus* Geoffroy, 1762, vol. 1, p. 198. Seven nominal species were first included in the genus by Scopoli (1772, pp. 99–100), three of which were new and seem never to have been clarified subsequently. The remaining four are now known as *Strangalina attenuata* (Linnaeus, 1758), *Strangalia quadrifasciata* (Linnaeus, 1758), *Pachyta quadrimaculata* (Linnaeus, 1758) (= *Cerambyx timidus* Scopoli, 1763) and *Leptura sanguinolenta* (Linnaeus, 1758). None of these species was designated subsequently as type of *Prionus* and I think none of them was included in *Prionus* after Scopoli's work. Latreille (1810, p. 431) designated as type *Cerambyx coriarius* Linnaeus, 1758 (p. 389), the only taxonomic species included in this genus by Geoffroy (1762) and one of the nominal species subsequently included by Fabricius (1775, p. 161). In accordance with general current usage I propose that *Prionus* Geoffroy, 1762 be ruled an available name and placed on the Official List, with *Cerambyx coriarius* Linnaeus, 1758 as the type species by designation under the plenary powers.

K.25 *Ptilinus* Geoffroy, 1762, vol. 1, p. 64. Geoffroy (1762) included in the genus two taxonomic species, the first provided with an incorrect reference to *Dermestes* pectinicornis Linnaeus, 1758 (now Ptilinus pectinicornis) and the second with an erroneous supposition on identity with Cantharis pectinicornis Linnaeus, 1758 (now in Schizotus Newman, 1838, PYROCHROIDAE). In Fourcroy (1785, p. 4) the corresponding species were named by Geoffroy as P. fuscus and P. flavescens. Possibly Geoffroy noticed the non-identity of his species with the Linnaean species after 1762 and therefore did not use Linnaean specific names but instead gave new names to both species. Ptilinus fuscus Geoffroy in Fourcroy, 1785 is regarded now as a good species in Ptilinus and P. flavescens Geoffroy in Fourcroy, 1785 as a junior synonym of P. fuscus. Müller (1776, p. 81) was the first author to include a nominal species in Ptilinus. His only species, P. cylindricus Müller, 1776 is the type species by subsequent monotypy. It was provided with a description, which corresponds with P. fuscus, and an incorrect citation in synonymy of Dermestes pectinicornis Linnaeus, 1758 (as Ptinus pectinicornis) and with a correct reference to Geoffroy. Müller did not state categorically that P. cylindricus was established as a replacement name for D. pectinicornis; therefore, the provisions of Article 72e of the Code do not apply and P. cylindricus Müller should be considered as a senior synonym of P. fuscus Geoffroy in Fourcroy. Furthermore, P. cylindricus Müller, 1776 is a senior primary homonym of P. cylindricus Germar, 1817 (p. 202) (now placed in the genus *Metholcus*). Since both *P. fuscus* Geoffroy in Fourcroy, 1785 and *M. cylindricus* (Germar, 1817) are in general current usage, the former an economically important species, and since P. cylindricus Müller has not been used as a valid name in the last 200 years, I propose the suppression of P. cylindricus Müller for the purposes of both the Principle of Priority and the Principle of Homonymy. This suppression would not prevent its use as a nominal type species which should be cited as *P. cylindricus* Müller, 1776 (a suppressed senior synonym of P. fuscus Geoffroy in Fourcroy, 1785). Some authors (e.g. Lucas, 1920, p. 557; White, 1974, p. 447) gave P. fuscus as the type species, while others (e.g. Latreille, 1810,

p. 427; Westwood, [1838], p. 29; Hope, 1840, p. 147; Thomson, 1859, p. 90) gave *D. pectinicornis* as the type species. Both species are closely related and belong to *Ptilinus* sensu stricto. I propose that *Ptilinus* Geoffroy, 1762 be ruled an available name and placed on the Official List.

K.26 Pyrochroa Geoffroy, 1762, vol. 1, p. 338. Latreille (1810, p. 430), followed by Curtis (1836, text for pl. 590), designated as type species Lampyris rubens Schaller, 1783 (= Pyrochroa ruberrima Geoffroy in Fourcroy, 1785 (p. 153)), a junior synonym of P. serraticornis (Scopoli, 1763). Although it was the only taxonomic species included in Pyrochroa by Geoffroy (1762) it was not one of the first subsequently included nominal species (Fabricius, 1775, p. 202; De Geer, 1775, p. 20) and therefore Latreille's type designation is invalid. Westwood ([1838], p. 30) designated as type species Cantharis coccinea Linnaeus, 1761 (p. 202). Although this taxonomic species was not included in the genus by Geoffroy (1762) it was one of the first subsequently included nominal species (Fabricius, 1775) and is therefore available for type designation. The same type species was accepted in subsequent literature (Thomson, 1859, p. 123; Blair, 1914) and is supported by me in this proposal. I propose that Pyrochroa Geoffroy, 1762 be ruled an available name and placed on the Official List.

K.27 Rhinomacer (Geoffroy, 1762, vol. 1, p. 269 — unavailable name) Geoffroy in Müller, 1764, p. xiii. Geoffroy (1762) included 11 taxonomic species in the genus. The identity is known to me for nine species: all are placed in various families of the CURCULIONOIDEA (formerly regarded as one family CURCULIONIDAE). Five species belong to various genera of the ATTELABIDAE, three to Apion (APIONIDAE) and one to Lixus (CURCULIONIDAE, CLEONINAE). Müller (1776, pp. 90-91) first subsequently included 15 nominal species in the genus. The identity is known to me for ten of these species, eight of which are placed in the ATTELABIDAE, one belongs to Apion (APIONIDAE) and one to Miarus (CURCULIONIDAE, MECININAE). Gozis (1881, p. cxii) designated 'violaceus Scop. (betuleti F.)' as type species of Rhinomacer Geoffroy. Both names are junior synonyms of Byctiscus betulae (Linnaeus, 1758). Müller (1776) included betulae Linnaeus in Rhinomacer, but he did not mention violaceus or betuleti and therefore Gozis's type designation is invalid. Silfverberg's (1978, p. 118) designation of 'Rhinomacer coryli Müller, 1776 (not Linnaeus, 1758),... a junior synonym of Attelabus nitens (Scop.), the type of Attelabus Linnaeus, 1758' as type species of 'Rhinomacer Müller, 1764' is invalid also, as 'Rhinomacer coryli Müller, 1776' is not a nominal species but a misidentification of Attelabus coryli Linnaeus, 1758. The name Rhinomacer was used for ATTELABIDAE by several 18th and 19th century authors. It is not used in this sense now. Fabricius (1781, p. 199) included in the genus Rhinomacer only one nominal species, R. curculioides Fabricius, 1781. It was designated as type of 'Rhinomacer Fab.' by Latreille (1810, p. 430) who used the emended spelling 'curculionoides'. R. curculioides is now placed in the genus Mycterus [Clairville], 1798 (PYTHIDAE). The name Rhinomacer was used instead of Mycterus (i.e. in the sense of Fabricius, 1781) by several 19th century authors, but not in the current literature. Fabricius (1787, p. 123) included a new nominal species in the genus besides R. curculioides, namely R. attelaboides Fabricius, 1787. The last was designated as type of 'Rhinomacer Fab.' by Schönherr (1823, col. 1136). The usage of Rhinomacer in the sense of attelaboides as type species prevailed during the 19th and 20th centuries. Gozis (1881, p. cxii) proposed the new name Cimberis for Rhinomacer Fabricius, 1787 non Geoffroy, with R. attelaboides as the type species by monotypy. In the last 30 years usage of *Cimberis* (instead of *Rhinomacer*) and of the family name NEMONYCHIDAE or CIMBERIDIDAE (instead of RHINOMACERIDAE) has been widespread (e.g. Crowson, 1955, p. 159; 1985, p. 144; Hatch, 1972, p. 335; Kuschel, 1989, pp. 121–122, 132–133). I therefore propose the suppression of the name *Rhinomacer* Geoffroy in Müller, 1764 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy, and the placing of *Rhinomacer* Geoffroy in Müller, 1764 on the Official Index. This action makes the name *Rhinomacer* Fabricius, 1787 also invalid, as a junior homonym.

K.28 Stenocorus Geoffroy, 1762, vol. 1, p. 221. Geoffroy (1762) included twelve taxonomic species in this genus. Nine nominal species were first subsequently included in the genus (Scopoli, 1772, pp. 96-99). The identity of five species described by Scopoli is unknown to me. The remaining are now known as Clytus arietis (Linnaeus, 1758), Plagionotus arcuatus (Linnaeus, 1758), Calidium violaceum (Linnaeus, 1758) and Phymatodes testaceus (Linnaeus, 1758) (= Stenocorus fenicus Scopoli, 1772). These species were not included in the work of Geoffroy (1762) or in the work of Fabricius (1775, p. 178), which was the first use of the name Stenocorus following Scopoli (1772). None of these species was designated subsequently as type. Crotch (1870, p. 43) designated as type species Leptura meridiana Linnaeus, 1758 (p. 398) (= Stenocorus geniculatus Geoffroy in Fourcroy, 1785 (p. 86)) which was included in the genus by Geoffroy (1762) and by Fabricius (1775). Following the concept of the genus given by Bedel (1889, p. 11) and Aurivillius (1912, p. 179), L. meridiana was accepted as type species by Lucas (1920, p. 608) and Plavilstschikov (1936, p. 158). This concept of the genus seems to be prevalent. Thomson (1864, p. 144) had designated as type Stenocorus parisinus Geoffroy in Fourcroy, 1785 (p. 85) (a junior synonym of Rhagium bifasciatum Fabricius, 1775), and Swaine & Hopping (1928, p. 12) designated Cerambyx inquisitor Linnaeus, 1758 (now in Rhagium). Both of these species were included in Stenocorus by Geoffroy (although inquisitor was misidentified) and both were excluded from Stenocorus and placed in his new genus Rhagium by Fabricius (1775). By accepting Thomson's or Swaine & Hopping's type designation, Stenocorus becomes a senior subjective synonym of Rhagium. This concept of Stenocorus was used by many authors in the second half of the 19th century (e.g. Thomson, 1860, p. 156; 1864, p. 144; Lacordaire, 1869, p. 428) as well as by most American authors in the 20th century. Recently this treatment of Stenocorus by American specialists has stopped (Chemsak, 1964, p. 234; Linsley & Chemsak, 1972, p. 44). In accordance with general current usage I propose that Stenocorus Geoffroy, 1762 be ruled an available name and placed on the Official List, with Leptura meridiana Linnaeus, 1758 as the type species by designation under the plenary powers.

K.29 Tritoma (Geoffroy, 1762, vol. 1, p. 335 — unavailable name) Geoffroy in Müller, 1764, p. xiv. The only taxonomic species included in the genus by Geoffroy (1762) was Mycetophagus quadripustulatus (Linnaeus, 1761) (= Tritoma bimaculata Geoffroy in Fourcroy, 1785 (p. 152)), belonging to the family MYCETOPHAGIDAE (see Arrow, 1945, p. 117). This species was designated as type species of Tritoma Geoffroy by Crotch (1870, p. 43). Fabricius (1775, p. 68) used the name Tritoma for five nominal species, among them T. bipustulata Fabricius, 1775 (p. 68) (which Fabricius believed to be Geoffroy's 'Tritoma'). Tritoma bipustulata Fabricius (now in the family EROTYLIDAE) was designated as type species of Tritoma by Latreille (1810, p. 432). This type designation corresponds to general current usage, although there was a tendency in the

past to replace *Tritoma* Fabricius non Geoffroy with *Cyrtotriplax* Crotch, 1873. In accordance with general current usage I propose conservation of *Tritoma* Fabricius, 1775 by suppression of all previous uses of the name *Tritoma* and the placing of *Tritoma* Fabricius, 1775 on the Official List.

- **K.30** The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to rule that the following generic names are available despite publication in a suppressed work:
 - (a) Altica Geoffroy, 1762;
 - (b) Anthrenus Geoffroy, 1762;
 - (c) Anthribus Geoffroy, 1762;
 - (d) Bostrichus Geoffroy, 1762;
 - (e) Cerocoma Geoffroy, 1762;
 - (f) Copris Geoffroy, 1762;
 - (g) Crioceris Geoffroy, 1762;
 - (h) Cryptocephalus Geoffroy, 1762;
 - (i) Diaperis Geoffroy, 1762;
 - (j) Galeruca Geoffroy, 1762;
 - (k) Gyrinus Geoffroy, 1762;
 - (1) Hydrophilus Geoffroy, 1762;
- (m) Notoxus Geoffroy, 1762;
 - (n) Omalisus Geoffroy, 1762;
 - (o) Platycerus Geoffroy, 1762;
 - (p) Prionus Geoffroy, 1762;
 - (q) Ptilinus Geoffroy, 1762;
 - (r) Pyrochroa Geoffroy, 1762;
 - (s) Stenocorus Geoffroy, 1762;
 - (2) to use its plenary powers to set aside all fixations of type species for the following genera as indicated:
 - (a) for Anthrenus Geoffroy, 1762 prior to that by Mroczkowski (1968) of Dermestes scrophulariae Linnaeus, 1758;
 - (b) for *Prionus* Geoffroy, 1762 all previous fixations of type species, and then to designate *Cerambyx coriarius* Linnaeus, 1758 as type species;
 - (c) for *Stenocorus* Geoffroy, 1762 all previous fixations of type species, and then to designate *Leptura meridiana* Linnaeus, 1758 as type species;
 - (3) to use its plenary powers to suppress the following generic names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
 - (a) Cistela Schaeffer, 1766;
 - (b) Pistella Müller, 1764;
 - (c) Rhinomacer Geoffroy in Müller, 1764;
 - (4) to use its plenary powers to suppress the following generic names for the purposes of both the Principle of Priority and the Principle of Homonymy:
 - (a) Byrrhus Geoffroy in Müller, 1764 and all other uses of the name Byrrhus prior to Byrrhus Linnaeus, 1767;
 - (b) Cucujus Geoffroy in Müller, 1764 and all other uses of the name Cucujus prior to Cucujus Fabricius, 1775;

- (c) Melolontha Geoffroy in Müller, 1764 and all other uses of the name Melolontha prior to Melolontha Fabricius, 1775;
- (d) Peltis Geoffroy in Müller, 1764 and all other uses of the name Peltis prior to Peltis Kugelann, 1792;
- (e) *Tritoma* Geoffroy in Müller, 1764 and all other uses of the name *Tritoma* prior to *Tritoma* Fabricius, 1775;
- (5) to use its plenary powers to suppress the specific name *cylindricus* Müller, 1776, as published in the binomen *Ptilinus cylindricus*, for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (6) to place on the Official List of Generic Names in Zoology the following names conserved under the plenary powers in (1) and (4) above:
 - (a) Altica Geoffroy, 1762 (gender: feminine), type species, by subsequent designation by Latreille (1810), Chrysomela oleracea Linnaeus, 1758;
 - (b) Anthrenus Geoffroy, 1762 (gender: masculine), type species, by subsequent designation by Mroczkowski (1968), Dermestes scrophulariae Linnaeus, 1758;
 - (c) Anthribus Geoffroy, 1762 (gender: masculine), type species, by subsequent designation by Jordan (1931), Anthribus fasciatus Forster, 1770;
 - (d) Bostrichus Geoffroy, 1762 (gender: masculine), type species, by subsequent designation by Latreille (1810), Dermestes capucinus Linnaeus, 1758;
 - (e) Byrrhus Linnaeus, 1767 (gender: masculine), type species, by subsequent designation by Latreille (1810), Dermestes pilula Linnaeus, 1758;
 - (f) Cerocoma Geoffroy, 1762 (gender: feminine), type species, by subsequent monotypy (Fabricius, 1775), Meloe schaefferi Linnaeus, 1758;
 - (g) Copris Geoffroy, 1762 (gender: masculine), type species, by subsequent designation by Latreille (1810), Scarabaeus lunaris Linnaeus, 1758;
 - (h) Crioceris Geoffroy, 1762 (emendation of entry on Official List in Opinion 908);
 - (i) Cryptocephalus Geoffroy, 1762 (gender: masculine), type species, by subsequent designation by Latreille (1810), Chrysomela sericea Linnaeus, 1758;
 - (j) Cucujus Fabricius, 1775 (gender: masculine), type species, by monotypy, Cucujus depressus Fabricius, 1775 (a junior subjective synonym of Meloe cinnabarina Scopoli, 1763);
 - (k) Diaperis Geoffroy, 1762 (gender: feminine), type species, by subsequent monotypy (Müller, 1776), Chrysomela boleti Linnaeus, 1758;
 - (l) Galeruca Geoffroy, 1762 (gender: feminine), type species, by subsequent designation by Latreille (1810), Chrysomela tanaceti Linnaeus, 1758;
 - (m) Gyrinus Geoffroy, 1762 (gender: masculine), type species, by subsequent designation by Latreille (1810), Dytiscus natator Linnaeus, 1758;
 - (n) *Hydrophilus* Geoffroy, 1762 (gender: masculine), type species, by subsequent designation by Latreille (1810), *Dytiscus piceus* Linnaeus, 1758;
 - (o) Melolontha Fabricius, 1775 (gender: feminine), type species, by absolute tautonymy, Scarabaeus melolontha Linnaeus, 1758;
 - (p) *Notoxus* Geoffroy, 1762 (gender: masculine), type species, by subsequent designation by Latreille (1810), *Attelabus monoceros* Linnaeus, 1761;
 - (q) Omalisus Geoffroy, 1762 (gender: masculine), type species, by subsequent monotypy (Fourcroy, 1785), Omalisus fontisbellaquaei Geoffroy in Fourcroy, 1785;

- (r) Peltis Kugelann, 1792 (gender: feminine), type species, by subsequent designation by Hope (1840), Silpha grossa Linnaeus, 1758;
- (s) *Platycerus* Geoffroy, 1762 (gender: masculine), type species, by subsequent designation by Latreille (1810), *Scarabaeus caraboides* Linnaeus, 1758;
- (t) *Prionus* Geoffroy, 1762 (gender: masculine), type species, by designation under the plenary powers in (2)(b) above, *Cerambyx coriarius* Linnaeus, 1758;
- (u) Ptilinus Geoffroy, 1762 (gender: masculine), type species, by subsequent monotypy (Müller, 1776), Ptilinus cylindricus Müller, 1776 (a suppressed senior subjective synonym of Ptilinus fuscus Geoffroy in Fourcroy, 1785) (see ruling in (5) above);
 - (v) *Pyrochroa* Geoffroy, 1762 (gender: feminine), type species, by subsequent designation by Westwood [1838], *Cantharis coccinea* Linnaeus, 1761;
 - (w) Stenocorus Geoffroy, 1762 (gender: masculine), type species, by designation under the plenary powers in (2)(c) above, Leptura meridiana Linnaeus, 1758;
 - (x) *Tritoma* Fabricius, 1775 (gender: feminine), type species, by subsequent designation by Latreille (1810), *Tritoma bipustulata* Fabricius, 1775;
- (7) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names as suppressed in (3) and (4) above:
 - (a) Byrrhus Geoffroy in Müller, 1764 and all other uses of the name Byrrhus prior to Byrrhus Linnaeus, 1767;
 - (b) Cistela Schaeffer, 1766;
 - (c) Cucujus Geoffroy in Müller, 1764 and all other uses of the name Cucujus prior to Cucujus Fabricius, 1775;
 - (d) Melolontha Geoffroy in Müller, 1764 and all other uses of the name Melolontha prior to Melolontha Fabricius, 1775;
 - (e) Peltis Geoffroy in Müller, 1764 and all other uses of the name Peltis prior to Peltis Kugelann, 1792;
 - (f) Pistella Müller, 1764;
- (g) Rhinomacer Geoffroy in Müller, 1764;
 - (h) *Tritoma* Geoffroy in Müller, 1764 and all other uses of the name *Tritoma* prior to *Tritoma* Fabricius, 1775;
 - (8) to amend the entry on the Official Index of Rejected and Invalid Generic Names in Zoology for the name *Dyticus* Müller, 1776 to read *Dyticus* Geoffroy in Müller, 1764;
 - (9) to place on the Official List of Specific Names in Zoology the following names:
 - (a) bipustulata Fabricius, 1775, as published in the binomen Tritoma bipustulata (specific name of the type species of Tritoma Fabricius, 1775);
 - (b) boleti Linnaeus, 1758, as published in the binomen *Chrysomela boleti* (specific name of the type species of *Diaperis* Geoffroy, 1762);
 - (c) capucinus Linnaeus, 1758, as published in the binomen Dermestes capucinus (specific name of the type species of Bostrichus Geoffroy, 1762);
 - (d) caraboides Linnaeus, 1758, as published in the binomen Scarabaeus caraboides (specific name of the type species of Platycerus Geoffroy, 1762);
 - (e) cinnabarina Scopoli, 1763, as published in the binomen Meloe cinnabarina (senior subjective synonym of Cucujus depressus Fabricius, 1775, the type species of Cucujus Fabricius, 1775);

- (f) coccinea Linnaeus, 1761, as published in the binomen Cantharis coccinea (specific name of the type species of Pyrochroa Geoffroy, 1762);
- (g) coriarius Linnaeus, 1758, as published in the binomen Cerambyx coriarius (specific name of the type species of Prionus Geoffroy, 1762);
- (h) fasciatus Forster, 1770, as published in the binomen Anthribus fasciatus (specific name of the type species of Anthribus Geoffroy, 1762);
- (i) fontisbellaquaei Geoffroy in Fourcroy, 1785, as published in the binomen Omalisus fontisbellaquaei (specific name of the type species of Omalisus Geoffroy, 1762);
- (j) fuscus Geoffroy in Fourcroy, 1785, as published in the binomen Ptilinus fuscus (first available subjective synonym of Ptilinus cylindricus Müller, 1776, the type species of Ptilinus Geoffroy, 1762);
- (k) grossa Linnaeus, 1758, as published in the binomen Silpha grossa (specific name of the type species of Peltis Kugelann, 1792);
- (l) *lunaris* Linnaeus, 1758, as published in the binomen *Scarabaeus lunaris* (specific name of the type species of *Copris* Geoffroy, 1762);
- (m) melolontha Linnaeus, 1758, as published in the binomen Scarabaeus melolontha (specific name of the type species of Melolontha Fabricius, 1775);
- (n) *meridiana* Linnaeus, 1758, as published in the binomen *Leptura meridiana* (specific name of the type species of *Stenocorus* Geoffroy, 1762);
- (o) monoceros Linnaeus, 1761, as published in the binomen Attelabus monoceros (specific name of the type species of Notoxus Geoffroy, 1762);
- (p) natator Linnaeus, 1758, as published in the binomen Dytiscus natator (specific name of the type species of Gyrinus Geoffroy, 1762);
- (q) oleracea Linnaeus, 1758, as published in the binomen Chrysomela oleracea (specific name of the type species of Altica Geoffroy, 1762);
- (r) piceus Linnaeus, 1758, as published in the binomen Dytiscus piceus (specific name of the type species of Hydrophilus Geoffroy, 1762);
- (s) pilula Linnaeus, 1758, as published in the binomen Dermestes pilula (specific name of the type species of Byrrhus Linnaeus, 1767);
- (t) schaefferi Linnaeus, 1758, as published in the binomen Meloe schaefferi (specific name of the type species of Cerocoma Geoffroy, 1762);
- (u) scrophulariae Linnaeus, 1758, as published in the binomen Dermestes scrophulariae (specific name of the type species of Anthrenus Geoffroy, 1762);
- (v) sericea Linnaeus, 1758, as published in the binomen Chrysomela sericea (specific name of the type species of Cryptocephalus Geoffroy, 1762);
- (w) tanaceti Linnaeus, 1758, as published in the binomen Chrysomela tanaceti (specific name of the type species of Galeruca Geoffroy, 1762);
- (10) to amend the entry on the Official List of Specific Names in Zoology for Chrysomela asparagi Linnaeus, 1758 to record the authorship of Crioceris from Geoffroy, 1762;
- (11) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *cylindricus* Müller, 1776, as published in the binomen *Ptilinus cylindricus* and suppressed under the plenary powers in (5) above.

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APPENDIX

On Geoffroy's names in Müller's Fauna Insectorum Fridrichsdalina (1764)

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The question has arisen whether O.F. Müller (1764) intended to synonymize E.L. Geoffroy's 1762 generic names under the genera of Linnaeus. The answer is that he clearly did not. A translation of the relevant paragraph of Müller's preface to the reader (1764: ix) and the choice of vocabulary in his comparative table (1764: xi ff.) are sufficient to demonstrate his intentions.

Translation from Müller's Preface (p. ix):

'When my book was already in press, L'Abregé [sic] de l'Histoire des Insectes dans les environs de Paris 1762 was announced in the Novellae Literariae Erlangenses. Upon reading it through I learned that its celebrated author [Geoffroy] departed substantially from the Linnaean Method in erecting many new genera and in determining their characters; therefore I thought it desirable for [the purposes of] natural science and in order to facilitate the reading of the books of both authors [i.e. Linnaeus and Geoffroy] to arrange [reducere] the new genera [i.e. of Geoffroy] with their characters along with the Linnaean genera, and I have placed the [new] genera side by side [with the Linnaean genera] in the schema. [With this scheme] it is easily possible for the reader to refer any insect before him to the genera of either of the two authors, and find the description [in either author] of the insect in question. Enjoy these [things] with me, dear reader, to the glory of the supreme divinity, for the delight of the mind, and for whatsoever usefulness [there is in it].'

The problem lies in the Latin word *reducere* which does not have its classical meaning 'lead back', but rather a late Latin meaning 'to arrange, bring into a certain order or arrangement', or 'to refer to something'. It does not mean 'reduce' in the modern English sense of the word.

Consequently, one must not make the mistake of supposing that Müller is 'synonymizing' in the modern sense of the word used currently in systematics. That is, he is not claiming that the Linnaean names are valid and the Geoffroy names invalid. He is merely arranging the two generic schemes side by side so that the reader may find the applicable description in either author, that is, either Linnaeus or Geoffroy. The adverb coram, which means 'present, before' in classical usage, here means 'side by side'.

Müller is not making any judgement about which generic system is correct. He is giving both schemes together as a matter of convenience to the reader.

On page xi of the Preface, he places on the left side of the page the designation *Equitis* a Linné, that is 'of the knight of Linné', the Latin way of saying von Linné. Linnaeus had been granted a patent of nobility by Gustavus III of Sweden in 1761. On the right side of the page Müller places *Domini Geofroi*, that is 'of Monsieur Geoffroy'. The two schemes of genera are then marshalled under each rubric in comparison with one another.

The title of this Table in translation reads:

Systematic Classification of Insects

Of von Linné Of Monsieur Geoffroy

A Harmony [Convenientia] of Each of the Two Authors

The word *convenientia* means 'harmony, symmetry, agreement'. Müller means that he is bringing the two generic systems 'into harmony' with each other. This language, *convenientia utriusque*, makes it unambiguously clear that Müller is not privileging either scheme, but simply relating them to each other for the reader's practical convenience.

It seems obvious to me that the choice of the term *convenientia* is due to an analogy with a familiar term in the criticism of the New Testament. An 'Evangelical Harmony' or a 'Harmony of the Gospels' is 'an attempt to arrange the several contributions of the four evangelists, so that they shall fall into their right places in a common story'. I take this definition from the *Oxford English Dictionary* (s.v. harmony 6).

There is certainly no intention in a Harmony to reject any of the gospel narratives, but only to make clear how they are related to one another. I am confident that Müller had this theological analogy in mind, and it accounts for the choice of the word *convenientia*. And the choice of that word makes clear that Müller had no intention of rejecting Geoffroy's names.

One final question should be cleared up concerning the first words of the paragraph of the Preface translated above, *libello iam impresso* 'the book having already been printed' or better, 'when the book was in press'. This is a puzzling bibliographical point, but I think it can be explained. Geoffroy's *Histoire Abrégée* was published anonymously in two volumes (Paris, 1762) and was re-issued with Geoffroy's name as author in 1764. Since Müller already knows the name of the author, it is apparently the case, then, that it is the 1764 re-issue which came to his notice in the *Novellae Literariae Erlangenses*, when the body of his book had already been printed. But he would have been able to take notice of it in the sheets of his introduction printed later.



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