PLENARY POWERS **PROPOSED** USE THE **TYPE** SPECIES FOR THE GENERA DESIGNATE "COLPOCEPHALUM" "LIPEURUS" NITZSCH. 1818, NITZSCH 1818, AND "GYROPUS" NITZSCH, 1818 (CLASS INSECTA, ORDER MALLOPHAGA) IN HARMONY WITH THE GENERALLY ACCEPTED USE OF THOSE NAMES

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The object of the present application is to ask the International Commission on Zoological Nomenclature to use its plenary powers to designate as the type species of the genera *Lipeurus* Nitzsch, 1818, *Colpocephalum* Nitzsch, 1818, and *Gyropus* Nitzsch, 1818 (Class Insecta, Order Mallophaga) the species universally accepted as such, thereby avoiding the very serious confusion which would inevitably result from the strict application of the *Règles* in these cases. The foregoing names were published in a paper entitled "Die Familien und Gattungen der Thierinsekten . . . als ein Prodromus der Naturgeschichte derselben" which appeared in 1818 in volume 3 of Germar's *Mag. Ent.* for that year (*Lipeurus* on page 291; *Colpocephalum* on page 298; *Gyropus* on page 304).

Nitzsch (1818) published the descriptions of a number of genera and subgenera (the latter now all promoted to generic rank) of the Order Mallophaga (Class Insecta). In each instance he listed a number of names of included species, none of which was accompanied by descriptions though some of them had references to earlier descriptions under different names; he did not designate a type species in any instance. Many of the species listed by Nitzsch were described by Burmeister (1838, Handb. Ent. 2), using Nitzsch's material but apparently writing independent descriptions; the rest were described by Giebel in a series of works between 1861 and 1874; Giebel attributed the names to Nitzsch and apparently borrowed the descriptions from the latter's manuscript.

Subsequent authors, with the sole exception of Hopkins (1947, Entomologist 80: 14-19) have either accepted all the trivial names published by Nitzsch in 1818 as being available from that date or have regarded all of them as nomina nuda, so far as the 1818 work is concerned. Actually, most of the names are nomina nuda, but those with references to previous descriptions are accompanied by an "indication" within the meaning of Article 25 of the Règles, though most of them were entirely unnecessary and have since been relegated to synonymy. Failure to differentiate between these two classes of trivial names in Nitzsch's 1818 work has led to invalid selections of type species for the three genera dealt with in the present application. In the remaining instances valid selections of type species either have been made or can still be made without any action on the part of the International Commission. In the case, however, of the names Lipeurus, Colpocephalum and Gyropus the subsequent selections of type species for these genera, though today universally accepted,

are invalid under the Règles, and their rejection would inevitably involve serious changes in the nomenclature of the group, unless the International Commission sees fit to take action to avoid this.

(a) The type species of "Lipeurus" Nitzsch, 1818

Johnston and Harrison (1911, Proc. linn. Soc. N.S.W. 36: 326) purported to select "L. caponis Linn. (syn. L. variabilis N.)" as the type species of Lipeurus Nitzsch, 1818. Their action has been accepted by all subsequent authors, notably by Harrison (1916, Parasitology 9: 22) and by Clay (1938: 110) in her monograph of *Lipeurus* and related genera. Harrison's work of 1916 is the standard list of the Mallophaga and for all practical purposes the only one, since it is the most recent and also the only one in which any attempt is made to apply the principle of priority to the names. The selection made by Johnston and Harrison is invalid because Nitzsch (1818) did not mention caponis at all and mentioned variabilis (: 293) only as a nomen nudum, whereas other names listed by him in *Lipeurus* were accompanied by references to prior descriptions and are therefore available names. It is, of course, only from these available names that a type species for the genus can be selected without the use by the International Commission fo its plenary powers. No valid type selection has as yet been made for this genus, but any such selection would inevitably result in the transfer of the name *Lipeurus* from the group that has always borne it since the original genus was divided by Harrison (1916: 26) to a group that has never borne it since the same date, for none of the species with technically available names that were cited by Nitzsch in 1818, is congeneric with *Pediculus* caponis Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:614). Moreover, none of these species belongs to a group that is without a valid generic name. The change would be particularly unfortunate because Lipeurus caponis (Linnaeus) is a parasite of the domestic fowl and therefore is the subject, under that name, of a very extensive mass of economic literature.

The only means by which far-reaching confusion can be avoided is by the use by the International Commission of its plenary powers to give valid force to the (at present) invalid action by Johnston and Harrison in 1911. What is required, therefore, is that the International Commission should use its plenary powers to designate *Pediculus caponis* Linnaeus, 1758, to be the type species of the genus Lipeurus Nitzsch, 1818. It would be well also if the International Commission, when taking this action, were expressly to define the species to which this name is applicable. There is no doubt as to the species to which Linnaeus applied the name Pediculus caponis, but some of the bibliographical references that he cited refer to other species. Schrank in 1803 (Fauna boic.: 193) was the first author to draw attention to these erroneous references. The best and most recent definition of *Pediculus caponis* is that published by Miss Theresa Clay in 1938 (Proc. zool. Soc. Lond. (B) 108: 111-113, figs. 1, 2a, 2b, 3a). It is accordingly recommended that when this species is designated as the type species of *Lipeurus* Nitzsch, it should be defined by reference to Miss Clay's paper, that the generic name Lipeurus Nitzsch should then be placed on the Official List of Generic Names in Zoology, with the above species, defined as suggested, as its type species; and that the trivial name caponis Linnaeus, 1758 (as published in the binominal combination Pediculus caponis), defined as suggested, should be placed on the Official List of Specific Trivial Names in

Zoology. In order to avoid the risk of subsequent misunderstanding, it would be helpful if at the same time the International Commission were to place the invalid emendation *Liperus* Kellogg, 1902 (J. N. Y. ent. Soc. 10: 22) on the Official Index of Rejected and Invalid Generic Names in Zoology.

(b) The type species of "Colpocephalum" Nitzsch, 1818

Neumann (1906:58) selected Colpocephalum zebra Nitzsch, 1818, as the type species of the genus Colpocephalum Nitzsch, 1818. This selection has been followed by all subsequent writers, including Harrison in his list of the Mallophaga, to which reference has already been made (1916:21) and Ferris (1924 Parasitology 16: 59, fig. 2) in one of a series of papers in which he redistributed and figured the type species of some genera of the MENOPONIDAE. But Neumann's type selection for this genus is invalid, for Nitzsch cited Colpocephalum zebra (1818:298) only as a nomen nudum; it was not until 1838 that this specific name was published with a description by Burmeister (Handb. Ent. 2 (2); 438). On the other hand, Nitzsch (1818: 299) did cite under the genus Colpocephalum one nominal species, Colpocephalum ochraceum Nitzsch, for which he provided an "indication" for the purposes of Article 25 of the Règles, by giving a reference to a previously published drawing. This species was the only one so cited by Nitzsch and is therefore the type species of Colpocephalum Nitzsch by monotypy. No subsequent writer has however so regarded this species. Nevertheless, a strict application of the Règles would result in the transfer of the name Colpocephalum from the group of species that includes Colpocephalum zebra Burmeister, 1838, to the genus now known by the name Actornithophilus Ferris, 1916 (Canad, Ent. 48: 303), the type species of which, Colpocephalum uniseriatum Piaget, 1880 (Pédiculines: 562), is undoubtedly congeneric with Colpocephalum ochraceum Nitzsch, 1818. Not only have the zebra-group and the ochraceum-uniseriatum group borne the names Colpocephalum and Actornithophilus respectively without disturbance since 1916, but both are large groups (Actornithophilus containing about 40 named species and Colpocephalum in the accepted sense a great many more). The confusion that would be caused by the transfer of the name Colpocephalum from the one group to the other would therefore be very great. Moreover, the change so involved would leave five generic names compounded with the word "Colpocephalum" (namely Eucolpocephalum Bedford, 1930 (Rep. vet. Res. S. Afr. 16: 161). Neocolpocephalum Ewing, 1933 (J. Parasit. 20: 65). Pseudocolpocephalum Qadri, 1936: Z. Parasitenk. 8:640). Allocolpocephalum Qadri, 1939 (Indian J. Ent. 1:66). Corvocolpocephalum Conci, 1942 (Bull. Soc. ent. ital. 74:30)) in a division of the family MENOPONIDAE to which the genus Colpocephalum would no longer belong.

The only way by which disastrous confusion can be avoided in this case is by the International Commission using its plenary powers to designate Colpocephalum zebra Burmeister, 1838, to be the type species of the genus Colpocephalum Nitzsch, 1818. In addition to giving a firm legal foundation for the current use of the generic name Colpocephalum, such a course would remove the danger to which the name Actornithophilus Ferris, 1916, is at present exposed; it would be desirable that this latter name should be placed on the Official List of Generic Names in Zoology at the same time that the name

Colpocephalum Nitzsch, 1818 (with the type species specified above) is stabilised in this way.

(c) The type species of "Gyropus" Nitzsch, 1818

When in 1818 (:304) Nitzsch first published the generic name Gyropus, he cited under it only (1) Gyropus ovalis (a nomen nudum until first published twenty years later with a description by Burmeister in 1838) and (2) Gyropus gracilis (an unnecessary nomen novum for Pediculus porcelli Schrank, 1781 (Enum. Ins. Austr. indig.:500, pl. l, fig. 1). The nominal species Gyropus gracilis Nitzsch, 1818, is thus the type species of this genus by monotypy.

Harrison (1916: 22) selected Gyropus ovalis Burmeister, 1838, as the type species of Gyropus Nitzsch, but that action was ultra vires, since (as shown above) Gyropus gracilis Nitzsch, 1818, has been the type species of this genus ever since the generic name Gyropus was first published in 1818. Nevertheless, Harrison's type selection has been universally accepted in all works published since 1916, including Ewing's monograph of the Gyropidae (1934) and Werneck's monograph of the Mallophaga of South American mammals (Werneck, 1936; 419). The latter is a work of high quality which deals with almost all the then known species of GYROPIDAE, but it has recently been superseded by a monograph by the same author of the mammal-infesting Mallophaga of the world (" Os Malófagos de Mamíferos. Parte 1 : Amblycera Lischnocera (Philopteridae e parte de Trichodectidae)" published at Rio de Janeiro in 1948 in which Gyropus ovalis Burmeister is still regarded as the type species of Gyropus Nitzsch. Under a strict application of the Règles, the name Gyropus Nitzsch would, however, have to be transferred to the genus at present known as Gliricola Mjöberg, 1910 (Zool. Anz. 35: 292) (type species, by original designation: Gyropus gracilis Nitzsch, 1818), and which has been universally accepted ever since. It should be noted, in passing, that the name Gliricola appeared in the January issue of the Zoologischer Anzeiger (on the page noted above) but that later in the same year (11th June) another paper by Mjöberg was published (Ark. Zool. 6 (No. 13): 18) in which the name Gliricola again appeared as a new name, once more with Gyropus gracilis Nitzsch as type species but this time by monotypy instead of (as in the earlier paper) by original designation. The Gliricola Mjöberg of the Ark. Zool. is both an objective synonym, and a junior homonym, of the Gliricola of the Zool. Anz. and, in accordance with the Commission's policy of disposing of invalid names, should now be placed on the Official Index of Rejected and Invalid Generic Names.

In addition to the arguments advanced in the preceding paragraph in favour of giving valid force to Harrison's selection of *Gyropus ovalis* Burmeister, 1838, as the type species of the genus *Gyropus* Nitzsch, 1818, it may be noted that since 1910 there have been erected six genera with names compounded of the word "Gyropus" (namely *Protogyropus* Ewing, 1924 (*Proc. U.S. nat. mus.* 63 (Art. 20): 7). *Macrogyropus* Ewing, 1924: 25. *Allogyropus* Ewing, 1924: 20. *Heterogyropus* Ewing, 1924: 27. *Monogyropus* Ewing, 1924: 10. *Tetragyropus* Ewing, 1924: 21), all of which would cease to be included in the subfamily GYROPINAE, if the change necessitated by the strict application of the *Règles* were to be made.

The foregoing changes in nomenclatorial usage would cause serious confusion, all the more so because both Gyropus ovalis Burmeister, 1838, and Gliricola porcelli (Schrank, 1781) are parasites of the guinea-pig and, in consequence, are frequently mentioned in the literature of applied entomology. The only way by which these serious results can be avoided is by the International Commission deciding to use its plenary powers to designate Gyropus ovalis Burmeister, 1838, to be the type species of the genus Gyropus Nitzsch, 1818, and to place Gyropus Nitzsch, 1818, on the Official List of Generic Names in Zoology with Gyropus ovalis Burmeister, 1838, as type species. It would be desirable that at the same time the name Gliricola Mjöberg, 1910, which would thus be relieved of the danger which at present threatens it, should also be placed on the Official List of Generic Names in Zoology.

I further ask that, when the foregoing generic name Gyropus Nitzsch, 1818, is placed on the Official List of Generic Names, the trivial name of its type species, namely the trivial name ovalis Burmeister, 1838 (as published in the binominal combination Gyropus ovalis) should be placed on the Official List of Specific Trivial Names. In the case of Gliricola Mjöberg, 1910, it would not be appropriate to place on the foregoing Official List the trivial name of its type species, for (as already explained) the trivial name gracilis Nitzsch, 1818 (as published in the binominal combination Gyropus gracilis) is a junior subjective synonym of the trivial name porcelli Schrank, 1781 (as published in the binominal combination *Pediculus porcelli*). It is therefore the latter trivial name which should be placed on the Official List. In this connection, it must be noted that the name of the species now universally known as Gliricola porcelli has been commonly, though incorrectly, attributed to Linnaeus, owing to the specific name *Pediculus porcelli* having been published as a nomen nudum by Linnaeus in 1758 (Syst. Nat. (ed. 10) 1: 611) and again in 1767 (ibid (ed. 12) 1 (2): 1017). What is required, therefore, is that the trivial name porcelli Schrank, 1781 (as published in the binominal combination *Pediculus porcelli*) should be placed on the Official List of Specific Trivial Names in Zoology and that the nomen nudum porcelli Linnaeus, 1758 (as published in the binominal combination Pediculus porcelli) should be placed on the Official Index of Rejected and Invalid Specific Trivial Names in Zoology. The figure given by Schrank for his Pediculus porcelli is quite reasonably good but it would nevertheless be convenient, if, when citing the name Pediculus porcelli Schrank in the decision on this case, the International Commission were at the same time to state that the nominal species in question is to be interpreted by the description and figures published in 1936 (Mem. Inst. Oswaldo Cruz 31: 397-401, figs. 1-9), by Werneck (by whom however the name of this species was then attributed to Linnaeus), the interpretation so given being the best and most recent that has been published and in complete accord with universal nomenclatorial practice.

(d) Conclusions and Recommendations

The considerations set forth in the preceding portions of the present application were put forward by the present applicant in a paper published in 1947, copies of which were distributed to all workers on Mallophaga with whom it was possible to establish contact, together with a request that the recipients should complete and return voting papers on the question whether application

should be made to the International Commission on Zoological Nomenclature for the use of the plenary powers to such extent as might be necessary to ensure the retention of the names *Lipeurus*, *Colpocephalum* and *Gyropus* in the sense in which they are currently used and have been used ever since the genera were divided.

J. Bequaert (Harvard University, Cambridge, Mass., U.S.A.) and J. E. Webb (Aberdeen University, Scotland) voted against such application being made, both explaining in letters accompanying their voting papers, that they were opposed in principle to all suspensions of the Rules in such cases; with one exception, they are the only workers, among those who replied, whose work on Mallophaga has lain wholly outside the field of systematics.

The following voted in favour of application being made to the International Commission on Zoological Nomenclature:—

W. Büttiker (Zurich, Switzerland)

T. Clay (London, England)

W. Eichler (Berlin, Germany)

K. C. Emerson (Stillwater, Oklahoma, U.S.A.)

L. R. Guimarães (São Paulo, Brazil)

G. H. E. Hopkins (Tring, England)

W. L. Jellison (Hamilton, Montana, U.S.A.)

S. v. Kéler (Berlin, Germany)

R. Meinertzhagen (London, England)

E. O'Mahony (Dublin, Eire)

G. B. Thompson (Kingston, Jamaica)

F. L. Werneck (Rio de Janeiro, Brazil)

It seems worth emphasing that it would be useless to attempt to give a comprehensive list of the works in which the generic names under consideration have been used in the sense in which it is sought to retain them, because such a list would include every occasion on which these names have been used since the invalid selections of type species for them were made. No author has ever used any of these names in a published work in the sense in which the strict application of the *Règles* would require that they should be used.

For the reasons set forth in the present application, the International Commission on Zoological Nomenclature is requested:—

(1) to use its plenary powers to set aside all indications or selections of type species for the under-mentioned nominal genera made prior to the decision now proposed to be taken, and, having done so, to designate as the type species of those genera the nominal species specified below:—

Name of genus

Species recommended to be designated as the type species of the genus specified in Col. (1)

(1) Lipeurus Nitzsch, 1818

Pediculus caponis Linnaeus, 1758 (as defined by Clay, 1938) Name of genus

Species recommended to be designated as the type species of the genus specified in Col. (1)

(1)

2)

Colpocephalum Nitzsch, 1818 Gyropus Nitzsch, 1818

Colpocephalum zebra Burmeister, 1388
Gyropus ovalis Burmeister, 138

- (2) to place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
 - (a) the three generic names specified in (1) above, with the species there specified in Col. (2) as their respective type species;
 - (b) Actornithophilus Ferris, 1916 (type species, by original designation: Colpocephalum uniseriatum Piaget, 1880 (Pédiculines: 562, pl. 47, fig. 2);
 - (c) Gliricola Mjöberg, 1910 (type species, by monotypy: Gyropus gracilis Nitzsch, 1818);
- (3) to place the under-mentioned trivial names on the Official List of Specific Trivial Names in Zoology:—
 - (a) caponis Linnaeus, 1758 (as published in the binominal combination *Pediculus caponis*), as defined in Col. (2) of (1) above (trivial name of type species of *Lipeurus* Nitzsch, 1818);
 - (b) ovalis Burmeister, 1838 (as published in the binominal combination Gyropus ovalis) (trivial name of type species of Gyropus Nitzsch, 1818);
 - (c) porcelli Schrank, 1781 (as published in the binominal combination *Pediculus porcelli*) (as defined in 1936 by Werneck (by whom the name was attributed to Linnaeus));
 - (d) uniseriatum Piaget, 1880 (as published in the binominal combination Colpocephalum uniseriatum) (trivial name of type species of Actornithophilus Ferris, 1916);
 - (e) zebra Burmeister, 1838 (as published in the binominal combination Colpocephalum zebra) (trivial name of type species of Colpocephalum Nitzsch, 1818.
- (4) to place the under-mentioned names on the Official Index of Rejected and Invalid Generic Names in Zoology:—
 - (a) Gliricola Mjöberg, June 1910 (an objective synonym, and junior homonym, of Gliricola Mjöberg, January 1910);
 - (b) Liperus Kellogg, 1902 (an invalid emendation of Lipeurus Nitzsch, 1818);
- (5) to place the trivial name porcelli Linnaeus, 1758 (as published in the binominal combination Pediculus porcelli) (a nomen nudum) on the Official Index of Rejected and Invalid Specific Trivial Names in Zoology.