

OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

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OPINION 424

Validation under the Plenary Powers of the specific name
rufa Linnaeus, 1761, as published in the combination
Formica rufa and designation under the same Powers of
the species so named to be the type species of the genus
Formica Linnaeus, 1758 (Class Insecta, Order Hymen-
optera)

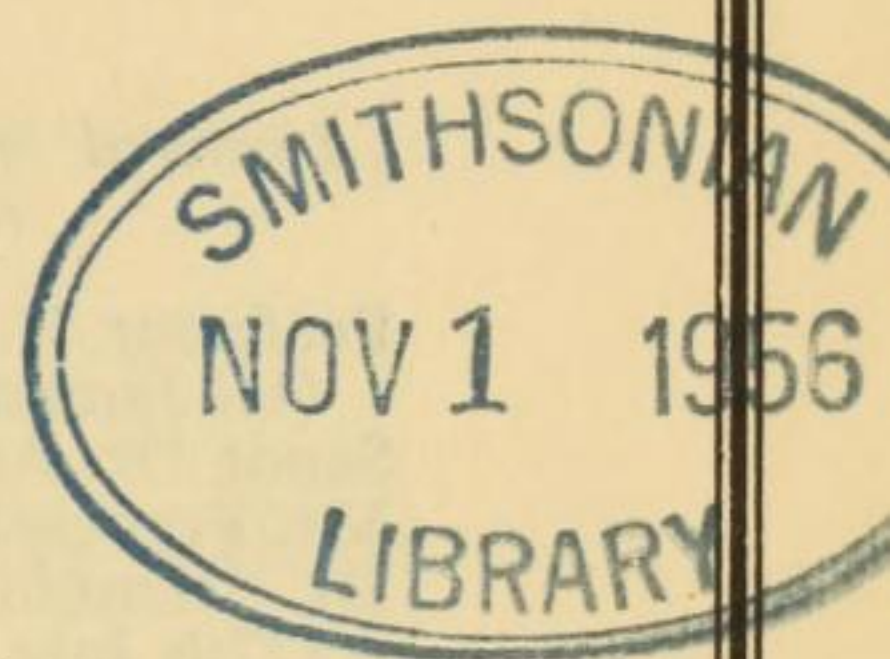
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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 424

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Professor Enrico TORTONESE (*Museo di Storia Naturale, "G. Doria," Genova, Italy*) (16th December 1954)

OPINION 424

VALIDATION UNDER THE PLENARY POWERS OF THE
SPECIFIC NAME "RUFA" LINNAEUS, 1761, AS
PUBLISHED IN THE COMBINATION "FORMICA
RUFA" AND DESIGNATION UNDER THE
SAME POWERS OF THE SPECIES SO
NAMED TO BE THE TYPE SPECIES
OF THE GENUS "FORMICA"
LINNAEUS, 1758 (CLASS
INSECTA, ORDER
HYMENOPTERA)

RULING :—(1) The following action is hereby taken
under the Plenary Powers :—

- (a) The specific name *rufa* Linnaeus, 1758, as published in the combination *Formica rufa*, is hereby suppressed for the purposes of the Law of Priority and also for those of the Law of Homonymy.
- (b) The specific name *rufa* Linnaeus, 1761, as published in the foregoing combination in the Second Edition of the *Fauna svecica* is hereby validated ;
- (c) The nominal species *Formica rufa* Linnaeus, 1761, is, it is hereby directed, to be interpreted by reference to the winged female specimen in the Linnean collection at Burlington House, London, selected to be the lectotype by Yarrow (I.H.H.) in paragraph 17 of the paper reproduced in paragraph 13 of the present *Opinion*.
- (d) The nominal species *Formica rufa* Linnaeus, 1761, as interpreted under the Plenary Powers in (c) above is hereby designated to be the type species

of the nominal genus *Formica* Linnaeus, 1758 (Class Insecta, Order Hymenoptera).

(2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers 1017 and 1018 respectively :—

- (a) *Formica* Linnaeus, 1758 (gender : feminine) (type species, by designation under the Plenary Powers under (1)(d) above : *Formica rufa* Linnaeus, 1761, as validated under the Plenary Powers under (1)(b) above and as interpreted under the same Powers under (1)(c) above) ;
- (b) *Camponotus* Mayr, 1861 (gender : masculine) (type species, by selection by Bingham (1903) : *Formica ligniperda* Latreille, 1802).

(3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers 947 and 948 respectively :—

- (a) *rufa* Linnaeus, 1761, as published in the combination *Formica rufa*, as validated under the Plenary Powers under (1)(b) and as interpreted under the same Powers under (1)(c) above (specific name of type species of *Formica* Linnaeus, 1758) ;
- (b) *ligniperda* Latreille, 1802, as published in the combination *Formica ligniperda* (specific name of type species of *Camponotus* Mayr, 1861).

(4) The under-mentioned specific name is hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* with the Name Number 342 :—*rufa* Linnaeus, 1758, as published in the combination *Formica rufa*, as suppressed under the Plenary Powers under (1)(a) above).

(5) The under-mentioned family-group name is hereby placed on the *Official List of Family-Group Names in Zoology* with the Name Number 75 :—FORMICIDAE (correction of FORMICARIAE) Latreille, [1802—1803] (first

published in correct form as FORMICIDAE by Stephens (J.F.), 1829) (type genus : *Formica* Linnaeus, 1758).

(6) The under-mentioned family-group names are hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* with the Name Numbers 58 to 61 respectively :—

- (a) FORMICARIAE Latreille, [1802—1803] (type genus : *Formica* Linnaeus, 1758) (an Invalid Original Spelling for FORMICIDAE) ;
- (b) FORMICARIDES [Leach], [1815] (type genus : *Formica* Linnaeus, 1758) (an Erroneous Subsequent Spelling for FORMICIDAE (correction of FORMICARIAE) Latreille, [1802—1803]) ;
- (c) FORMICADAE Leach, 1819 (type genus : *Formica* Linnaeus, 1758) (an Erroneous Subsequent Spelling for FORMICIDAE (correction of FORMICARIAE) Latreille, [1802—1803]) ;
- (d) FORMICAEDES Billberg, 1820 (type genus : *Formica* Linnaeus, 1758) (an Erroneous Subsequent Spelling for FORMICIDAE (correction of FORMICARIAE) Latreille, [1802—1803]).

I. THE STATEMENT OF THE CASE

On 16th August 1937, the late Professor A. D. Imms (*President*) and Professor O. W. Richards (*Secretary*), Royal Entomological Society of London, formally communicated to the International Commission on Zoological Nomenclature Part 5 of the work entitled *The Generic Names of British Insects*, published two days earlier, intimating that the Council of the Society concurred in the recommendations set forth in the foregoing Part and commended those recommendations to the favourable consideration of the International Commission. The above Part contained

a Report by the Hymenoptera Sub-Committee¹ of the Society's Committee on Generic Nomenclature² setting out the names of the genera of Hymenoptera Aculeata represented in the British fauna. Attached to the Sub-Committee's Report was a detailed survey of the problems involved which had been prepared for the Sub-Committee by Dr. O. W. Richards, one of its members. The Report contained recommendations regarding seventeen generic names and two specific names. Among the former was included the case of the name *Formica* Linnaeus, 1758, with which the present *Opinion* is concerned. The application so submitted was as follows :—

**Proposed suspension of the “ Règles ” for the names “ Formica ”
Linnaeus, 1758, and “ Camponotus ” Mayr, 1861 (Class
Insecta, Order Hymenoptera)**

By R. B. BENSON, M.A.

(Assistant Keeper in the Department of Entomology,
British Museum (Natural History)),

CH. FERRIERE

(Imperial Institute of Entomology, London)

and

O. W. RICHARDS, D.Sc.

(Imperial College of Science and Technology, London).

Linnaeus (1758, *Syst. Nat.* (ed. 10a) 1 : 579) founded the genus *Formica* for a number of species of ants, including *Formica rufa* Linnaeus, 1758, and *Formica herculeana* Linnaeus, 1758. Latreille (1810, *Consid. génér.* : 437) cited the latter species as the type of the genus. This citation is valid although the name *Formica herculeana* is followed by the words “ ejusdem *rufa* ”, indicating that *Formica*

At the time of the submission of the foregoing Report the composition of the Hymenoptera Sub-Committee was as follows :—R. B. Benson, M.A. ; Ch. Ferrière ; O. W. Richards, D.Sc.

² The Composition of the Committee on Generic Nomenclature was the same at this time as at the date of the submission of Part 4 of the *Generic Names of British Insects*, and has been given in footnote 2 to *Opinion* 211 (volume 4 in the *Opinions and Declarations Series*), which deals with a recommendation submitted in that Part.

rufa was also a member of the genus. Curtis (1839, *Brit. Ent.* 16 : plate 752) designated *Formica rufa* as the type and his designation has been universally followed by hymenopterists. Meanwhile, *Formica herculeana* is now placed in the genus *Camponotus* Mayr (1861, *Europ. Formicid.* : 35) (type *Formica ligniperda* Latreille, 1802, by designation of Bingham, 1903, *Faun. Brit. India*, Hym. 2 : 347).

Camponotus and *Formica* in the generally accepted sense are both very large genera of world-wide distribution and any change in their generic nomenclature would cause great confusion.

We are of the opinion that it is highly desirable that in the exercise of the Plenary Powers conferred on them by the International Zoological Congress, the International Commission on Zoological Nomenclature should as soon as possible take the steps laid down by the Congress for the promulgation of an *Opinion* to the following effect :—

The names *Formica* Linnaeus, 1758 (type *Formica rufa* Linnaeus, 1758) and *Camponotus* Mayr, 1861 (type *Formica ligniperda* Latreille, 1802) be added to the *Official List of Generic Names*. The designation by Latreille (1810) of *Formica herculeana* Linnaeus, 1758, as the type of *Formica* is therefore to be set aside and the designation by Curtis (1839) of *Formica rufa* Linnaeus, 1758, is to be upheld.

II. THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application : The Report by the Hymenoptera Sub-Committee included in Part 5 of the work *The Generic Names of British Insects* was, on its receipt by the International Commission, given the Registered Number Z.N.(S.) 133. Later, however, when the proposals therein were split up for individual treatment, the application regarding the name *Formica* was allotted the Registered Number Z.N.(S.) 776.

3. Effect on the present application of the interpretation of Latreille's " Considérations générales " of 1810 given in " Opinion" 136 : It had not been found possible to advance the consideration

of the present case by the time that the outbreak of war in Europe in September 1939 led to the evacuation of the records of the International Commission from London to the country as a precaution against the risk of destruction through air raids. The Secretariat in London was re-opened in 1942 and steps were immediately taken to establish the *Bulletin of Zoological Nomenclature* as a means for bringing to the attention of zoologists applications submitted to the International Commission for decision. Work was at once started on outstanding applications with a view to arranging for their publication in the newly established *Bulletin*. When in 1944 the present case was being prepared for the printer, Mr. Hemming came to the conclusion that the end desired by the applicants could be attained without the use by the International Commission of its Plenary Powers, for in *Opinion* 136 (1939, *Ops. Decls. int. Comm. zool. Nomencl.* 2 : 13—20) the Commission had amplified and in part emended the interpretation of Latreille's *Considérations générales sur l'Ordre naturel des Animaux composant les Classes des Crustacés, des Arachnides et des Insectes avec un tableau méthodique de leurs Genres disposés en Familles* of 1810 given by the Ruling in *Opinion* 11. Upon the adoption of that *Opinion*, it became immediately apparent that an entirely new situation had arisen, so far as concerned the generic name *Formica* Linnaeus. After communicating with the applicants, Mr. Hemming annexed the following explanatory note to the application in this case before sending it to the printer :—

In view of the clarification of the Commission's *Opinion* 11 given in *Opinion* 136 (which was not published at the time when the present application was drawn up), the difficulties in regard to *Formica* Linnaeus, 1758, discussed in that application have disappeared, for under *Opinion* 136 Latreille did not in 1810 make a valid designation of the type species of *Formica* Linnaeus. In consequence the designation by Curtis (1839) of *Formica rufa* Linnaeus, 1758, as the type species of that genus is valid. Thus, the names *Formica* Linnaeus, 1758, and *Camponotus* Mayr, 1861, can now be placed on the *Official List of Generic Names in Zoology*, without the prior use by the Commission of their Plenary Powers to suspend the *Règles Internationales*. (int'd.) F.H. 11th August 1944.

4. Publication of the present application : The present application, with Mr. Hemming's annexed note, was sent to the printer in September 1944, but, owing to difficulties arising from paper

rationing, shortage of labour at the printing works and similar causes, publication did not actually take place until 28th February 1947 (*Bull. zool. Nomencl.* 1 : 207).

5. Support received from Dr. Th. Mortensen (Universitetets Zoologiske Museum, Copenhagen, Denmark : On 8th April 1947, Dr. Th. Mortensen (*Universitetets Zoologiske Museum, Copenhagen*) addressed a letter to the Office of the Commission, in which he commented upon a number of applications then recently published in the *Bulletin of Zoological Nomenclature*, in which, as regards the present application he indicated his support as follows :—"All of the proposals by Benson, Ferrière and Richards (pp. 204—220) should be accepted".

6. Submission of the present application to the International Commission on Zoological Nomenclature at its Session held in Paris in July 1948 : The present application was considered by the International Commission on Zoological Nomenclature at the Thirteenth Meeting of its Paris Session held at the Sorbonne in the Amphithéâtre Louis-Liard on Monday, 26th July 1948 at 1730 hours. In presenting this case, the Acting President (Mr. Francis Hemming) said that for the reasons explained in the brief note which he had published in the previous year (the text of which has been reproduced in paragraph 3 of the present *Opinion*) it no longer appeared that the use of the Commission's Plenary Powers would be required in order to attain the objects sought by the applicants. The ground had therefore been cleared for the addition of the generic names *Formica* Linnaeus, 1758, and *Camponotus* Mayr, 1861, to the *Official List of Generic Names in Zoology* under the normal procedure prescribed for the recording in this way of nomenclatorially available names.

7. Decision taken by the International Commission on Zoological Nomenclature at its Session held in Paris in July 1948 : The following is an extract from the Official Record of the Proceedings of the Commission of the Thirteenth Meeting of its Paris Session, setting out the decision then reached by it in the

present case (Paris Session, 13th Meeting, Conclusion 43) (1950, *Bull. zool. Nomencl.* 4 : 408—410) :—

THE COMMISSION agreed :—

- (1) that no type selection within the meaning of Rule (g) in Article 30 was made for the genus *Formica* Linnaeus, 1758, by Latreille in 1810 (*Consid. gén. Crust. Arach. Ins.*), that under the *Règles* the type species of this genus was *Formica rufa* Linnaeus, 1758, that species having been the first of the originally included species to have been duly so selected under Rule (g) in Article 30 (by Curtis, 1839), and therefore that no question arose of the Commission having to use their Plenary Powers to designate that species as the type species of the foregoing genus ;
- (2) to place the under-mentioned generic names with the type species severally specified below on the *Official List of Generic Names in Zoology* :—
 - (a) *Formica* Linnaeus, 1758 (type species, by selection by Curtis, 1839 : *Formica rufa* Linnaeus, 1758) ;
 - (b) *Camponotus* Mayr, 1861 (type species, by selection by Bingham, 1903 : *Formica ligniperda* Latreille, 1802) ;
- (3) to place the under-mentioned trivial names on the *Official List of Specific Trivial Names in Zoology* :—
 - (a) *rufa* Linnaeus, 1758, as published in the combination *Formica rufa* ;
 - (b) *ligniperda* Latreille, 1802, as published in the combination *Formica ligniperda* ;
- (4) to render an *Opinion* recording the decisions specified in (1) to (3) above.

8. Commissioners attending the Session held in Paris in July 1948 : The decision quoted in the immediately preceding paragraph was concurred in by each of the sixteen (16) Commissioners and Alternate Commissioners present at the Session of the International Commission held in Paris in July 1948, namely :—

Beltrán *vice* Cabrera ; Boschma ; Bradley ; di Caporiacco ; Hemming ; Hindle *vice* Jordan ; Jorge *vice* do Amaral ; Kirby *vice* Stoll ; Lemche *vice* Dymond ; Mansour *vice* Hankó ; Metcalf *vice* Peters ; Riley *vice* Calman ; Rode ; Spärck *vice* Mortensen ; van Straelen *vice* Richter ; Usinger *vice* Vokes.

9. Submission of a Report on the present application to the Section on Nomenclature of the Thirteenth International Congress of Zoology, Paris, 1948 : The decision taken by the International

Commission on Zoological Nomenclature in relation to the present case, as set out in the extract from the *Official Record* of its Proceedings at its Paris Session reproduced in paragraph 7 of the present *Opinion*, was reported to, and approved by, the Section on Nomenclature of the Thirteenth International Congress of Zoology, Paris, 1948, at its Fifth Meeting held on 26th July 1948 (1950, *Bull. zool. Nomencl.* 5 : 108).

10. Discovery in 1953 by Dr. I. H. H. Yarrow (British Museum (Natural History), London) that the nominal species “*Formica rufa*” Linnaeus, 1758, the type species of the genus “*Formica*” Linnaeus, 1758, did not represent to the taxon currently identified therewith : On 18th July 1953, Dr. I. H. H. Yarrow (*British Museum (Natural History), London*) communicated to the Office of the Commission a paper in which, while in agreement with the general purpose of the application relating to the generic name *Formica* Linnaeus, 1758, dealt with by the International Commission in Paris in 1948 (paragraph 7 above), he drew attention to a serious flaw in the application then considered by the Commission which called for the use of the Commission’s Plenary Powers if the object of the decision taken in Paris was to be secured. The difficulty uncovered by Dr. Yarrow arose from the fact that, as it now appeared, the nominal species *Formica rufa* Linnaeus, 1758, the type species of the genus *Formica* Linnaeus, 1758, did not represent the taxon commonly identified with it and that, if the foregoing nominal species, interpreted by the taxon which it was now known to represent, continued to be accepted as the type species of *Formica*, the very confusion which in Paris in 1948 the Commission had sought to avert would arise again in a different form.

11. Action taken upon the receipt of Dr. Yarrow’s communication in July 1953 : Dr. Yarrow’s communication in regard to the present case was received on the eve of the temporary transfer of the Office of the Commission to Copenhagen in preparation for the meetings of the Colloquium on Zoological Nomenclature which, jointly with the International Commission, had been summoned to meet in that city on 29th July 1953 in anticipation of the opening a week later of the Fourteenth International Congress of Zoology. In these circumstances it was impossible at that time to take any action on the communication received

from Dr. Yarrow. However, before leaving London for Copenhagen, Mr. Hemming executed the following Minute (on 23rd July 1953) placing on record that it would be necessary for the present case to be re-submitted to the Commission before an *Opinion* embodying the decision taken in Paris was prepared :—

Discovery by Dr. I. H. H. Yarrow that “*Formica rufa*” Linnaeus, 1758, is a species of “*Camponotus*” Mayr, 1861, and not of “*Formica*” Linnaeus, 1758

By FRANCIS HEMMING, C.M.G., C.B.E.

(*Secretary to the International Commission on Zoological Nomenclature*)

A new situation has been created by the Report dated 18th July 1953 now received from Dr. I. H. H. Yarrow (*British Museum (Natural History)*) that it has been established that the nominal species *Formica rufa* Linnaeus, 1758, represents a species of the genus *Camponotus* Mayr, 1861, and not, as previously thought, of the genus *Formica* Linnaeus, 1758 ; for, when in 1948 the International Commission accepted the foregoing nominal species as the type species of the genus *Formica* Linnaeus, its object was to secure that the name *Formica* should continue to be used in its accustomed sense and should not become a senior synonym of *Camponotus* Mayr, a situation which the applicants had anticipated arising through the acceptance, as they believed was necessary without help from the Commission, of *Formica herculeana* Linnaeus, 1758, as the type species of *Formica* Linnaeus.

2. In these circumstances it is clearly necessary that this case should be re-submitted to the International Commission before any further action is taken thereon. As Secretary, I accordingly hereby direct that no action be taken on the decision reached by the International Commission in this case in 1948 (1950, *Bull. zool. Nomencl.* 4 : 408—410), pending the submission to the Commission of the Report now received from Dr. Yarrow.

12. Procedure agreed upon in 1954 for dealing with the situation created by Dr. Yarrow's communication of July 1953 : The piloting through the press of the work *Copenhagen Decisions on Zoological Nomenclature*, the Official Record of the decisions in this field taken by the Fourteenth International Congress of Zoology, occupied almost the whole of the resources of the Office of the Commission for the remainder of the year 1953. By the early part of 1954 good progress had, however, been made in the preparation of *Opinions* embodying decisions on individual problems taken by the International Commission at its Session held in Paris

in 1948. At this point it was judged that the stage had been reached at which the situation disclosed in the communication received by Dr. Yarrow in July 1953 should be placed before the Commission. Correspondence thereupon ensued between the Secretary and Dr. Yarrow, as the result of which it was agreed that this matter should be laid before the Commission in two documents, namely :—(1) Dr. Yarrow's communication (at that time slightly extended) which was concerned mainly with an exposition of the taxonomic issues involved ; (2) a supplementary paper to be prepared by the Secretary on the purely nomenclatorial problems raised in the present case.

13. Supplementary Application submitted by Dr. I. H. H. Yarrow (British Museum (Natural History), London) : On 6th October 1954 the following application, embodying certain minor revisions of the application submitted in July 1953, was communicated to the Office of the Commission for the consideration of the International Commission :—

Application for the re-examination and re-phrasing of the Decision taken by the International Commission regarding the name of the type species of " *Formica* " Linnaeus, 1758 (Class Insecta, Order Hymenoptera)

By I. H. H. YARROW, M.A., Ph.D.
(*British Museum (Natural History), London*)

SYNOPSIS

Benson, Ferrière and Richards in 1937 and 1947 submitted a case to the International Commission on Zoological Nomenclature asking for the preservation of the existing usage of the generic names *Formica* Linnaeus, 1758 and *Camponotus* Mayr, 1861, by cancelling the selection by Latreille (1810) of *Formica herculeana* Linnaeus, 1758, as the type species of the genus *Formica* Linnaeus, 1758, and in its place accepting the selection by Curtis (1839) of *Formica rufa* Linnaeus, 1758, as type of the genus *Formica* Linnaeus, 1758. At their Meeting in Paris in July 1948 the Commission considered the above application and agreed that Latreille in 1810 made no type selection of *Formica herculeana* as type species of *Formica* within the meaning of Rule (g) in Article 30 of the *Règles* and ruled that under the *Règles* the type species of this genus was *Formica rufa* Linnaeus, 1758, that species having been the first of the originally included species to have been

duly selected by Curtis (1839) and that therefore there was no necessity for the Commission to use their Plenary Powers to designate that species as type of the genus *Formica*. Furthermore, the Commission agreed to place *Formica rufa* Linnaeus, 1758 (type species *Formica rufa* Linnaeus, 1758) on the *Official List of Generic Names in Zoology*, and *rufa* Linnaeus, 1758, as published in the binominal form *Formica rufa*, on the *Official List of Specific Trivial Names in Zoology*. Recent investigation has shown *Formica rufa* Linnaeus, 1758 and *Formica herculeana* to be conspecific, the former a worker, the latter a wingless female of *Camponotus herculeanus* Linnaeus, 1758.

2. If *Formica rufa* Linnaeus, 1758 is to be accepted as the type species of the genus *Formica*, then *Camponotus* Mayr, 1861 is a direct synonym and the very same confusion of world-wide compass, which Benson, Ferrière and Richards set out to avoid must obtain.

3. This confusion can be avoided if the Commission will agree to use their Plenary Powers to place *Formica rufa* Linnaeus, 1758 on the list of permanently rejected names, and on the *Official List of Specific Names in Zoology* to replace *Formica rufa* Linnaeus, 1758 with *Formica rufa* Linnaeus, 1761, the occasion on which Linnaeus first described an individual of the species traditionally known as *Formica rufa*.

STATEMENT OF THE CASE

4. Linnaeus in 1758 (: 580, no. 2) proposed the name *Formica rufa*. The description he gives here agrees with the worker caste of *Camponotus herculeanus* (Linnaeus, 1758) but in no way with *Formica rufa* auctt. The description of the nest, on the other hand, cannot apply to *Camponotus*.

5. Linnaeus in 1761 (: 426, no. 1721) redescribed *Formica rufa* giving a description of the worker in the same words as in 1758 together with descriptions of a male and female and a supplementary description of the same worker.

6. Linnaeus in 1767 (: 962, no. 3) quoted the illustration given by Schaeffer in 1766 (pl. 5, fig. 3) under his *Formica rufa*, thus selecting the worker but not the female illustrated in that plate (fig. 4). There can be no doubt that these illustrations apply to *Camponotus ligniperda* (Latreille, 1802), a species not distinguished from *C. herculeanus* (Linnaeus, 1758) at that time. This shows that Linnaeus still confused *Camponotus* workers with those found in thatched nests, a form of nest never made by *Camponotus*.

7. Latreille in 1802 (: 143) was uncertain as to the identity of *Formica rufa* Linnaeus and deliberately excluded Linnaeus's own description and quotation of Schaeffer's illustration in order to retain

the name for what we now know as "*F. rufa*"; at the same time he felt obliged to point out that he only supposed his "*rufa*" to be the same as the Linnean species though in his opinion it might well be Linnaeus's *herculeana*.

8. Zetterstedt in 1840 (: 488, no. 3 *nec* 450, no. 8 which is a *Myrmica* species) interpreted *F. rufa* Linnaeus as a species now placed in *Camponotus* Mayr, 1861, and an examination of his specimens has shown that both his "*F. rufa* and *F. rufa* var.b." are in fact *Camponotus*.

9. Nylander in 1846 (: 894) placed the worker *F. rufa* Linnaeus, 1761 and *F. rufa* Linnaeus Zetterstedt, 1840, as synonyms of *Formica herculeana* Linnaeus. *F. rufa* Linnaeus Nylander, 1846 (: 902) is based on the male and female of Linnaeus, 1761. This was followed by Forster, 1850 (: 9), Roger, 1863 (: 1, no. 7, note :—misprint ♀ for ♂ cf under *F. rufa* : 12, no. 357). Forel, 1874 (: 96) synonymizes *F. rufa* Linnaeus with *Camponotus herculeanus* and under *Formica* (: 98) quotes "*F. rufa* i. sp. Linné (Faun. Svec.) Latreille. Mayr. Nylander".

10. Nylander in 1846 (: 894) pointed out that *Formica herculeana* Linnaeus, 1761 is a female; in actual fact the description given by Linnaeus in 1758 also must refer to the (dealated) female. In the Linnean Collection at Burlington House, London, there is a specimen which, though unlabelled, could be the type of *herculeana*. Also in the Linnean Collection is a single unlabelled worker of *Camponotus herculeanus* agreeing with the description of *F. rufa*. A third specimen of *Camponotus* is a winged female bearing the label "*herculeanea* [sic] ex desc.". *Formica* (modern sense) in the Linnean Collection is represented by a single worker bearing the label "*rufa* ex descr.", two unlabelled winged females and three unlabelled males. These last five could include the male and female specimens described by Linnaeus in the 2nd. edition of the *Fauna Svecica* (1761) and agree with the somewhat cursory description. The labelled worker on the other hand, does not agree at all with the description of *rufa*, which states "Thorace compresso toto ferrugineo, capite abdomenque nigris" (the thorax is not compressed, the head is not black but red—in fact this specimen is copiously red-marked) and even less with the supplementary description of 1761 which states "... squama intergerina ferruginea, acuminata.", which is typical of the worker of *Camponotus herculeanus* (Linnaeus, 1758), but effectively excludes any known *Formica*. No type of *Formica rufa* has previously been selected.

11. Dalla Torre in 1893 and later authors have disregarded this synonymy of *Formica* and *Camponotus*, indeed Donisthorpe (1927) goes even further and quotes the Linnean description of 1758 under "*Formica rufa*" despite the fact that this description cannot possibly

apply to any known *Formica* (nor in fact to any ant known in the British fauna).

12. It should be noted that Linnaeus intended to refer to the woodland thatch-building ants by his *Formica rufa* since he states in 1758 “*habitat in Europae acervis-acerosis sylvaticis ; in America septentrionali. Kalm,*” but unfortunately selected a superficially similar but in fact abundantly distinct specimen for description. His description of the *rufa* female in 1761 (: 426) removes any doubt on this matter.

13. The International Commission on Zoological Nomenclature at the Paris Meeting, July 1948, having had under consideration an application (file Z.N. (S.) 133) submitted by Mr. R. B. Benson (British Museum (Natural History) London), M. Ch. Ferrière (then of the Commonwealth (at that time Imperial) Institute of Entomology, London), and Dr. O. W. Richards (Imperial College of Science and Technology, London) “that the Commission should use their Plenary Powers to preserve the existing usage of the generic names *Formica* Linnaeus, 1758, and *Camponotus* Mayr, 1861 (Class Insecta, Order Hymenoptera) by cancelling the selection by Latreille (1810) of *Formica herculeana* Linnaeus, 1758, as the type species of the genus *Formica* Linnaeus, 1758 (Benson, Ferrière and Richards, 1947, *Bull. zool. Nomencl.* 1 : 207) ;” and agreed “to place the undermentioned generic names with the type species severally specified below on the *Official List of Generic Names in Zoology*” :—

Formica Linnaeus, 1758 (type species, by selection by Curtis, 1839 : *Formica rufa* Linnaeus, 1758) ;

Camponotus Mayr, 1861 (type species, by selection by Bingham, 1903 ; *Formica ligniperda* Latreille, 1802) ;”

and “to place the undermentioned trivial names on the *Official List of Specific Trivial Names in Zoology*” :—

rufa Linnaeus, 1758, as published in the combination *Formica rufa* ;

ligniperda Latreille, 1802, as published in the combination *Formica ligniperda*”. (1950, *Bull. zool. Nomencl.* 4 : 409—410.)

14. This decision was taken in order to prevent the synonymising of a *Camponotus* with *Formica* and to retain the use of *Formica* in the traditional sense.

15. From the above statement it will be seen that if *Formica rufa* Linnaeus, 1758 is retained for the type of *Formica* Linnaeus, 1758,

then *Camponotus* May, 1861, must be treated as a synonym, the very contingency that the Commission have sought to avoid.

16. As was stated in the original application (Benson, Ferrière and Richards, 1837, *The Generic Names of British Insects*, 5, Hymenoptera Aculeata, *R. ent. Soc. Lond.* : 86 and 1947, *Bull. zool. Nomencl.* 1 : 207) “*Camponotus* and *Formica* in the generally accepted sense are both very large genera of world-wide distribution and any change in their generic nomenclature would cause great confusion.”

RECOMMENDATION

17. It is considered that the best solution of the difficulties discussed above will be for the Commission to direct that the name *Formica rufa* Linnaeus be identified as from the description published in 1761 which undoubtedly refers to the species commonly so known and of which two winged female specimens are preserved in the Linnean Collection at Burlington House, and that this identification should be made by reference to one of those specimens. In order to facilitate the adoption of this proposal, I have selected one of the foregoing specimens to be the lectotype and I hereby publish that selection as follows :—“Of the two unlabelled winged female specimens in the Linnean Collection, one is in better condition than the other, having the full complement of antennae, wings and legs, and this is the specimen which I now select as the lectotype of the foregoing species. I have attached to this specimen the following label for this purpose : “Lectotype of *Formica rufa* Linnaeus, 1761, by selection by I. H. H. Yarrow, 1954”. The specimen stands in Box 192 in Drawer 54. An adequate diagnosis of the female of this species will be found under the synonym *F. piniphila* Schenck in Bondroit, 1918 (: 57) ”.

18. The proposals now submitted are :—

- (a) that the name *rufa* Linnaeus, 1758, as published in the combination *Formica rufa*, be permanently suppressed under the Plenary Powers and that under the same powers *Formica rufa* Linnaeus, 1761 (which under the action proposed would become an available name) should be designated the type species of the genus *Formica* Linnaeus, 1758, the nominal species so designated to be interpreted by reference to the winged female specimen in the Linnean Collection at Burlington House which I have selected to be the lectotype ;
- (b) that the name *rufa* Linnaeus, 1761, as published in the combination *Formica rufa*, as validated above and as there interpreted be placed on the *Official List of Specific Names in Zoology* at the same time that the generic name *Formica* Linnaeus, 1758, is placed on the *Official List of Generic Names in Zoology*.

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14. Report supplementary to Dr. Yarrow's application submitted by Mr. Francis Hemming, Secretary to the International Commission : Simultaneously with the submission to the Office of the Commission of Dr. Yarrow's application, Mr. Hemming, Secretary to the International Commission, submitted the Report supplementary thereto which it had been agreed (paragraph 12) should be submitted to the Commission at the same time as Dr. Yarrow's Report :—

“ Formica ” Linnaeus, 1758 : Report on proposed action under the Plenary Powers to give valid force to the Decision taken by the Commission in Paris : action needed because of circumstances not then known to the Commission

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The purpose of the present Report is to draw attention to an unexpected difficulty which has arisen in the case of the name *Formica* Linnaeus, 1758 (Class Insecta, Order Hymenoptera), on which a decision was taken in 1948, and to seek a supplementary decision from the Commission, in order to make it possible to prepare the required *Opinion* in this case.

2. This case was submitted to the Commission in August 1937 by the Royal Entomological Society of London on behalf of its Committee on Generic Nomenclature and the Hymenoptera Sub-Committee of that body. The application regarding *Formica* Linnaeus, 1758, had then just been published (1937, *Gen. Names brit. Ins.*, Part 5 : 86). The specialists by whom the application had been drafted were : R. B. Benson ; Ch. Ferrière ; O. W. Richards. In 1947 this application was re-published by the Commission (*Bull. zool. Nomencl.* 1 : 207).

3. In the application submitted, the foregoing specialists asked the Commission to use its Plenary Powers for the purpose of providing a valid foundation for the established usage of the names *Camponotus* Mayr, 1861, and *Formica* Linnaeus, 1758. As the applicants observed, “ In the generally accepted sense [these] are both very large genera of world-wide distribution and any change in their generic nomenclature would cause great confusion ”. According to the view held by the applicants, the foregoing nominal genera were, under a strict application of the ordinary rules, subjectively identical with one another, since, as it was considered, the type species of *Formica* Linnaeus (by selection by Latreille, 1810) was *Formica herculeana* Linnaeus, 1758, a species currently referred by specialists to the genus *Camponotus* Mayr. The applicants asked that this difficulty should be overcome

by the Commission using its Plenary Powers to designate *Formica rufa*, Linnaeus, 1758, as the type species of the genus *Formica* Linnaeus.

4. The proposed use of the Plenary Powers for the purpose of validating the current usage of the foregoing generic names was advertised in the prescribed manner on 29th September 1947. As was only to be expected, the publication of this notice elicited no objections to the action proposed, no specialist feeling disposed to support the transfer of the name *Formica* Linnaeus to the genus now known as *Camponotus* Mayr.

5. At Paris the Commission did not use its Plenary Powers in this case, for it took the view that the end desired could be obtained without resort to those Powers, for it transpired that the selection by Latreille (1810) of *F. herculeana* Linnaeus, 1758, as the type species of *Formica* Linnaeus was defective and that the first valid type selection for this genus was that by Curtis (1839) who selected *Formica rufa* Linnaeus, 1758, a selection in complete harmony with current usage. Accordingly, the Commission then disposed of this case by placing the name *Formica* Linnaeus, 1758 (with the above species as type species) and *Camponotus* Mayr, 1861 (type species, by selection by Bingham (1903) : *Formica ligniperda* Latreille, 1802) on the *Official List of Generic Names in Zoology* (1950, *Bull. zool. Nomencl.* 4 : 408—410).

6. The complication which has now been brought to notice by Dr. I. H. H. Yarrow (*British Museum (Natural History), London*) in a paper which is being published simultaneously with this Report (1954, *Bull. zool. Nomencl.* 9 : 313—317) is that the accepted interpretation of the nominal species *Formica rufa* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 580) is incorrect. This is due to the fact that since 1893 all authors have followed the incorrect determination of the foregoing nominal species by Dalla Torre, who, in making that interpretation, disregarded the synonymy of *Formica* and *Camponotus* established by previous authors. Dr. Yarrow points out :—

- (1) that the description given by Linnaeus in 1758 for *F. rufa* agrees with the worker caste of what is now known as *Camponotus herculeana* (Linnaeus, 1758) but in no way with the “*Formica rufa*” of authors.
- (2) that Linnaeus in 1761 (*Faun. svec.* (ed. 2) : 426) repeated his 1758 description of the worker but added descriptions of a male and a female and gave a supplementary description of the same worker.
- (3) that Linnaeus in 1767 (*Syst. Nat.* (ed. 12) 1(2) : 962) added to the reference for *F. rufa* a citation to a figure (Schaeffer, 1766, *Ic. Ins.* 1 : pl. 5, fig. 3) which there can be no doubt represents *Camponotus ligniperda* (Latreille, 1802) ;

- (4) that Latreille in 1802 (*Hist. nat. Fourmis* : 143) expressed doubt as to the identity of *F. rufa* Linnaeus, 1758, and, "in order to retain that name for what we now know as '*F. rufa*'," deliberately excluded both Linnaeus' own description and the citation by Linnaeus (in 1767) of Schaeffer's plate ;
- (5) that Zetterstedt in 1840 (*Ins. lapp.* : 488, no. 3 *nec* 450, no. 8 (which latter is a *Myrmica*)) interpreted *F. rufa* Linnaeus as a species now placed in the genus *Camponotus* ;
- (6) that Nylander in 1846 (*Act. Soc. Sci. fenn.* 2 : 894) treated *F. rufa* Linnaeus, 1758, as interpreted by Linnaeus in 1761, and also *F. rufa* Linnaeus, as interpreted by Zetterstedt (1840) as synonyms of *Formica herculeana* Linnaeus (i.e. as a *Camponotus*) and in this he was followed by Forster (1850), Roger (1863) and Forel (1874) ;
- (7) that the series of *F. rufa* in the Linnean Collection at Burlington House contains the following representatives of the species currently (but incorrectly) known as "*F. rufa*" ; (i) a single worker labelled "*rufa ex desc.*" ; (ii) two unlabelled winged females ; (iii) three unlabelled males ; that the unlabelled males and females could include the male and female described by Linnaeus in 1761 (these specimens agreeing with the somewhat cursory description then given for *F. rufa*) ; but that the labelled worker does not agree with the 1761 description.

7. Dr. Yarrow points out that the need for preventing the confusion which would follow from the transfer of the name *Formica* Linnaeus to the genus now known as *Camponotus* Mayr is as great as it was when the Benson/Ferrière/Richards proposal was published in 1937. He proposes that the end desired—namely, the provision of a valid basis for the decision taken by the Commission in 1948—should be secured by the use by the Commission of its Plenary Powers (a) to suppress the specific name *rufa* Linnaeus, 1758, as published in the combination *Formica rufa*, and (b) to designate *Formica rufa* Linnaeus, 1761 (which, on the suppression of *Formica rufa* Linnaeus, 1758, would become an available name) to be the type species of the genus *Formica* Linnaeus, 1758, the nominal species so designated to be interpreted by reference to the unlabelled winged female preserved in the Linnean Collection in the series of *Formica rufa* which he has selected to be the lectotype in the event of the Commission approving his present proposals. Dr. Yarrow gives particulars of the distinguishing label which he has attached to the female lectotype—it will be recalled from paragraph 6 (7) above that there are two winged females in the Linnean Collection—and he has furnished also a reference to a description of the lectotype so chosen which sets out the characters shown by that specimen which indisputably show that it is referable to the species currently—but incorrectly—known as *Formica rufa* Linnaeus, 1758.

8. While it is unfortunate that the information now received from Dr. Yarrow was not available at the time when the Commission decided to take such steps as might be necessary to prevent the transfer of the name *Formica* Linnaeus, 1758, to the genus currently known as *Camponotus* Mayr, 1861, the receipt of his communication at the present moment is very timely, for it has made it possible to postpone the preparation of the *Opinion* embodying the decision taken by the Commission on this case until it has been able to consider the additional material now submitted.

9. It is clearly desirable that all outstanding matters connected with the name *Formica* Linnaeus, should now be disposed of and I accordingly asked Dr. Yarrow to furnish particulars of the occasions on which this name has been taken as the basis of a family-group name. In a letter dated 21st October 1954, Dr. Yarrow has kindly furnished the following particulars :—

- 1802. FORMICARIAE (Formicaires) Latreille, 1802, *Histoire naturelle générale et particulière des Crustacés et des Insectes* 3 : 352
- 1805. FORMICARIAE (Formicaires) Latreille, 1805, *ibid.* 13 : 241
- 1809. FORMICARIAE (Formicaires) Latreille, 1809, *Genera Crustaceorum et Insectorum* 4 : 124
- 1810. FORMICARIAE (Formicaires) Latreille, 1810, *Considérations générales sur l'ordre naturel des Animeaux composant les Classes des Crustacés, des Arachnides, et des Insectes* : 311
- 1813. FORMICARIAE, Fallén, 1813, *Specimen Novan Hymenoptera disponendi methodum exhibens* : 7, 40
- 1815. FORMICARIDES, [Leach], [1815] in Brewster's *Edinburgh Encyclopedia* 9 (pt. 11) : 147
- 1819. FORMICADAE Leach, 1819, in Samouelle, *The Entomologist's useful Compendium* : 272
- 1820. FORMICAEDES Billberg, 1820, *Enumeratio insectorum in Museo Gust. Joh. Billberg* : 104.

Dr. Yarrow adds that the first use of the name FORMICIDAE that he has been able to trace is Stephens (J.F.), 1829. *A Systematic Catalogue of British Insects* : 357.

10. On the question of procedure, it appears to me that the most convenient course would be for me to submit for consideration the draft of a Ruling—intended later to be embodied in an *Opinion*—which would include not only (a) the draft of a Ruling giving effect to the request now received from Dr. Yarrow, but also (b) the Rulings agreed upon by Commission at Paris in regard to the remaining aspects of this case. The draft Ruling so prepared is given in an Annexe to the present note. It will be appreciated that it is in Point (1) of the draft Ruling that the action proposed for dealing with Dr. Yarrow's

point is set out and that the remaining Points (Points (2) to (4)) are concerned either with decisions on other aspects of the case decided upon in Paris (Points (2) and (3)) or (Point (4)) deal with matters that are purely consequential upon the acceptance of the recommendation set out in Point (1), if that recommendation is approved.

A N N E X E

Draft of Revised Ruling now submitted for consideration

(1) Under the Plenary Powers, (a) the specific name *rufa* Linnaeus, 1758, as published in the combination *Formica rufa*, is hereby suppressed for the purposes both of the Law of Priority and of the Law of Homonymy ; (b) the specific name *rufa* Linnaeus, 1761, as published in the same combination, is hereby validated and this name is to be interpreted by reference to the winged female specimen in the Linnean Collection selected to be the lectotype by Yarrow (1954).

(2) The under-mentioned names are hereby placed on the *Official List of Generic Names in Zoology* : (a) *Formica* Linnaeus, 1758 (gender : feminine) (type species, by designation under the Plenary Powers : *Formica rufa* Linnaeus, 1761, as validated and determined in (1) above ; (b) *Camponotus* Mayr, 1861 (gender : masculine) (type species, by selection by Bingham (1903) : *Formica ligniperda* Latreille, 1802).

(3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* : (a) *rufa* Linnaeus, 1761, as published in the combination *Formica rufa* and as validated and determined in (1) above ; (b) *ligniperda* Latreille, 1802, as published in the combination *Formica ligniperda*.

(4) The specific name *rufa* Linnaeus, 1758, as published in the combination *Formica rufa* and as suppressed in (1) above is hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*.

(5) The under-mentioned name is hereby placed on the *Official List of Family-Group Names in Zoology* :—FORMICIDAE (correction of FORMICARIAE) Latreille, [1802—1803*] (first published in the correct form as FORMICIDAE by Stephens (J.F.), 1829) (type genus : *Formica* Linnaeus, 1758).

(6) The under-mentioned names of family-group taxa, of each of which the type genus is *Formica* Linnaeus, 1758, are hereby placed on

* The work in which this name, though dated "An X" in the French Revolutionary Calendar, was not actually published until "An XI". It was therefore published in the period September 1802—September 1803.

the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—(a) FORMICARIDES [Leach], [1815] ; (b) FORMICADAE Leach, 1819 ; (c) FORMICAEDES Billberg, 1820.

15. Publication of Dr. Yarrow's Application and of Mr. Hemming's Report supplementary thereto : Dr. Yarrow's Application and Mr. Hemming's Report supplementary thereto were sent to the printer on 13th October 1954 and were published on 30th December of that year in Part 10 of Volume 9 of the *Bulletin of Zoological Nomenclature* (Yarrow, 1954, *Bull. zool. Nomencl.* 9 : 313—317 ; Hemming, 1954, *ibid.* 9 : 309—312).

16. Issue of Public Notices in 1954 : Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 51—56) Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 30th December 1954 (a) in Part 10 of Volume 9 of the *Bulletin of Zoological Nomenclature* (the Part in which Dr. Yarrow's application was published) and (b) to the other prescribed serial publications. In addition, such Notice was given also to six general zoological serial publications and to seven entomological serials in Europe and America.

17. Comments received : A note of support for Dr. Yarrow's application was received before the publication of his paper from four British entomologists. After publication two further communications were received, one from a British zoologist, the other from a German zoologist. Both these zoologists supported the action proposed by Dr. Yarrow. The foregoing communications are reproduced in the immediately following paragraphs. No objection to the action proposed by Dr. Yarrow was received from any source.

18. Support received from Dr. R. B. Benson (British Museum (Natural History)) and three other British entomologists : On 18th July 1953 Dr. Yarrow (the applicant in the present case) communicated to the Office of the Commission the following note of support for his proposals prepared by the under-mentioned specialists :—(1) R. B. Benson (*British Museum (Natural History), London*) ; (2) G. E. J. Nixon (*Commonwealth Institute of Entomology, London*) ; (3) J. F. Perkins (*British Museum (Natural*

History), London); (4) O. W. Richards (*Imperial College of Science and Technology, London*) (Benson *et al.*, 1954, *Bull. zool. Nomencl.* **9** : 318) :—

We strongly support Dr. I. H. H. Yarrow's application for the suppression of *Formica rufa* Linnaeus, 1758 : the retention of *Formica rufa* Linnaeus, 1761 with the type, a female ; and the retention of *Formica* Linnaeus, 1758, with the type species *Formica rufa* Linnaeus, 1761.

19. Support received from Dr. Julian Huxley (London) : On 28th January 1955, Dr. Julian Huxley (*London*) addressed a letter to the Office of the Commission commenting upon a number of then recently published applications, in which he intimated his support for Dr. Yarrow's application as follows (Huxley, 1955, *Bull. zool. Nomencl.* **11** : 232) :—

With reference to your notice in *Nature* last week, I write to say that I hope very much that the names *Formica rufa* and *Upogebia* will be validated as suggested, as any change would result in grave inconvenience to working biologists.

20. Support received from Dr. H. Bischoff (Kustos am Zoologischen Museum der Humboldt-Universität, Berlin) : The following note of support by Dr. H. Bischoff (*Kustos am Zoologischen Museum der Humboldt-Universität, Berlin*) for Dr. Yarrow's application was received in the Office of the Commission on 17th February 1955 (Bischoff, 1955, *Bull. zool. Nomencl.* **11** : 255) :—

I strongly support Dr. I. H. H. Yarrow's application for the suppression of *Formica rufa* Linnaeus, 1758 ; the retention of *Formica rufa* Linnaeus, 1761 with the type, a female ; and the retention of *Formica* Linnaeus, 1758, with the type species *Formica rufa* Linnaeus, 1761.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

21. Issue of Voting Paper V.P.(55)9 : On 5th August 1955, a Voting Paper (V.P.(55)9) was issued in which the Members

of the Commission were invited to vote either for, or against, "the proposal relating to the name for the type species of the genus *Formica* Linnaeus, 1758, and matters associated therewith as set out in the Draft Ruling given on page 312 of volume 9 of the *Bulletin of Zoological Nomenclature*" [i.e. in the Draft Ruling annexed to the paper reproduced in paragraph 14 of the present *Opinion*].

22. The Prescribed Voting Period : As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 5th November 1955.

23. Particulars of the Voting on Voting Paper V.P.(55)9 : At the close of the Prescribed Voting Period, the state of the voting Paper V.P.(55)9 was as follows :—

(a) *Affirmative Votes had been given by the following twenty-three (23) Commissioners (arranged in the order in which Votes were received) :*

Bodenheimer ; Holthuis ; Riley ; Vokes ; Stoll ; Hering ; Bradley (J.C.) ; Lemche ; Prantl ; Hankó ; Mayr ; do Amaral ; Esaki ; Kühnelt ; Dymond ; Key ; Mertens ; Bonnet ; Hemming ; Jaczewski ; Miller ; Sylvester-Bradley ; Cabrera ;

(b) *Negative Votes :*

None ;

(c) *Voting Papers not returned, two (2) :*

Boschma ; Tortonese³.

24. Declaration of Result of Vote : On 5th November 1955, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(55)9, signed a Certificate that the Votes cast were as set out

³ After the close of the Prescribed Voting Period late affirmative votes were received from Commissioner Boschma and from Commissioner Tortonese.

in paragraph 23 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

25. Preparation of the Ruling given in the present " Opinion " : On 7th March 1956, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(55)9.

26. Original References : The following are the original references for the generic and specific names placed on the *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion* :—

Camponotus Mayr (G.L.), 1861, *Die europ. Formiciden* : 10, 25, 35

Formica Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 579

ligniperda, *Formica*, Latreille, 1802, *Hist. nat. Fourmis* : 88

rufa, *Formica*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 580

rufa, *Formica*, Linnaeus, 1761, *Fauna svec.* (ed. 2) : 426

27. The following is the reference for the selection of a type species for the genus *Camponotus* Mayr, 1861, specified in the Ruling given in the present *Opinion* :—Bingham, 1903, *Fauna brit. India*, Hymen. **2** : 347.

28. The following are the original references for the family-group names placed on the *Official List* and *Official Index* of names of that category by the Ruling given in the present *Opinion* :

FORMICADAE Leach, 1819, in Samouelle, *The Entomologist's useful Compendium* : 272

FORMICAEIDES Billberg, 1820, *Enumeratio Ins. Mus. Billberg.* : 104

FORMICARIAE Latreille, [1802—1803], *Hist. nat. gén. partic. Crust. Ins.* **3** : 352

FORMICARIDES [Leach], [1815], in Brewster's *Edinburgh Ency.* 9(1) : 147

FORMICIDAE Stephens (J.F.), 1829, *Syst. Cat. brit. Ins.* : 357 (correction of FORMICARIAE Latreille, [1802—1803]).

29. At the time of the submission of the present application the name applicable to the second portion of a binomen was "trivial name". This was altered to "specific name" by the Fourteenth International Congress of Zoology, Copenhagen, 1953, which at the same time made corresponding changes in the titles of the *Official List* and *Official Index* of names of this category. These changes in terminology have been incorporated in the Ruling given in the present *Opinion*.

30. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

31. The present *Opinion* shall be known as *Opinion* Four Hundred and Twenty-Four (424) of the International Commission on Zoological Nomenclature.

DONE in London, this Seventh day of March, Nineteen Hundred and Fifty-Six.

*Secretary to the International Commission
on Zoological Nomenclature*

FRANCIS HEMMING