

genre *Dactylocera*, tout en précisant que l'espèce type est autre (*Phr. semilunata* Risso)! Je doute donc que l'on puisse tenir systématiquement les espèces figurées dans les planches de cette édition du *Règne animal* comme les types valablement désignés des genres!

(3) IDENTITÉS DES ESPÈCES *GAMMARELLUS* ET *LOCUSTA*—Les requérants n'ont tenu compte ni des faits rappelés en 1) ci-dessus, ni de la discussion de Latreille (*Hist. Nat. gen. et partic.*, t. 6, pp. 297-299, 24 germinal an XI = 14 avril 1803).

(4) ESPÈCES-TYPES DE *PHROSINA* ET DE *DACTYLOCERA*—Les requérants semblent ignorer la première révision par Latreille (*Règne animal*, édit. 2, 1829) et ne discutent pas les désignations conformes des types de *Dactylocera* par Milne Edwards (*Ann. Sc. nat.*, 1830, 20 : 386, note) et de *Phrosina* par Latreille (*Cours d'Entomologie* 1831 p. 400).

(5) GENRE *PEPHREDO*—Les requérants proposent de supprimer l'espèce-type (*potamogeti*) de ce genre monotypique, mais ne proposent, pour ce genre ainsi vidé de tout contenu, ni suppression, ni mise à l'Index!

(6) CAS DES NÉOTYPES—Il semble curieux de fixer des néotypes pour des espèces (*levifrons*, *rivularis*) que l'on veut mettre à l'Index. Sans doute même n'en a-t-on pas le droit puisque (Code. Art. 75b) la désignation d'un néotype ne peut pas s'appliquer à une espèce dont le nom soit hors de l'usage courant!

J'ajoute qu'il me semble que les requérants n'ont pas observé toutes les précautions méticuleuses requises par l'Article 75c (ils ne disent rien des provenances géographiques, ni où se trouve le *specimen*-type de *sedentarius* Forskäll, etc. . . .).

RAFINESQUE'S AMPHIPOD NAMES: REPLY TO DR. DUPUIS. Z.N.(S.) 1879

By L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*)

I will try to answer as well as I can the criticisms put forward by Dr. Dupuis.

Indeed a great number of decisions were asked, since a great number of names are involved. A blanket suppression of all Rafinesque's crustacean names was, if I remember correctly, what I had in mind when first proposing that action should be taken on this matter. I was discouraged from this by Hemming and correctly so. Several of Rafinesque's names, being junior synonyms or already widely adopted, did not cause any harm at all. Therefore in my first proposal concerning Rafinesque's names of Decapoda and Stomatopoda (see Opinion 522, *Opin. Decl. Int. Comm. Zool. Nomencl.*, 1958, 19 (9) : 209-248), all names are dealt with separately. Names in an exactly similar situation were of course discussed together. This same pattern was followed with Rafinesque's Amphipod names. And I am convinced that it is the best way.

The classical names automatically came into the picture, in those cases where an older synonym of these names had to be suppressed in order to save these well known names. This is even indicated in the title by the wording "and matters connected therewith".

We have given of each of the species proposed by Rafinesque the taxonomic status as, to our best ability, it could be ascertained at this moment, and we discussed, as exhaustively as possible the repercussions of the adoption of both the generic and specific names proposed by Rafinesque for these species. Where no immediate difficulties were foreseen (e.g. if names are at present considered junior synonyms), we did not request any action. The only actions that we requested were to save well known currently adopted names.

We do realize that if we now ask for the suppression of what to us seems a senior synonym of a well known name, and later these two names prove to belong to different taxa, our action was not necessary. But we even kept this in mind and thought that

the suppression, even if it later proves to be unnecessary, would do very little harm as the name for which suppression was asked was hardly ever used anyhow.

Now to the specific points:

1. The author of *Talitrus* is Bosc (1802, An X), even though Bosc ascribed the name to Latreille. There is no indication in Bosc's book that the definition that he gave of *Talitrus* is written by Latreille, it even is clear that the wording is by Bosc himself. As Griffin (1938, *Journ. Soc. Bibl. nat. Hist.*, 1(5) : 157) pointed out, Latreille's *Hist. nat. gén. partic.* 3, although bearing "An X" on the title page, appeared in "An XI", thus later than Bosc's book. There can therefore be no doubt that Bosc has to be cited as the author of *Talitrus*.

I have to admit that I overlooked the citation of *Talitrus* in Bosc, vol. 1, p. 78, and am most thankful to Dr. Dupuis for pointing out this error, which really makes a great difference. It means that the original publication of *Talitrus* by Bosc (1802, vol. 1, p. 78; vol. 2, p. 148: as the two volumes so far as we can ascertain are published simultaneously, we have to take both descriptions into account) indeed contained mention of *Oniscus gammarellus* Pallas, and therefore Latreille's (1810, *Consid. gén. Crust. Arachn. Ins.* : 103, 423) selection of that species as the type of *Talitrus* is valid. As *Oniscus gammarellus* Pallas at present is currently assigned to the genus *Orchestia*, acceptance of Latreille's type selection would (1) sink *Orchestia* Leach, 1814 as a synonym of *Talitrus* Bosc, 1802-1803, (2) make *Talitrus* Bosc the valid name of what at present is named *Orchestia* Leach, and (3) make it necessary to find a replacement name for the genus now indicated as *Talitrus*. In order to avoid this horrible confusion the Commission would have to take exactly those actions that Bousfield and I requested in our application under (1)(c) and (1)(d) of par. 6. So the action that we requested was correct, but the reasons for it are different from the ones that we published.

2. There is nothing against an "en bloc" designation of type species as long as it is clearly stated in the work itself how such type species are selected. In my opinion the indication on the title page of every volume of Cuvier's Disciples' edition of *Le Règne Animal*: "planches gravées, représentant les types de tous les genres" is an entirely unequivocal and clear indication of a type selection, which is valid if also the other requirements set forth by the Code are met. If Latreille's (1810, *Consid. gén. Crust. Arachn. Ins.* : 423) statement "Table des genres avec l'indication de l'espèce qui leur sert de type" is accepted by the Commission as a valid type designation as Opinion 11 specifically does, then Cuvier's type designations are equally valid (on the condition always that they fulfil all other requirements of the Code). In Opinion 470 (1957, *Opin. Decl. Int. Comm. Zool. Nomencl.* 16(9) : 136, 170) the type species of the genus *Gnathophyllum* Latreille, as selected by H. Milne Edwards in the Disciples' edition of Cuvier's has been accepted by the Commission. And there may be more such names on the Official List (*Gnathophyllum* is Name no. 1121).¹

3. We did not treat the identity of *Oniscus gammarellus*, as we (incorrectly) did not think that the species entered into the picture. As it now proves (see sub 1 above), that it actually is the valid type of the genus *Talitrus*, attention should be given to it as I did now under 1 above. The identity of *Cancer locusta* has been extensively dealt with by Bousfield and myself in our par. 5 (p. 109).

4. As Latreille (1829, Cuvier's *Règne Animal*, (ed. 2) 4 : 117) is the original author of *Dactylocera* and Bousfield and I cited him as such, I do not see how Dr. Dupuis can say that we did not take him into account. The fact that Latreille included only one species in *Dactylocera* (viz., *Phrosina semilunata*) makes that species the type by monotypy, as we stated. Latreille (1829) in this same work did not indicate a type for the genus *Phrosina* so that there was no reason to cite that author in regard to *Phrosina*. Latreille (1831, *Cours d'Entomologie*: 400) mentioned a genus which "j'ai appelé Phrosine (*Phrosina*), et qui a pour type une espèce que je crois être la

¹ Designations of type-species for the genera bearing names numbers 1303 (*Lyasmata* Risso, 1816), 1621 (*Eriphia* Latreille, 1817) and 1642 (*Philyra* Leach, 1817) on the Official List of Generic Names in Zoology are given us by H. Milne Edwards, 1837 in the Disciples' edition of Cuvier's *Règne Animal*. Designations made by Latreille, 1810 in his *Consid. gén.* are accepted for 48 generic names in the two published instalments of the List.

phrosine gros-oeil de M. Risso". This is not a definite type selection of *Phrosina macrophthalmia* for the genus *Phrosina*, as Latreille tentatively qualified the identity of the type species with Risso's species and cited it under a vernacular name. I must admit that I overlooked this "type selection" and am grateful to Dr. Dupuis for directing my attention to it. I do not have H. Milne Edwards's (1830) paper here at my disposal and as I have to leave tomorrow for a 6-weeks trip abroad I cannot obtain the paper before I leave. I am sorry therefore that I cannot comment on H. Milne Edwards's type designation of *Dactylocera* other than stating that, since the type of that genus was fixed by monotypy, no action by H. Milne Edwards could change the situation.²

5. Dr. Dupuis makes here the mistake to confuse taxa and names. We asked for the suppression of *potamogeti* in order to save the name *Gammarus fasciatus*. The name *potamogeti* not being thereafter available any more, its species should be given the name *fasciatus*. The generic name *Pepredo* Rafinesque, 1817, being a junior synonym of *Gammarus* Fabricius, 1775, does no harm and there is no need to suppress it. If later it should prove that the old genus *Gammarus* has to be divided in two or more genera or subgenera, the name *Pepredo* could be used for one of the newly recognized taxa provided that its type species *P. potamogeti* belongs in one of these taxa, and no older name is available for the latter. The type species of the (sub)genus *Pepredo* then should have to be named *Pepredo fasciatus* (Say), as the epithet *potamogeti* would not be available.

6. The neotype case is a sticky one. I believe that in order to solve the problem of a dubious name that threatens stability of nomenclature, as is the case here, a neotype selection is fully justified. Our action fulfilled all the requirements of Article 75, as far as I can see. Article 75(b), it is true, requests as Dr. Dupuis stated that a name must be in general use, but he forgot to complete the quote by "either as a valid name or as a synonym". I did interpret this part of the Code thus, that the nominal species for which the neotype is selected may be a synonym of a nominal species the name of which is in general use. Which is the case here in both *Pisitoe levifrons* and *Lepleurus rivularis*. The other interpretation would be that the name was in general use as a synonym, which I cannot quite visualize. One cites synonyms once in a while but does not use them regularly. Another solution, in order to avoid making neotypes for these species (a method, which I prefer as it can be done without bothering the Commission), is that the names be suppressed under the plenary powers, but then some people will object to suppressing nomina dubia.

As to the "provenances géographiques", we did give those of *Lepleurus rivularis* and of its neotype very carefully, but indeed were less careful with *Pisitoe levifrons* Rafinesque, 1814. Rafinesque's type came from Sicily. The type locality of *Cancer sedentarius* Forskål, 1775 is "In Mari mediterraneo", the type is still extant and is preserved in the Zoological Museum, Copenhagen.

I do not agree that the names in Bosc like *Talitrus*, *Bopyrus*, *Sphaeroma* and *Pinnotheres* should be attributed to Latreille. All the descriptions are in Bosc's own words. Direction 45 (1956, *Opin. Decl. Int. Comm. Zool. Nomencl.*, 1 (D)(9): 233-242) deals with the author's name of the genus *Pinnotheres*, which is on the Official List as *Pinnotheres* Bosc, 1801-1802, being name no. 577.

Summarizing, I must admit an error in the type indication of *Talitrus*, but this does not change anything in the action asked for. Also the type localities of *Pisitoe*

² In a footnote to the description of his new genus *Vibilia*, Milne Edwards says: "... Il est évident que, dans la méthode de M. Latreille, les Vibilies rentrent dans son genre *Dactylocera*; mais nous pensons qu'il convient de les distinguer de l'unique espèce que ce savant y rapporte [see Latreille in Cuvier, *Règne Animal* ed. 2, 4: 117] et qu'on doit prendre par conséquent comme type de ses *Dactylocères*. Cet Amphipode, qui est la Phrosine semi-lunaire de M. Risso, ... diffère de nos Vibilies par sa forme générale ..." etc., with detailed differentiation of *Vibilia* from *Dactylocera*. It is clear that Milne Edwards simply accepts the fact that Latreille had already fixed the type-species of *Dactylocera* by monotypy.

levifrons and *Cancer sedentarius* should have been stated, as well as the whereabouts of the type specimen of the latter species.

I regret not having been more careful in these points and am grateful to Dr. Dupuis for pointing them out.

ADDITIONAL COMMENTS ON THE PROPOSED VALIDATION OF
CYMATIIDAE IREDALE, 1913. Z.N.(S.) 1939

By W. O. Cernohorsky (*Auckland Institute and Museum, Auckland, New Zealand*) and
A. G. Beu (*New Zealand Geological Survey, Lower Hutt, New Zealand*)

We have studied the comments on the above application by Mr. Melville (*Bull. zool. Nomencl.* 31 (3) : 105) and in particular those by Mr. Heppell. We offer the following pertinent information:

We concur with Prof. Rohdendorf that according to the strict interpretation of the Code of International Commission on Zoological Nomenclature the family-group name Ranellidae Gray, has chronological priority over Cymatiidae Iredale, but is a strict interpretation of the Rules contained in the Code of I.C.Z.N. always in the best interests of nomenclatural stability? We concede that the usage of Ranellinae by Powell (1933, *Trans. N.Z. Inst.* 63 : 155, 164) removes Ranellidae from the *nomina oblita* category. Apart from Powell's usage, the family-group name Ranellinae has been scarcely used this century: by Terry, 1970 (*Bull. Amer. Paleont.* 56 : 449) and Cernohorsky (*Marine shells of the Pacific*, vol. 2: 117). Shikama (1963, *Selected shells of the world illustrated in colours* vol. 1: 64 and 1964 *op. cit.* vol. 2: 115) used the family-group name Ranellidae in error for the family Bursidae.

The main cause of the confusion of family names in the group is the realisation by Dell and Dance (1963, *Proc. malac. Soc. Lond.* 35 : 159) that the Cymatiid *Murex olearium* Linnaeus, 1758 is the type species of *Ranella* Lamarck, 1816, thus transferring the name *Ranella* to the then consistently used family Cymatiidae. During the nineteenth century most authors of the large, popular iconographies used as the major criterion for distinguishing a family now called Bursidae from a family now called Cymatiidae the presence or absence of varices aligned up the sides of the spire, a criterion now realised to have no significance (for instance, different species of one subgenus of *Bursa* have varices spaced every threequarters of a whorl or aligned up the spire sides). On this criterion *Ranella* seemed so closely related to what is now called *Bursa* that no-one realised they were not congeneric, and the family now called Bursidae was universally called Ranellidae. A mental association of the name *Ranella* with the family Bursidae has persisted during this century, even after Dell and Dance demonstrated the relationships of *Ranella olearium*, and still leads to confusion. Thus the name Ranellidae could be considered as a replacement name for Cymatiidae only after 1963, and it is not surprising that Cymatiidae was used for the family with almost 100% consistency from about 1920 until about 1963, and remains overwhelmingly the currently used name.

We find it confusing and in conflict with the principle of stability of nomenclature that a name used for over 100 years for a different family should now replace the widely understood and used name Cymatiidae. Mr. Heppell implied that our previously listed 18 usages of Cymatiidae after 1961 did not constitute "general acceptance" in the meaning of Article 40(a), and we have therefore compiled and append a more complete list of 75 references to usages of Cymatiidae after 1961. We did not attempt to make the list exhaustive, and with greater expenditure of time a longer list could have been compiled. In view of the rarity of usages of a family-group name based on *Ranella* in the sense of a group of Cymatiidae during this century (the three we know of are listed above) we submit that the overwhelmingly consistent usage of Cymatiidae constitutes "general acceptance". It is therefore clear that the acceptance of Ranellidae in place of Cymatiidae would upset current usage and stability of nomenclature.