REQUEST FOR A RULING AS TO THE SPECIMEN TO BE ACCEPTED AS THE LECTOTYPE OF "MEGATHYMUS ARYXNA" DYAR, 1905 (CLASS INSECTA, ORDER LEPIDOPTERA)

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(Commission's reference : Z.N.(S.) 889)

The Facts

1. Megathymus neumoegeni was described by Edwards in 1882.

2. Page 320 of volume 2 (1896) and plate 69 of volume 3 ([1897]) of the Lepidoptera-Heterocera section of the *Biologia Centrali-Americana* described and figured (figs. 3 and 4) two specimens identified by Druce as "neumoegeni".

3. Megathymus aryxna was described by Dyar in 1905, the description reading as follows:

"M. aryxna, new species.

"This is the form figured in the *Biologia Cent.—Am. Lep. Het.*, III, pl. 69, figs. 3 and 4. It differs from *neumoegeni* in having the fulvous markings considerably reduced, the outer band being broken into spots. I have ten specimens from Arizona from Dr. Barnes and Mr. Poling ...".

4. Megathymus drucei was described by Skinner in 1911, being a new name proposed by him for figure 3 of the above mentioned (paragraph 2) specimens figured in the *Biologia* as "neumoegeni".

5. Barnes and McDunnough in 1912 stated that Dyar had restricted the name aryxna to a single specimen, not being one of the specimens figured in the *Biologia*, but being one of the "ten specimens from Arizona" referred to above (paragraph 3). This Dyar did not do beyond writing a label at or about that time, and affixing it to one of those ten specimens. Just when Dyar did this is not known.

6. Skinner and Williams in 1924 restricted the type of *Megathymus aryxna* to figure 4 of the *Biologia*, saying "we select this figure as the type of *aryxna* Dyar". This specimen which is labelled "Mex[ico]", is now preserved in the British Museum Collection.

7. Omitting references to Catalogues and Check Lists, which are not considered usually taxonomic papers, it may be stated that so far as we have been able to find Skinner (1911), Skinner and Williams (1924), Freeman (1950), and Bell and dos Passos (1954) have used the name *Megathymus aryxna* in the manner in which the present authors wish it to be recognized by the International Commission, while Holland (1898), Barnes and McDunnough (1912), Draudt (1924), Holland (1931), and Stallings and Turner (1954) have used it in the other sense.

The Issue

8. The question at issue is whether the lectotype of *Megathymus aryxna* is the specimen in the British Museum (Natural History), figured in the *Biologia* (pl. 69, fig. 4), or one of the ten specimens in the United States National Museum, to which Dyar attached a label stating that the name *aryxna* was restricted to that specimen. This issue is raised by two recent papers, the first by Stallings and Turner (1954) and the second by Bell and dos Passos (1954).

The Argument

9. Upon the foregoing statement of facts and the assumption that the ten specimens from Arizona constituted part of the type series, it is contended by Stallings and Turner that Barnes and McDunnough in 1912 effectively published the unpublished restriction of Dyar, but they cite no reference for this conclusion beyond page 23 of volume 1, Number 3 of the Contributions to the Natural History of the Lepidoptera of North America, although in such an important matter the restriction should be quoted, or at least cited to the very line. We have read that page carefully, but can find no language approaching a restriction which should be always clear and unequivocal. The nearest approach to such a statement is on lines eight, nine and ten of Barnes and McDunnough's work where they state that "at our suggestion Dr. Dyar has restricted the name aryxna to the unnamed form [italics ours] of which fig. 1 represents a co-type". This reference must be to Dyar's label, because admittedly there is no published restriction by him, but is that a valid restriction by Dyar? Since when does writing a label and affixing it to a specimen constitute a restriction ? How can a name be restricted to an "unnamed form " by which Barnes and McDunnough referred to four of the ten specimens that did not agree with any part of the description ? For they said " Dyar's original diagnosis of this species cannot apply to it in its restricted form ". As noted, when Barnes and McDunnough came to figure the "unnamed form"

they did not call it a lectotype but a "Co-type". It was not even that, because those four specimens were never part of the type series.

10. Stallings and Turner say in reference to the second sentence of Dyar's description "Frankly, we are unable to determine which of the two species he was describing". As far as we know, no one else has had any difficulty in determining which specimens Dyar was describing. *Megathymus aryxna* was, in fact, nothing but a substitute or new name for specimens which Dyar claimed were erroneously identified as "neumoegeni" by Druce in the Biologia. Stallings and Turner fail to quote the first sentence of the original description, but admit "The first sentence in his description does refer to Fig. [sic] 3 & 4 in the Biologia." Obviously the description is in the first sentence. The second sentence that Stallings and Turner quote is more comparative than descriptive.

11. In concluding their argument on this subject, Stallings and Turner refer without page citation to "the action of the International Commission last August at the Copenhagen Congress with reference to the Principle of the First Reviser", but fail to state how that principle is in any way relevant to the facts. That principle "is to be rigidly construed", and relates "in the case of specific names, only when an author, after citing two or more such names published in the same book and on the same date, clearly indicates by whatever method, (a) that he is of the opinion that the nominal species so named represent the same taxon, and (b) that he is selecting one of the names concerned, to the exclusion of the other name or names, to be the name to be used for that taxon" (Hemming, 1953). There is no such situation here.

12. On the other hand, Bell and dos Passos conclude from the evidence :

- that the type series of aryxna consists only of the two specimens figured in the Biologia, and does not include any of the specimens to which Dyar may have intended, seven years later, to restrict that name, because being a substitute name the types were only those two specimens (see Decision 142 of the 1953 Copenhagen Congress);
- (2) that the action of Skinner in giving the name drucei to the specimen illustrated as figure 3 of the *Biologia* automatically restricted the name aryxna to figure 4, that being the only remaining syntype;
- (3) that neither Dyar, as Stallings and Turner admit by stating "He never published this restriction", nor Barnes and McDunnough ever published any restriction, publication being an essential part of such a selection (see Decision 137(4) of the 1953 Copenhagen Congress);
- (4) that Skinner and Williams expressly restricted the type of aryxna to figure 4 of the Biologia, and after selecting figure 4 of the Biologia as "the type of aryxna Dyar", said "The shifting of the concept by Dyar at the suggestion of Barnes and McDunnough is not valid".

Actually it was not a shifting at all, but at most a contemplated shifting that was never carried out in any manner.

Conclusion

13. As shown in paragraph 7 above, there is no uniform usage of the name *aryxna*, it having been used about half of the time in the manner advocated herein and the other half as used by Stallings and Turner, and it is impossible for there to be any stability in the nomenclature of some species of *Megathymus* until the International Commission has designated the lectotype of *aryxna*.

14. Under the theory of Stallings and Turner the pertinent synonymy would read :

Megathymus neumoegeni Edwards, 1882 aryxna Dyar, 1905 (partim) Megathymus aryxna Dyar, 1905 evansi Freeman, 1950 Megathymus drucei Skinner, 1911

15. The present authors believe however that it should read :

Megathymus neumoegeni Edwards, 1882 aryxna Dyar, 1905 Megathymus evansi Freeman, 1950 Megathymus drucei Skinner, 1911.

16. It is to avoid any further confusion in the use of this name that the present application is made.

17. We have refrained from considering the validity on taxonomic grounds of some of the above mentioned taxa, and the above synonymy is not to be considered as an expression of any opinion on our part concerning that problem, because that is a subjective matter and does not concern the International Commission. Once the type of *aryxna* is fixed, other problems will solve themselves.

18. The International Commission on Zoological Nomenclature is accordingly requested :

(1) to give a Ruling :--

- (a) that the sole syntypes of the nominal species Megathymus aryxna Dyar, 1905, were the specimens figured respectively under the name Megathymus neumoegeni as figures 3 and 4 on plate 69 of volume 3 of the Lepidoptera-Heterocera Section of Godman and Salvin's Biologia Centrali-Americana;
- (b) that the specimen labelled "Mex[ico]" now in the British Museum Collection, which was figured as figure 4 on the plate referred

to above is the lecto-type of the nominal species *Megathymus* aryxna Dyar, having been duly selected as such by Skinner and Williams (1924: 205);

- (2) to place the under-mentioned specific names on the Official List of Specific Names in Zoology :--
 - (a) neumoegeni Edwards, 1882, as published in the combination Megathymus neumoegeni;
 - (b) aryxna Dyar, 1905, as published in the combination Megathymus aryxna and as defined by the Ruling given in (1)(b) above.

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SUPPORT FOR THE DOS PASSOS/BELL PROPOSAL RELATING TO THE NAME "MEGATHYMUS ARYXNA" DYAR, 1905

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(Commission's reference : Z.N.(S.) 889)

(For the application submitted in this case, see page 289 of the present volume)

(Letter dated 19th January 1955)

Your Z.N.(S.) 889 of 18th January re lectotype of *Megathymus aryxna*, I am in entire agreement with the views expressed by Bell and Dos Passos.

Up to the publication in 1950 by Freeman of *evansi* the practice was to regard aryxna as = *neumoegeni*, vide "Hesperioidea of N. America" by Lindsey Bell and Williams 1931, the latest publication.

Early in the war I worked out *Megathymus* in the British Museum Collection and found that there were two species occurring together in Arizona over the label *neumoegeni*. I looked up the literature and found that the second species was the *aryxna* of Barnes & Macdunnough but not of Dyar, whose type must be taken as fig. 4 in the *Biologia*. I sent my analysis to Bell, suggesting he should call the second species *drucei*.

During 1952 and 1953 discussion took place between the two schools of thought in America. I was called upon by both sides to furnish photographs and genitalia drawings of Druce's figs. 3 and 4, both of which are in the British Museum bearing a label "B.C.A.Lep Het *Megathymus neumoegeni*".

Stallings & Turner published their solution of the problem in 1954. This reached me just before the paged proofs of vol. 4 of *Catalogue of American Hesperiidae in the British Museum* went to press and I added a postcript—" The decision that *aryxna* = evansi disregards the law that a type must agree with the original description". On the receipt of the Bell & Dos Passos separate, Mr. Riley sent a note to the printers asking them to add that their paper confirmed my opinion.



Dos Passos, Cyril F. and Bell, Ernest L. 1955. "Request for a ruling as to the specimen to be accepted as the lectotype of "Megathymus aryxna" Dyar, 1905 (class Insecta, order Lepidoptera). Z.N.(S.) 889." *The Bulletin of zoological nomenclature* 11, 289–294.

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