CALYMENE VARIOLARIS BRONGNIART, 1822 (TRILOBITA) : PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE A NEOTYPE IN HARMONY WITH CURRENT USE. Z.N.(S.) 2189.

By R.P. Tripp (British Museum (Natural History), London), J.T. Temple (Briakbeck College, London) and K.C. Gass (Milwaukee, U.S.A.)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to designate the specimen figured by Murchison in 1839 (655, pl. 14, fig. 1) as neotype of Calymene variolaris Brongniart, 1822 (14-15, pl. 1, figs. 3a-c).

History of the case

1. Brongniart in 1822 (14-15, pl. 1, figs. 3a-c) figured two trilobites under the name Calymene variolaris. Pl. 1, fig. 3a is of an extended dorsal shield of an encrinurid with fixigenal spine clearly visible. Fig. 3b is a right lateral view of an enrolled dorsal shield: that it belongs to the suborder Phacopina and not to the family ENCRINURIDAE is indicated by the large eye, in which the lenses are distinguishable. Fig. 3c is an enlargement of the lenses of the eye of the same specimen as fig. 3b. Brongniart's diagnosis ends "angulis externo-posticis in mucrone productis". The description states "sur leur angle extérieure une sorte d'appendice qui se prolonge sur les côtés de l'abdomen, jusque vers la sixième articulation".

2. Murchison in 1839 (655, pl. 14, fig. 1) figured a dorsal exoskeleton of a trilobite under the name Calymene variolaris Brong. (var. ?) pointing out that it differed from Brongniart's figure [3a] in lacking what would now be called fixigenal spines, and stating that it might represent a distinct form.

3. Burmeister in 1846 (114) restricted Brongniart's variolaris to his figures 3a, c only (although these do not represent the same species) and quoted Murchison's pl. 14, fig. 1 in synonymy. Further on (p. 115) he wrote "I propose, however, to retain the name of Calymene variolaris for Murchison's species so-called, this being probably distinct; but I shall transfer the still older name C. punctata to the Calym. variolaris of Brongniart, which at an earlier period was certainly known by that name".

4. Salter in 1848 explicitly referred Brongniart's fig. 3b (not 3a) and Murchison's pl. 14, fig. 1 to Cybele variolaris (Brongniart).

5. Fletcher in 1850 (403-404) listed Brongniart's pl. 1, fig. 3a in the synonymy of 'Cybele punctata Wahlenburg', and Brongniart's fig. 3b in the synonymy of 'Cybele variolaris Brongniart, sp.'.

6. All subsequent authors have applied the name variolaris to the encrinurine species represented by Murchison's pl. 14, fig. 1, even though the species was not figured by Brongniart. No lectotype or neotype of variolaris has yet been designated.

7. Brongniart's pl. 1, fig. 3a is from a drawing by [Charles] Stokes of a Dudley specimen in the Johnson Collection but the specimen is now not to be...
found in any of the museums known to hold parts of this collection. Brongniart himself stated that he did not know the whereabouts of the original of his figs. 3b, c.

8. The species figured in Brongniart’s pl. 1, fig. 3a was re-figured by Buckland in 1836 (p. 74, pl. 46, fig. 6) and named Asaphus tuberculatus. This figure probably represents Brongniart’s specimen. Encrinurus tuberculatus (Buckland) has been recognised by Tripp (1962, p. 467) as a valid name for a species in the group of Encrinurus punctatus (Wahlenberg, [1818]) (for the suppression of Trilobus punctatus Brünnich, 1781, and the validation of Wahlenberg’s specific name, see Opinion 537, Ops. Decls. int. Comm. zool. Nomencl. vol. 20: 41-56).

9. If Brongniart’s species were to be restricted to his fig. 3a (a procedure that would be in accordance with Brongniart’s original interpretation as indicated by his diagnosis) the name variolaris would apply to a different encrinurine species from that for which it has been used for over a century, and Buckland’s name would become a junior objective synonym.

10. If, on the other hand, Brongniart’s species were to be restricted to his figs. 3b, c the name variolaris would apply to an unidentified member of the Phacopina.

11. The trilobite to which the name Encrinurus variolaris (sensu Murchison) has been applied is the well known “strawberry-headed” trilobite of Dudley, familiar to the early collectors, and widely represented in museum collections. The following is a selection of references in the literature:

1848 Cybeie variolaris Brongniart (part); Salter, p. 344.
1850 Cybele variolaris Brongniart sp.; Fletcher, pp. 404-405, pl. 32, figs. 6-10.
1851 Zethus variolaris Brong. sp.: M’Coy, pp. 157-158.
1853 Encrinurus variolaris Brong. sp.; Salter, p. 7, pl. 4, figs. 13, 14.
1871 Encrinurus variolaris Brongniart; Baily, pp. 67-68, pl. 23, fig. 3.
1878 Cryptonymus variolaris Brongniart; Vogdes, p. 21, pl. 1, figs. 6-10; pl. 3, figs. 13, 14 (reproductions of Salter 1853, pl. 4, figs. 13, 14).
1884 Encrinurus variolaris; La Touche, pl. 10, fig. 253.
1907 Cryptonymus variolaris Brongn.; Vogdes. p. 74, pl. figs. 1-9, non fig. 10 (figs. 1-4, 7-9 reproductions of Fletcher 1850: figs. 5-6 of Salter 1853).
1917 Cryptonymus variolaris; Vogdes, pl. 3, figs. 1-9 (reproduction of Vogdes 1907, pl. 3).
1954 Encrinurus variolaris (Brongniart); Temple, pp. 315-318, text-figs. 1, 2.
1962 Encrinurus variolaris (Brongniart); Tripp, pl. 65, figs. 17-20.
1972 Encrinurus (Frammia) variolaris (Brongniart, 1822); Schrank, pl. 13, fig. 8.
1973 Encrinurus variolaris (Brongniart 1822); Clarkson and Henry, pp. 123-125 figs. 12-16.

12. In order to avoid the necessity for a change in current nomenclature, we recommend that the specimen figured by Murchison as Calymene variolaris Brong. (var.?) be designated as neotype of Calymene variolaris Brongniart, 1822. Since Murchison’s specimen is clearly not conspecific with either of Brongniart’s syntypes of Calymene variolaris it is necessary for Plenary Powers.
to be invoked for validation of this designation. Murchison's specimen is now preserved in Birmingham University Museum under the number BU 55. It is from the Much Wenlock Limestone Formation of Dudley, and is figured in a paper submitted to the journal Palaeontology by the authors of this application. A label has been affixed to the specimen stating that it has been selected as the neotype of Calymene variolaris Brongniart, 1822, and that the International Commission on Zoological Nomenclature has been asked to validate this selection under its Plenary Powers.

13. In the light of the foregoing, the International Commission on Zoological Nomenclature is asked:-

(1) to use its plenary powers to rule that Calymene variolaris Brongniart, 1822, is to be interpreted by reference to the neotype specimen designated above;

(2) to place the specific name variolaris Brongniart, 1822, as published in the binomen Calymene variolaris, on the Official List of Specific Names in Zoology, with an endorsement that the neotype of the species is the specimen designated above.

REFERENCES


