

## On the true identity of *Sphaerium borneense* Sowerby

by

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Although our knowledge of the non-marine mollusc fauna of Borneo must be very incomplete, it is certain that this huge island supports an immensely rich and varied fauna. It is equally certain that even without the additions that will be made eventually, the existing record is in need of considerable revision; undoubtedly a number of species will have to fall into synonymy or be expunged from the list. The subject of this note is to be synonymised and probably expunged.

*Sphaerium borneense* Sowerby, was described and figured from material in the British Museum (SOWERBY, 1878b, Pl. 15 Sp. 42), with 'Borneo' as the locality. ODHNER (1940, p. 115) notes that it has not been refound, and on the basis of SOWERBY's poor figure suggests that it may belong to the genus *Byssanodonta*. When one considers the known recent distribution of *Byssanodonta* (Central and South America, Trinidad; Africa, Madagascar and Mauritius) the presence of this genus in Borneo would be of considerable interest. PRASHAD (1921, p. 505) uses this same figure for comparison purposes when describing *Sphaerium cecilae* from the adjacent island of Sumatra. An inspection of the original material reveals that this species is not referable to either *Sphaerium* or *Byssanodonta*.

*S. borneense* was described from specimens acquired by HUGH CUMING whose collection was purchased for the British Museum

in 1866. A box labelled 'S. borneense, Sow./C.I. 42/Borneo/M.C.' contained four specimens, evidently the original series. None of the specimens agrees with the figure in both coloration and size. However, most of the figures in this monograph are of very poor quality

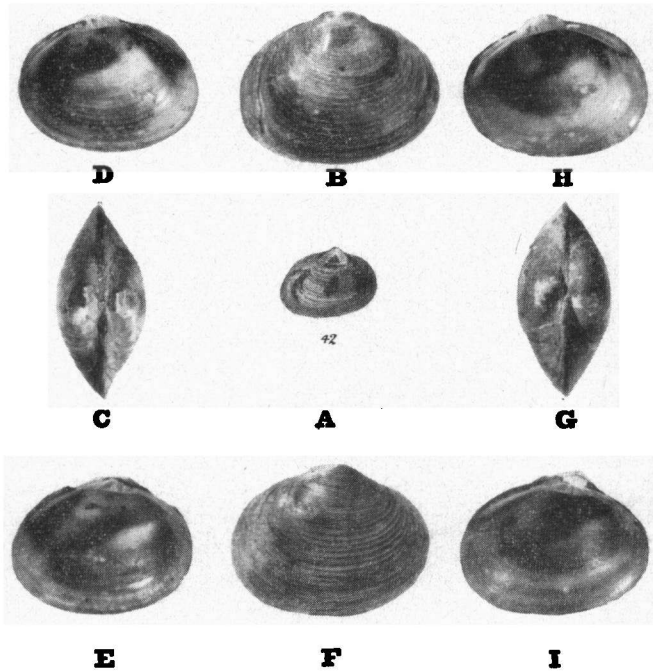


Fig. 1. A-E: *Sphaerium borneense*. A: Sowerby's original figure. B: lectotype, lateral view. C: lectotype, dorsal view. D, E: syntype, internal view of both valves. F-I: *Corbicula angasi*. F: lateral view. G: dorsal view. H, I: internal view of both valves.

Figs B-I  $\times 2$  approximately.

and the colouring of several is unnatural. The dimensions of one specimen agree with the figure and this one is illustrated here (Figs. 1 B and C) and selected as lectotype: *S. borneense* Sow. LECTOTYPE, Length 11.90 mm, Height 9.00 mm, Diameter 5.50 mm, B.M. (N.H.), Reg. No. 1958.1.10.60. Interior views are given of the valves of another, slightly smaller, specimen from the series (Figs. 1 D and E, Fig. 2). These illustrations show that *S. borneense* was founded on a species of *Corbicula*.

An examination of the British Museum (Natural History) collection of Corbiculidae, including many type specimens, and a search through the literature indicates that no species of *Corbicula* of this appearance has been described from Borneo or any other part of the former Dutch East Indies. CUMING is not known to have visited Borneo himself and it is impossible to tell how he came by the specimens. It is known that soon after the CUMING collection reached

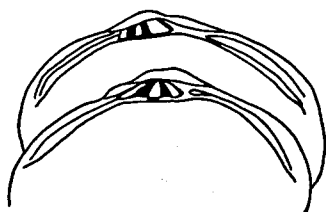


Fig. 2. *Sphaerium borneense*,  $\times 2\frac{1}{2}$  approximately.

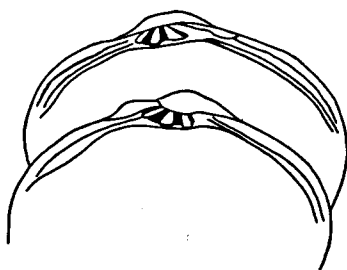


Fig. 3. *Corbicula angasi*,  $\times 2\frac{1}{2}$  approximately.

the British Museum many specimens were wrongly labelled (SMITH, 1906, 710—711). In the absence of more precise information the locality 'Borneo' must be regarded with suspicion. *C. borneense* bears a most striking resemblance to a well known Australian species, *C. angasi* Prime (1864), (*Corbiculina angasi* of most Australian authors). Internal and external views of two specimens of *C. angasi* from the Murray River are shown next to the similar views of *S. borneense* (Figs. 1 F-I, Fig. 3). These specimens, presented to the

British Museum by ANGAS, are certainly topotypes and may be syntypes. SOWERBY essayed a figure of this species as well (SOWERBY, 1878a, Pl. 17 Sp. 90), which has little in common with the actual specimen (from the HANLEY collection) in the British Museum. The danger of basing taxonomic conclusions solely on inadequate figures is obvious.

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