

TEREBRATULINA D'ORBIGNY, 1847 (BRACHIOPODA): PROPOSED
DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS.
Z.N.(S.) 1809

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Purpose of the Application:

This application proposes to clear the difficulty created by the change in the description by Linnaeus to his species *Anomia caputserpentis* in 1758 and 1767. This species, *sensu* 1767, is the type-species of the genus *Terebratulina* d'Orbigny, 1847, and synonymous with the species *Anomia retusa* Linnaeus, 1758. Thus, as a result of d'Orbigny's misidentification of *A. caputserpentis* we wish to change the type-species of *Terebratulina* from *A. caputserpentis* Linnaeus, 1758, to *A. retusa* Linnaeus, 1758.

History:

2. This application arises from the recent review of the brachiopods in the Linnaean Collection (Brunton, Cocks and Dance 1967).

3. In the tenth edition of the *Systema Naturae* Linnaeus erected the species *Anomia caputserpentis* (1758 : 703, species number 200), describing it as follows: "A. testa ovata laevi gibba: valvula altera apice longiore. Column. purp. 22.f.1. Habitat . . . fossilis. Natium altera postice gibba perforata." In the same publication (1758 : 701, number 191) Linnaeus erected the species *Anomia retusa*, with the following description: "A. testa obovata striata retusa: convalle longitudinali, nate performata. Habitat in pelago Norvegico supra Alcyonia. D. Pennant." The two species are distinctive; the former being a smooth shelled fossil species and the latter a strongly ribbed living species.

4. Specimens of both these *Anomia* species are preserved in the Linnaean Collection and are those isolated by Hanley after the publication of his *Ipsa Linnaei Conchylia* (1855). Two specimens of *A. caputserpentis* Linnaeus, 1758, are preserved in oolitic calcareous matrix and there are four specimens of *A. retusa* Linnaeus, 1758, from Recent seas. Lectotypes for both species have been selected and figured (Brunton, Cocks and Dance, 1967).

5. In the twelfth edition of the *Systema*, Linnaeus (1767 : 1153) changed his description of *A. caputserpentis* to: "A. testa obovata striata tomentosa: valvula altera nate longiore perforata. Fn. suec. 2154. Column. purp. 22.f.2. Gualt. test.t. 96.f.D. Habitat in abyssu M. Norvegici. Testa obovata, tomentoso, antice compressa, longitudinaliter striata, alba. Valvula superior postice prominens longiorque apice perforato ligamento affixo coralliis Zoo-phytisve; haec antice paulo longior & declinata. Inferior valvula rotundata, antice retusa, postice brevior. Margo utriusque crenulatus. Cardo dente utriusque testae utrinque ad latus prominens," while that of *A. retusa* remained unchanged. Thus in the 1767 edition these two species appear to be indistinguishable and this change in concept of *A. caputserpentis* has resulted in ambiguity.

6. In 1847 d'Orbigny erected the genus *Terebratulina* with *Anomia caputserpentis* as type-species. D'Orbigny clearly thought of this as the species as redefined in 1767, i.e. the species subsequently considered as synonymous with *Anomia retusa*, because he illustrated a brachial valve interior (1847, pl. 7, fig. 17) which is closely comparable to Recent *A. retusa* now in the Linnaean Collection. This internal morphology is not what we should expect to see within the smooth shelled fossil species *A. caputserpentis* Linnaeus, 1758.

7. Most subsequent authors (Hanley 1855 : 123; Davidson, 1856 : 17) have recognised that *A. caputserpentis* Linnaeus, 1767, is synonymous with *A. retusa* Linnaeus, 1758. Dall (1920 : 296) also recognised this, but is in error to place *A. retusa* as the type-species of *Terebratulina* without further discussion.

8. Since the erection of the genus *Terebratulina* d'Orbigny there has been no doubt as to its definition and the smooth species *Anomia caputserpentis* Linnaeus, 1758, could never be accommodated within this genus. However, despite the work of Dall (1920) and Thompson (1927 : 186) who stressed that *Anomia retusa* should be considered the type-species of *Terebratulina*, the original name given by d'Orbigny remains in use.

9. We are now in the situation where it is generally agreed that *Anomia caputserpentis* Linnaeus, 1758, is not of the genus *Terebratulina* d'Orbigny; *A. caputserpentis* Linnaeus, 1767 = *A. retusa* Linnaeus, 1758; and that d'Orbigny's original concept of the genus *Terebratulina* is based upon the living species *A. caputserpentis* Linnaeus, 1767 [non 1758] which is the junior synonym of *A. retusa* Linnaeus 1758.

10. Thus, we feel it to be desirable to propose that the type-species of *Terebratulina* d'Orbigny, 1847, be changed from *Anomia caputserpentis* Linnaeus, 1758, to *Anomia retusa* Linnaeus, 1758. This disposes of the ambiguity which was originally caused by Linnaeus himself when he altered his definition of *A. caputserpentis* between 1758 and 1767.

Proposals

11. Therefore we request the International Commission:

(1) to use its plenary powers:

(a) to set aside all designations of type-species for *Terebratulina* d'Orbigny, 1847, and

(b) having done so to designate as the type-species of *Terebratulina* d'Orbigny, 1847, the nominal species *Anomia retusa* Linnaeus, 1758;

(2) to place the generic name *Terebratulina* d'Orbigny, 1847 (gender : feminine) on the Official List of Generic Names in Zoology;

(3) to place the specific name *Anomia retusa* Linnaeus, 1758, type-species of *Terebratulina* d'Orbigny, by the plenary powers of 1(b) above, on the Official List of Specific Names in Zoology.

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