

## About "*Epicyprina*" *expansa*. (Cretaceous Bivalve). Oliete: A New Locality.

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**RESUMEN-** Se señala la presencia la "*Epicyprina*" *expansa* en Oliete, (Prov.Teruel, NE de España). Se discute su asignación genérica, al tratarse de un molde interno. Se recuerda parte de la fauna de Oliete, depositada en el Museo Geológico del Seminario de Barcelona (= MGSB).

**ABSTRACT-** The presence of "*Epicyprina*" *expansa* in Oliete (Teruel Province, NE of Spain) is noted. Its generic assignment is discussed, as it is an internal mold. Part of the fauna of Oliete, stored in the Geological Museum of the Seminary of Barcelona (= MGSB) is remembered.

**KEY WORDS-**Palaeontology. *Bivalvia*. *Generic assignment*. *NE Spain*.

Coquand (1865) described *Cyprina expansa* as a species. A specimen from the Ferrazza collection, from Oliete, is shown here, and other aspects of the species and genus are discussed.

### SYSTEMATICS

Family Arctiidae Newton, 1891

Genus *Epicyprina* Casey, 1952

1952 *Epicyprina* Casey, p. 154. pl. 7, fig. 2 y pl.8, fig. 1; text figs. 72-73

1969 *Epicyprina* Casey: Keen, p. N 646

**About the genus** - In 1952 Casey created the genus *Epicyprina* with the type species *Venus angulata* Sowerby, 1814. Later Casey (1961, p 586) changed the generic determination of a species: Harrison's *Cyprina angulata* became *Epicyprina harrisoni* Casey, 1961, a species from the Folkstone Beds (upper Aptian to lower Albian). The genus was admitted in the Treatise (Keen, 1969) and has been generally accepted. Thus Mongin (1985, p. 81) cites two Albian species without discussing the value and timeliness of the genus. They are *E. angulata* (Sowerby) and *E. evyensis* (Deshayes in Leymerie).

Casey (1952) in his generic characters valued above all the dentition of the hinge, most particularly the rough surface of tooth AII of the left valve (fig. 1 of pl. 8) and tooth AIII of the right valve (fig. 2 of pl. 7) ("the most striking feature of this genus"). Figures reproduced in Keen (1969 p.N647, figs. E127, 8 b-c). Because in an internal cast it is impossible to check such a character, it seems appropriate to put the name of the genus in quotation marks ("...") indicating that only the external characters are used, among which the oblong shape, the prosogyric umbo and the muscular impressions stand out. Although, if one reevaluates the generic characters, one has the impression of their rarity and uniqueness (a pair of rough teeth!), which do not support the validity of a new genus. Other specialists will have the last word.

In the casts, the substitution of *Cyprina* Lamarck, 1818 (recte *Arctica* Schumacher, 1817) for *Epicyprina* is somewhat problematic, perhaps a good criterion is stratigraphic: *Epicyprina* reaches the Aptian and *Cyprina* does not exceed the Albian.

### **"*Epicyprina*" *expansa* (Coquand, 1865)**

1865 *Cyprina expansa*: Coquand, p. 299, pl. XVIII, fig. 4 & 5.

1947 *Cyprina expansa* Bataller, p. 105, with synonymy and with the same figure of Coquand. (Synopsis p. 191).

1988 *Epicyprina* (sic) *expansa*: Gómez-Alba, p. 244, lám. 121, fig. 1.

2012 *Epicyprina* (sic) *expansa*: Hernández & Ruano, p. 39, lám. 12, fig. 16.

**Original description** - "Shell oblong, not triangular, slightly swollen, smooth or marked with some lines of growth, inequilateral. The buccal side short, narrow; lunula deeply excavated; Anal side elongated, widened, rounded and provided with an obtuse carina; deep muscular impressions". Note that this obtuse shell is very blurred in the original figure. Dimensions: Length: 76 mm. Height: 70 mm. Thickness: 43 mm". It is a somewhat large specimen, where the thickness decreases.

**Taxonomic data** - Coquand (1865), following the custom of his time, gave only a good description and noted two localities: Obón and Morella (between Morella and Chert). Here it is indicated that the holotype, which corresponds to the figured specimen, is in the collections of the Hungarian Geological Institute. Its type locality is considered to be Obon and its chronostratigraphy is Aptian. It was named for its oblong shape. See above for the original description.

**Notes** - Judging from the figures and description, Coquand (1865) had only internal casts. Likewise, all the specimens studied are internal casts.



Fig. 1-"*Epicyprina*" *expansa* (Coquand, 1865). Aptian of Oliete. Measurements in text. Scale bar = 1 cm. (Photo Carrasco).

**Localities** - In the MGSB there are the following specimens, all of them are internal casts and some of them are very deteriorated, therefore the measurements are orientative. All of them come from Aptian levels. Abbreviations: dap = distance antero posterior, dup distance umbo paleal and E = thickness. Measurements in mm.

Specimen n° 1069 de Mas de Barberáns (Prov. Tarragona), dap= 71, dup= 66 y E total= 45.

Specimen n° 1096 de Montmell (Marmellar), (Prov. Tarragona), dap= 74, dup= 70 y E total=61

Specimen n° 1079a de Mas de Barberáns, (Prov. Tarragona), dap= 70, dup=69 y E total= 42.

Specimen n° 1079b de Mas del Barberáns, (Prov. Tarragona), dap= 60, dup=51 y E total= 44.

Specimen n° 7036a de Castellote, (Prov. Teruel), dap= 68, dup = 60 y E total= 41.

Specimen n° 7036ba de Castellote, (Prov. Teruel), dap=71, dup=65 y E total=43.

Specimen n° 55725 de Forcall. (Col. Casanova). (Prov. Castellón), dap=94, dup=93 y E of one valve =31.

Variability. The larger specimen has less thickness than the smaller ones.

To these localities must be added the region of Almansa (Prov. Albacete) (Aptian in general), Oliete (Prov. Teruel), (with the specimen figured and the measurements: dap= 81, dup= 77 and total E= 59) and Josa-Obón (Prov. Teruel) of Gómez-Alba (1988). Some of the species from Oliete, housed in the MGSB and collected on several occasions, are listed in the appendix.

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### **Annex** (Fauna of Oliete in the MGSB, pars)

Foraminifera.

*Palorbitolina lenticularis* (Blumenbach, 1805).

#### Bivalvia

*Sphaera corrugata* J. Sowerby, 1822.

*Liostrongya pasiphae* (Coquand, 1865).

*Pachymya fallax* (Coquand, 1865).

*Integricardium larteti* (Vilanova, 1868).

*Quadratortonia valentina* (Vilanova in Mallada, 1887).

*Pterotortonia caudata* (Agassiz, 1840).

*Lima parallela* (Sowerby, 1812).

*Ceratostreon tuberculiferum* (Koch & Dunker, 1837).

*Vertinomya coquandi* Calzada, 1980

*Pholadomya elongata* Munster, 1841.

*Cucullaea dilatata* (d'Orbigny, 1844).

#### Brachiopoda

*Sellithyris sella* (J. de C. Sowerby, 1823).