

Revision of the worldwide Recent Pinnidae and some remarks on fossil European Pinnidae

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Abstract:

Works on pinnids in the last 60 years, especially in the Indo-Pacific, proved inadequate to reflect reality. Globally, 55 instead of the usually accepted 21 pinnids are herein recognized. Two further species may prove valid, *Atrina* sp. from Chile and *A. kinoshitai* HABE, 1953 from Japan.

Information on the evolution, morphology, habitat, biology and special characteristics of pinnids are provided.

A total of 55 species of the worldwide Recent Pinnidae are characterized and some common European fossils are illustrated. Many species are reinstated. Three new species are described: an Indo-Pacific *Pinna* (*Cyrtopinna*), an Indo-Pacific *Atrina* (*Servatrina*), and a West African *Atrina* (*Servatrina*). The assessment of the morphology of the shell was based mostly on type material that was compared with many other specimens in a variety of public and private collections. The distribution and habitats are included to fully document all species.

All of IREDALE's and MÖRCH's subgenera are recognized and two further subgenera *Abyssopinna* and *Australopinna* are here introduced. Two Eastern Atlantic species, *A. chautardi* and *A. fragilis* could not be placed in any subgenus with confidence. The validity of *P. kinoshitai* remained unresolved.

Key words:

European fossil pinnids; worldwide Recent Pinnidae; *Abyssopinna* subgen. nov.; *Australopinna* subgen. nov.; *Pinna* (*Cyrtopinna*) *wayae* sp. nov.; *Atrina* (*Servatrina*) *pini* sp. nov.; *Atrina* (*Servatrina*) *marquesana* sp. nov.; neotype for *Pinna pectinata* LINNAEUS, 1767; eyes of Will; waste channels.