

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

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Content:	Page:
Abstract and key words	2
Foreword and acknowledgements	3
Evolution and phylogeny	4
General morphology	5
<u>Fossil Pinnidae</u>	6
Examples of fossil European Pinnidae	6
<i>Stegoconcha ampla</i> (J. SOWERBY, 1835)	6
<i>Pinna robinaldina</i> ORBIGNY, 1844	6
<i>Pinna iburgensis</i> WEERTH, 1884	7
<i>Pinna decussata</i> GOLDFUSS, 1837	7
<i>Pinna quadrangularis</i> GOLDFUSS, 1837	8
Determination problems with fossil Pinnidae e.g. <i>A. fragilis</i> / <i>P. pectinata</i>	8
<i>Atrina fragilis kolloensis</i> MARQUET & VERVOENEN, 1995	8
<u>The Recent Pinnidae</u>	11
Habitat and Environment	11
Biology	12
Shells and their regeneration	12
Internal organs	14
Ligament	14
Commensalism	15
Pinnidae supplier of pearls, byssus-threads and food	16
Genera, subgenera and proposed new subgenera	17
Geographic distribution of 55 Recent Pinnidae	24
Mediterranean and North East Atlantic	25
<i>Pinna (Pinna) rudis</i> LINNAEUS, 1758	25
<i>Pinna (Pinna) nobilis</i> LINNAEUS, 1758	25
<i>Atrina</i> s.l. <i>fragilis</i> (PENNANT, 1777)	27
West Africa (East-Atlantic)	30
<i>Pinna (Pinna) rudis</i> LINNAEUS, 1758	30
<i>Atrina</i> s.l. <i>chautardi</i> (M. NICKLÈS, 1953)	31
<i>Atrina (Servatrina) pini</i> sp. nov.	33
West- Atlantic (Caribbean)	36
<i>Pinna (Pinna) carnea</i> GMELIN, 1791	36
<i>Atrina (Atrina) rigida</i> (LIGHTFOOT, 1786)	37
<i>Atrina (Servatrina) seminuda</i> (LAMARCK, 1819)	40
<i>Atrina (Servatrina) serrata</i> (SOWERBY I, 1825)	42
East Pacific (West America)	44
<i>Pinna (Pinna) rugosa</i> SOWERBY I, 1835	44
<i>Atrina (Atrina) tuberculosa</i> (SOWERBY I, 1835)	46
<i>Atrina (Servatrina) cumingii</i> (REEVE, 1858)	48
<i>Atrina (Servatrina) maura</i> (SOWERBY I, 1835)	50
<i>Atrina (Servatrina) oldroydii</i> DALL, 1901	52
<i>Atrina (Servatrina) texta</i> HERTLEIN, HANNA & STRONG, 1943	54
<i>Atrina</i> sp. GUZMANN ET AL., 1998	57
Indo-Pacific (including South Australia, New Zealand, Japan, and Hawaii)	59
Remarks to identification problems of Indo-Pacific genera and species	59
<i>Pinna (Pinna) fimbriatula</i> REEVE, 1859	60
<i>Pinna (Abyssopinna) epica</i> JOUSSEAUME, 1894	62
<i>Pinna (Abyssopinna) cellophana</i> MATSUKUMA & OKUTANI, 1986	64
<i>Pinna (Abyssopinna) exquisita</i> DALL, BARTSCH & REHDER, 1938	66
<i>Pinna (Abyssopinna) linguafelis</i> (HABE, 1953)	67
<i>Pinna (Cyrtopinna) attenuata</i> REEVE, 1858	70
<i>Pinna (Cyrtopinna) incurva</i> GMELIN, 1791	71
<i>Pinna (Cyrtopinna) trigonalis</i> W.H. PEASE, 1861	73
<i>Pinna (Cyrtopinna) trigonium</i> W.R. DUNKER, 1852	75
<i>Pinna (Cyrtopinna) wayae</i> sp. nov.	77
<i>Pinna (Exitopinna) deltodes</i> MENKE, 1843	79

<i>Pinna (Subitopinna) menkei</i> REEVE, 1858	81
<i>Pinna (Subitopinna) angustana</i> LAMARCK, 1819	83
<i>Pinna (Subitopinna) atropurpurea</i> SOWERBY I, 1825	85
<i>Pinna (Subitopinna) bicolor</i> GMELIN, 1791	87
<i>Pinna (Subitopinna) dolabrata</i> LAMARCK, 1819	90
<i>Pinna (Subitopinna) electrina</i> REEVE, 1858	92
<i>Pinna (Subitopinna) madida</i> REEVE, 1858	94
<i>Pinna (Subitopinna) papyracea</i> GMELIN, 1791	96
<i>Pinna (Subitopinna) sanguinolenta</i> REEVE, 1858	98
<i>Pinna (Quantulopinna) muricata</i> LINNAEUS, 1758	102
<i>Atrina (Atrina) vexillum</i> (BORN, 1778)	104
<i>Atrina (Servatrina) assimilis</i> (REEVE, 1858)	107
<i>Atrina (Servatrina) chinensis</i> (DESHAYES in CUVIER, 1841)	109
<i>Atrina (Servatrina) exusta</i> (GMELIN, 1791)	111
<i>Atrina (Servatrina) hystrix</i> (HANLEY, 1858)	113
<i>Atrina (Servatrina) inflata</i> (DILLWYN, 1817)	116
<i>Atrina (Servatrina) japonica</i> (REEVE, 1858)	118
<i>Atrina (Servatrina) lischkeana</i> (CLESSIN, 1891)	121
<i>Atrina (Servatrina) marquesana</i> sp. nov.	123
<i>Atrina (Servatrina) pectinata</i> (LINNAEUS, 1767)	125
<i>Atrina (Servatrina) penna</i> (REEVE, 1858)	128
<i>Atrina (Servatrina) kinoshitai</i> HABE, 1953 remarks	129
<i>Atrina (Servatrina) recta</i> DALL, BARTSCH & REHDER, 1938	130
<i>Atrina (Servatrina) serra</i> (REEVE, 1858)	131
<i>Atrina (Servatrina) strangei</i> (REEVE, 1858)	134
<i>Atrina (Servatrina) teramachii</i> HABE, 1953	135
<i>Atrina (Australopinna) tasmanica</i> (TENISON-WOODS, 1876)	138
<i>Atrina (Australopinna) squamifera</i> (SOWERBY I, 1835)	139
<i>Atrina (Australopinna) zelandica</i> (GRAY, 1835)	141
<i>Streptopinna saccata</i> (LINNAEUS, 1758)	143
Localities, stratigraphy and literature on European fossil Pinnidae treated herein	145
Literature on Recent Pinnidae	146
Characteristics of the Recent Pinnidae	152
List of abbreviations (institutions and collections)	156
Photo credits	156
Index (List of Recent species and synonyms)	157

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.