

Fig. 1. Fossils and fossiliferous rocks with Japanese labels. A-B. Fish fossil. “尾州石魚 [Owari, Sekigyô]” in the label (B) means a fossil fish from Owari (or Bishû). This specimen is considered to be from the Lower Miocene Morozaki Group in the Chita Peninsula, Aichi Prefecture. Labels are pasted to the back side of the specimen. Length = 55.4 mm. C-G. Fossiliferous sandstones. C. “美濃クワセキ [Mino, Kwaseki]” in the Japanese label means a fossil from Mino (= Gifu Prefecture). E, G. “カイセキ [Kaiseki]” in labels means shell stone. C-D. Height = 76.3 mm (C-D, including label), 75.4 mm (E), 75.8 mm (F-G). E is probably from the Lower Miocene Ayukawa Group in Kôga Province, Gôshû (= Shiga Prefecture) or the Lower Miocene Ichishi Group in Seishû (= Mié Prefecture). E includes fragments of *Turritella* sp. and *Cyclocardia* sp.

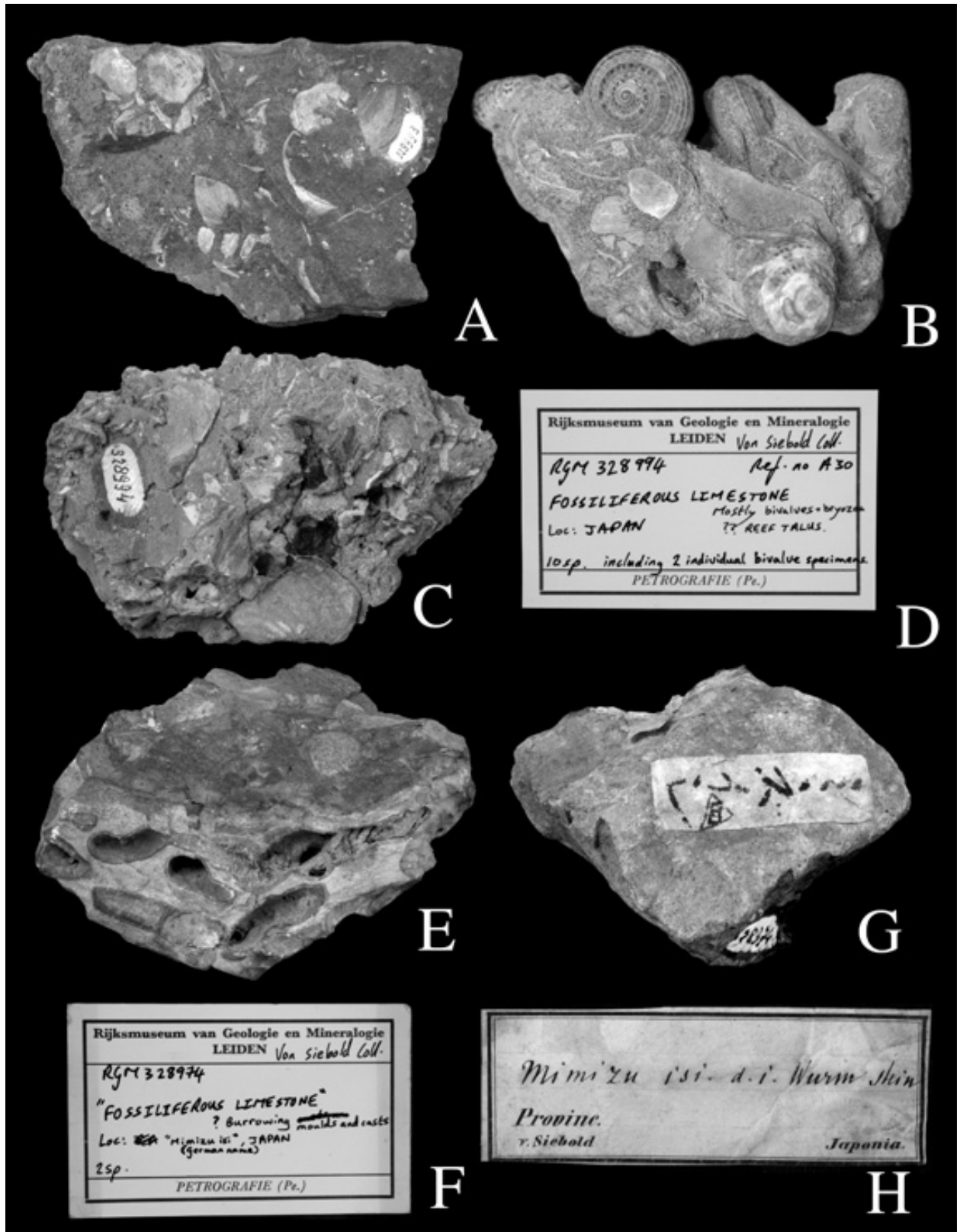


Fig. 2. Fossiliferous rocks. A-D. Sedimentary rocks containing molluscan shells and/or shell fragments. Length = 166 mm (A), 99 mm (C). B. Sandstone including *Umbonium (Suchium) moniliferum* (Lamarck, 1822) and *Batillaria multiformis* (Lischke, 1869). E-H. Burrows produced by boring bivalve "Teredo". "ミズイシ [Mimizu isi]" in the Japanese label of H mean "earthworm stones". Length = 68.5 mm. Registration number: A. 328993, C. 328994, D. 328974.

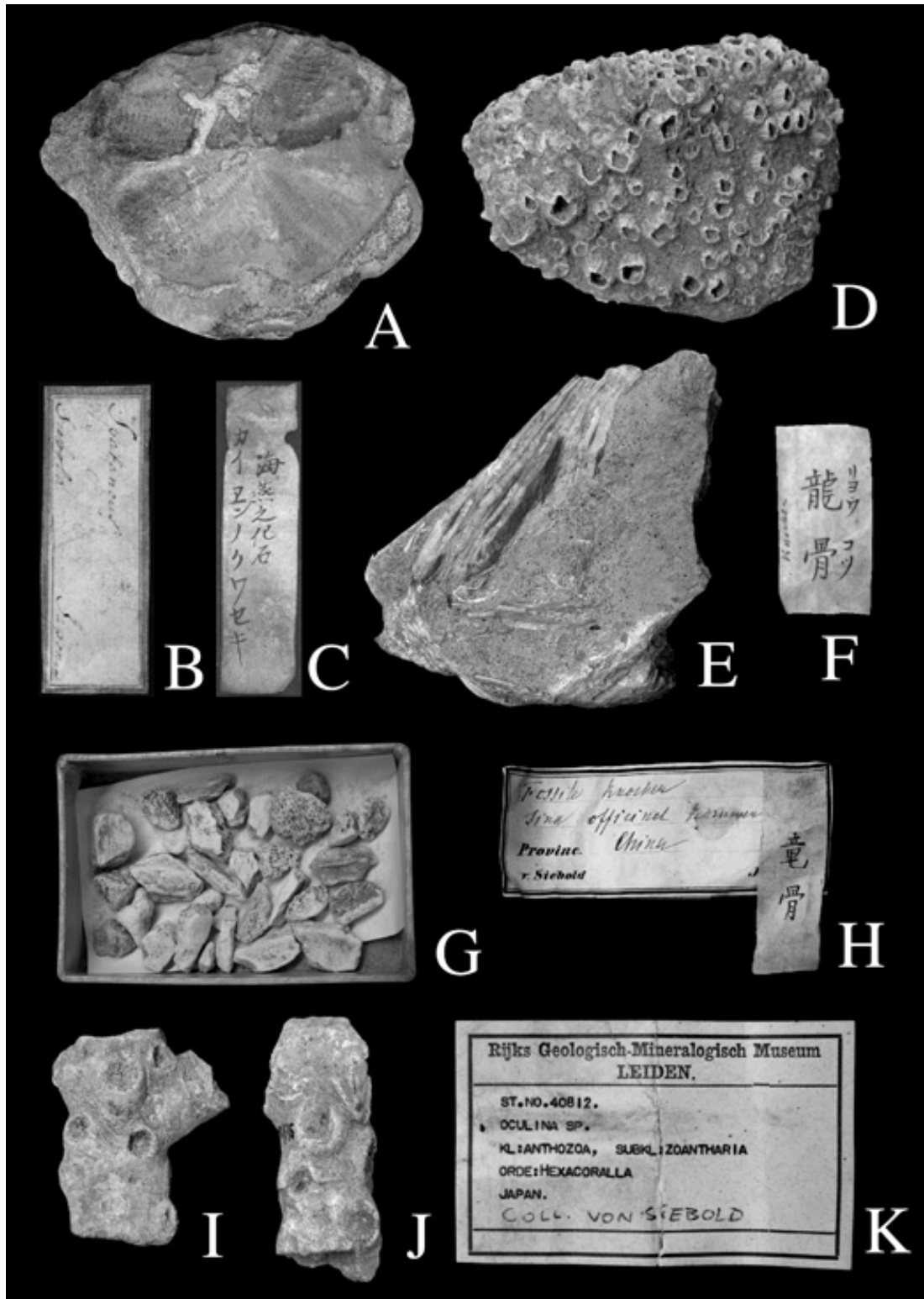


Fig. 3. Various invertebrate and vertebrate fossils. A-C. Heart urchin (Echinodermata, Spatangoida). “カイエンノクワセキ 海燕之化石 [Kaién-no-Kwaseki] ” in the Japanese label (C) means “a fossil of heart urchin”. Size not measured. D. Barnacles (Arthropoda, Cirripedia). Length = 68 mm. E-F. Fossil identified as “リョウコツ 龍骨 [Ryôkotsu] ” meaning a dragon bone in the Japanese label (F). Possibly fragment of oyster fossil including matrix = 85.7 mm. G-H. Fragments of fossil mammal bones from “China” according to the label (H). “竜骨 [Ryôkotsu]” in the Japanese or Chinese label (H, right side) also means “dragon bones”. I-K. Corals identified as *Oculina* sp. Registration number: 40812. Length = 23.1 mm (I), 28.7 mm (J).

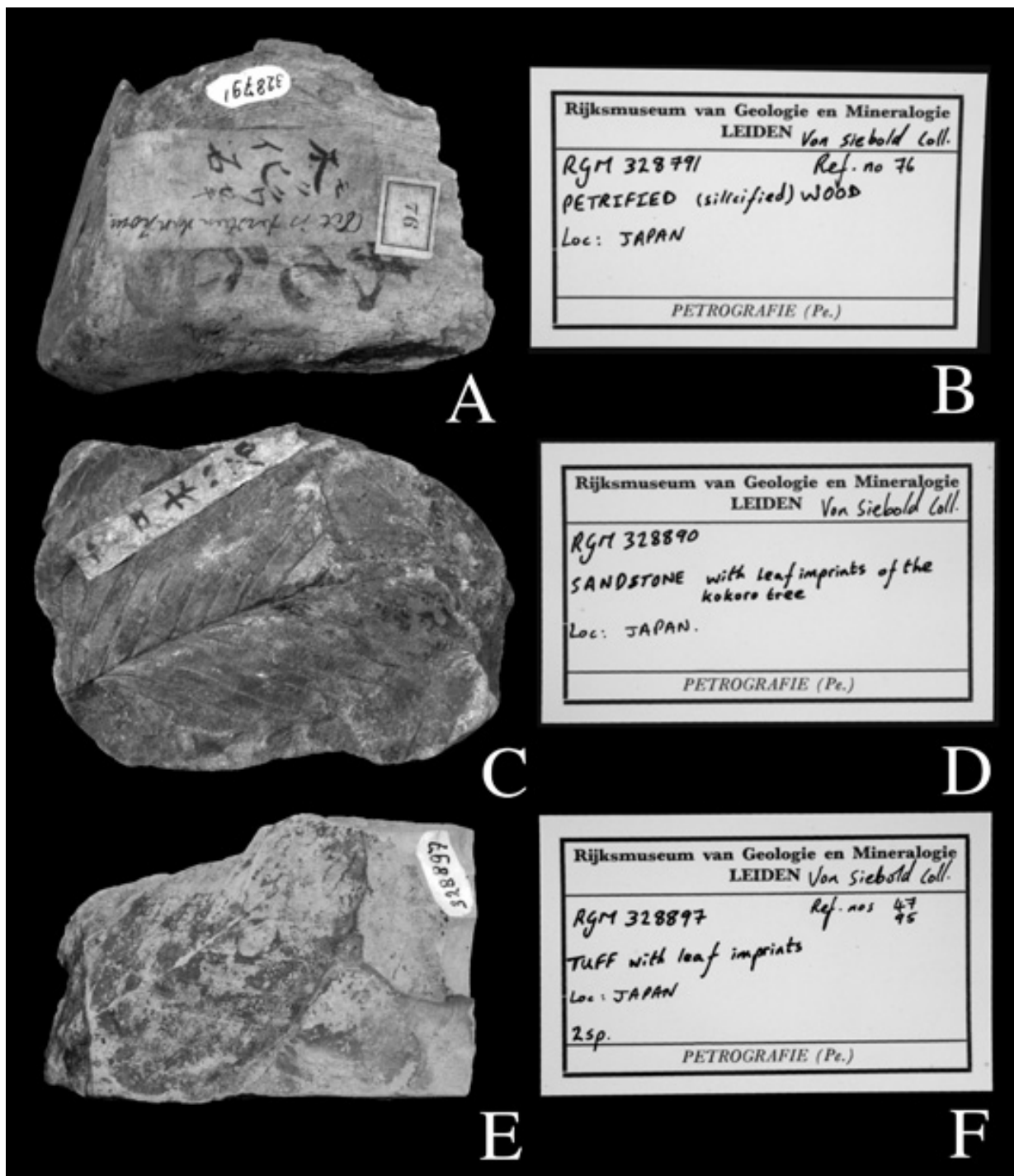


Fig. 4. Plant fossils. Tree trunk (A) and leaves (C, E). A. “木化石 [Moku-kwaseki]” in the pasted Japanese label means “a wood fossil”. C. “木ハ石 [Konoha-seki]” in the pasted Japanese label means “a leaf stone”. Length: A = 108 mm, C. 67.2 mm, D. 97 mm. Registration number: A. 3287981, C. 328890, E. 328897.

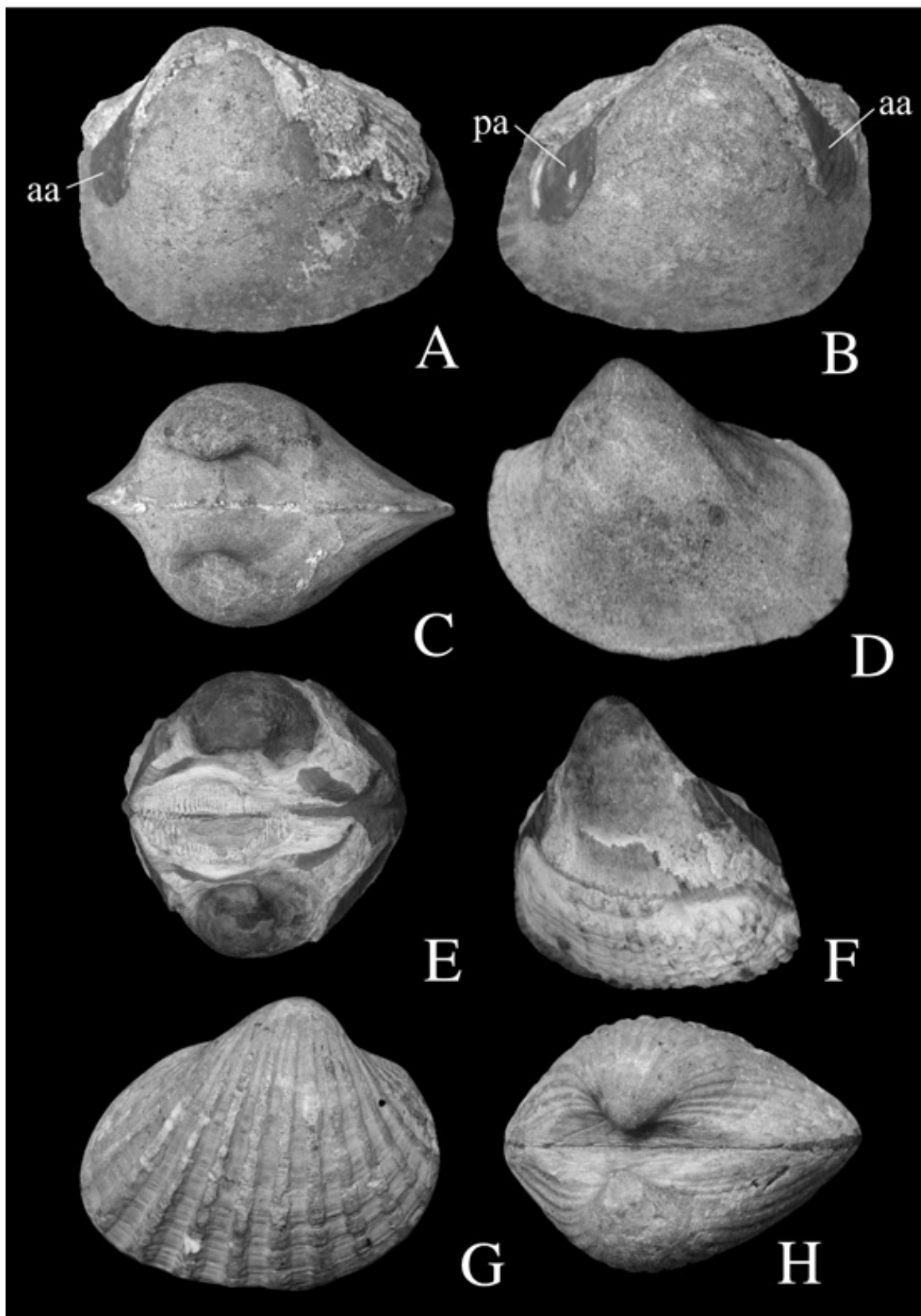


Fig. 5. Bivalvia, Pteriomorpha, Arcidae. A-B. *Anadara* (*Anadara*?) sp. C-D. *Anadara* sp. E-F. *Anadara* (*Hataiarca*) cf. *kakehataensis* Hatai & Nisiyama, 1949. G-H. *Anadara* (*Tegillarca*) *granosa* (Linnaeus, 1758). A-B. Shell length (SL) = 55.7 mm. C-D. SL = 61.1 mm. E-F. SL = 39.5 mm. G-H. SL = 53.2 mm.

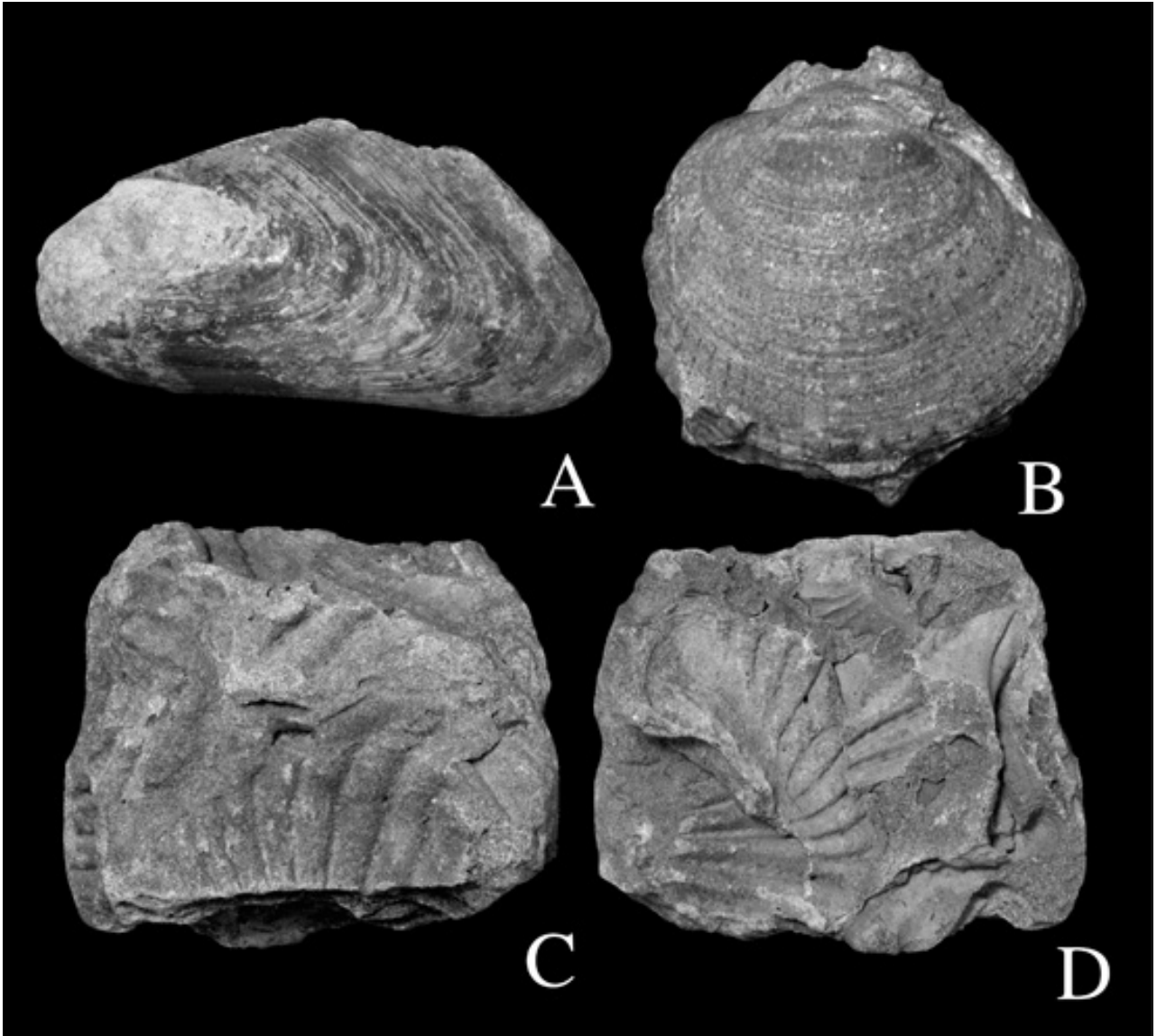


Fig. 6. Bivalvia, Pteriomorpha and Palaeoheterodonta. A. *Modiolus* sp. B. *Glycymeris (Veletuceta) cisshuensis* Makiyama, 1926. C-D. *Pterotrigoia* sp. A. Shell length (SL) = 54.1 mm. B. SL = 40.4 mm. C-D. Sandstone including molds of *Pterotrigoia* sp. Length = 74.1 mm.

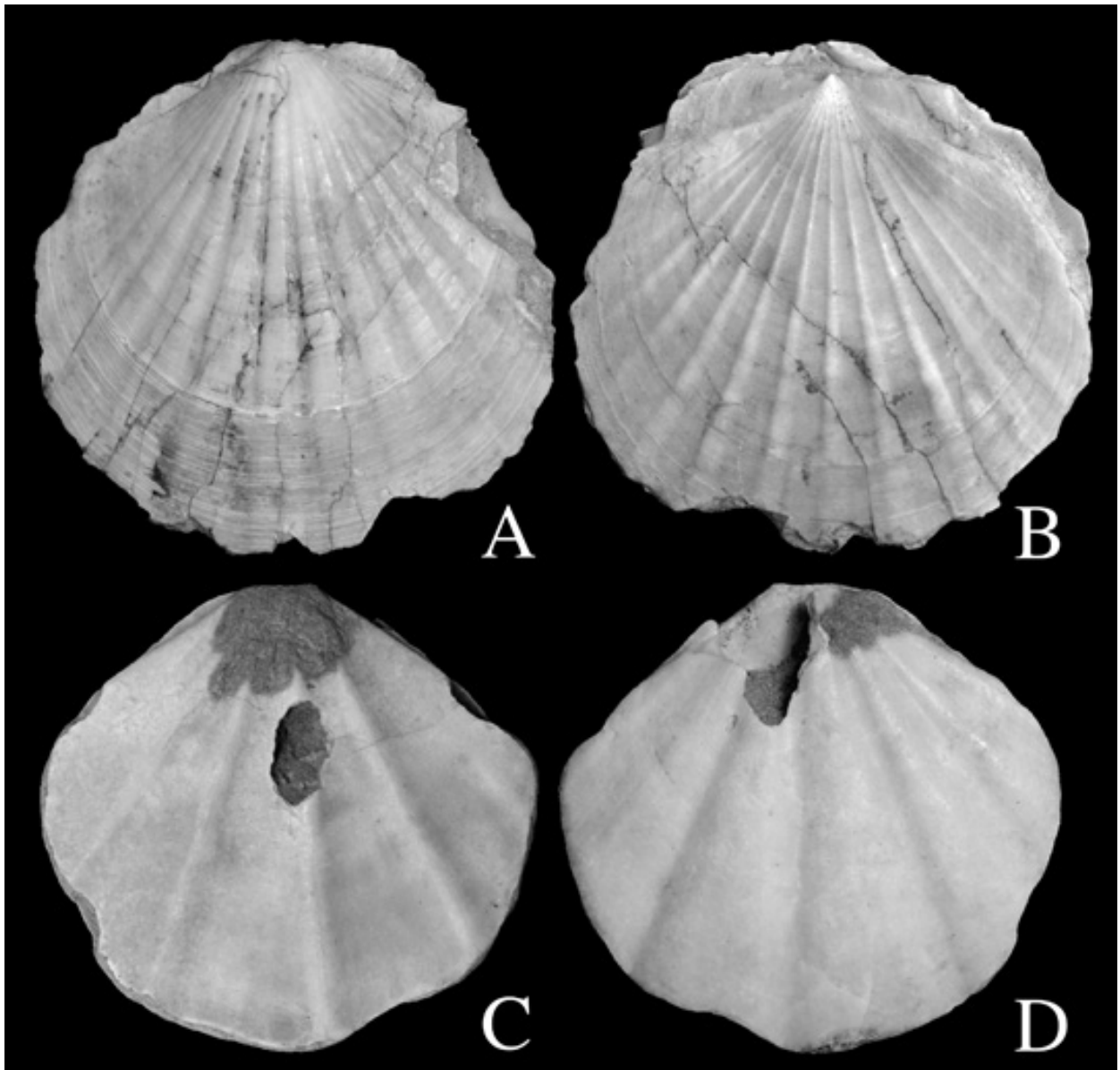


Fig. 7. Bivalvia, Pteriomorpha, Pectinidae. A-B. *Amussiopecten praesignis* (Yokoyama, 1922). C-D. *Mizuhopecten tokyoensis hokurikuensis* (Akiyama, 1962). A-B. Shell length (SL) = 66.6 mm. C-D. SL = 64.9 mm.

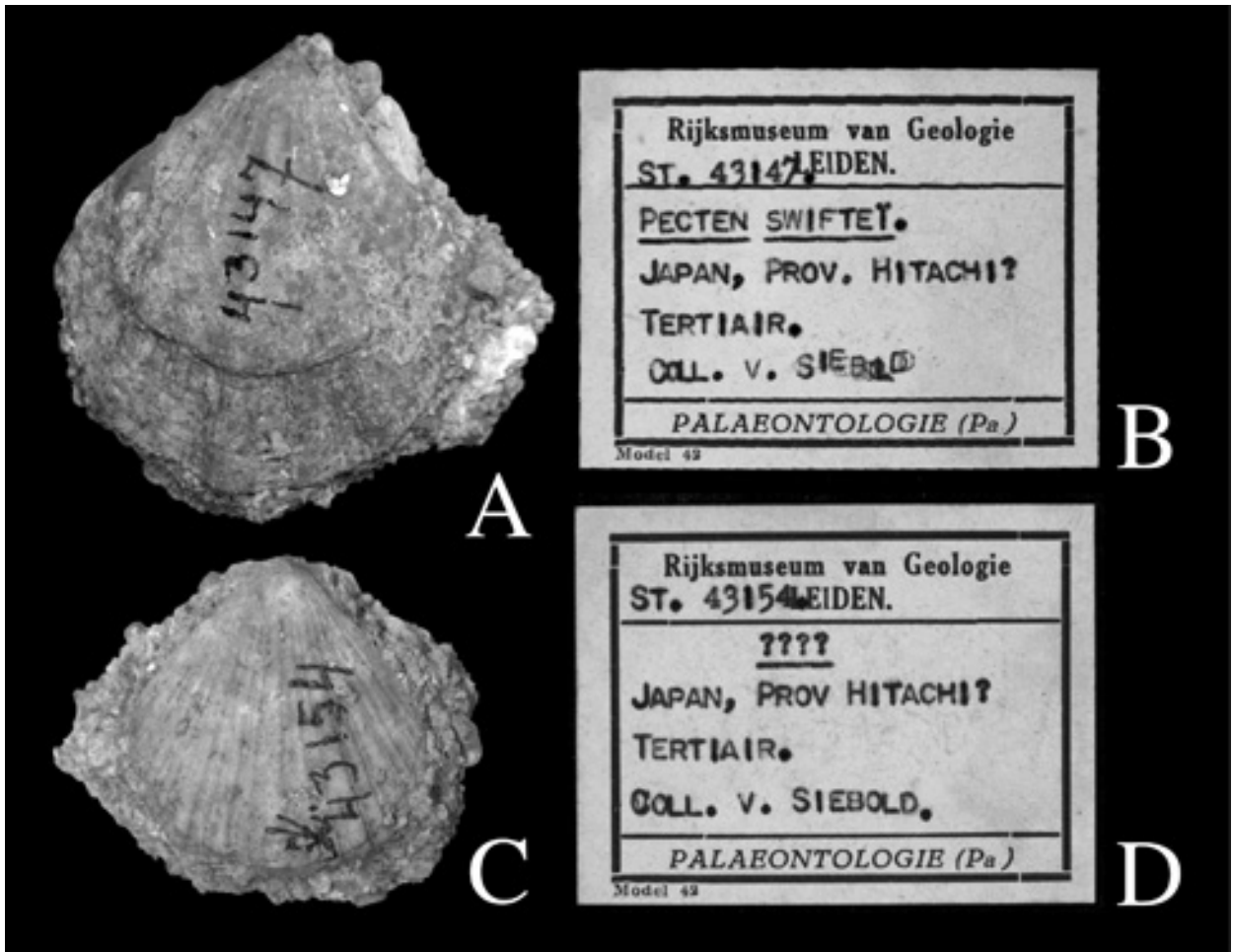


Fig. 8. Bivalvia, Pteriomorpha, Pectinidae. A-B. *Swiftpecten swiftii* (Bernardi, 1858). C-D. *Chlamys* sp. Registration number: A-B. 43147, C-D. 43154. Size not measured.



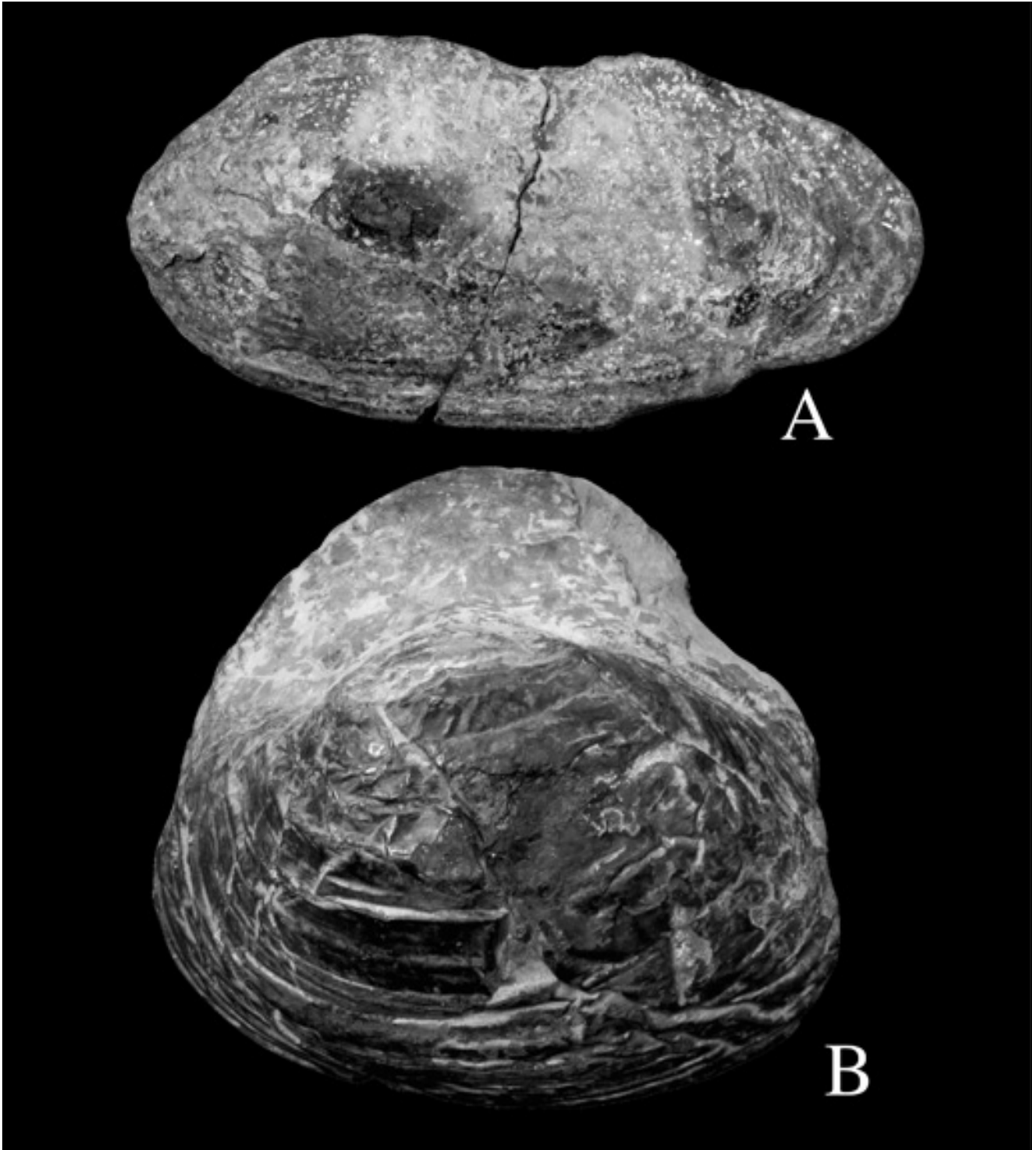


Fig. 9. Bivalvia, Palaeoheterodonta, Unionidae. A. *Cuneopsis?* sp. B. *Anodonta?* sp. A. Shell length (SL) = 140.2 mm. B. SL = 105.8 mm.

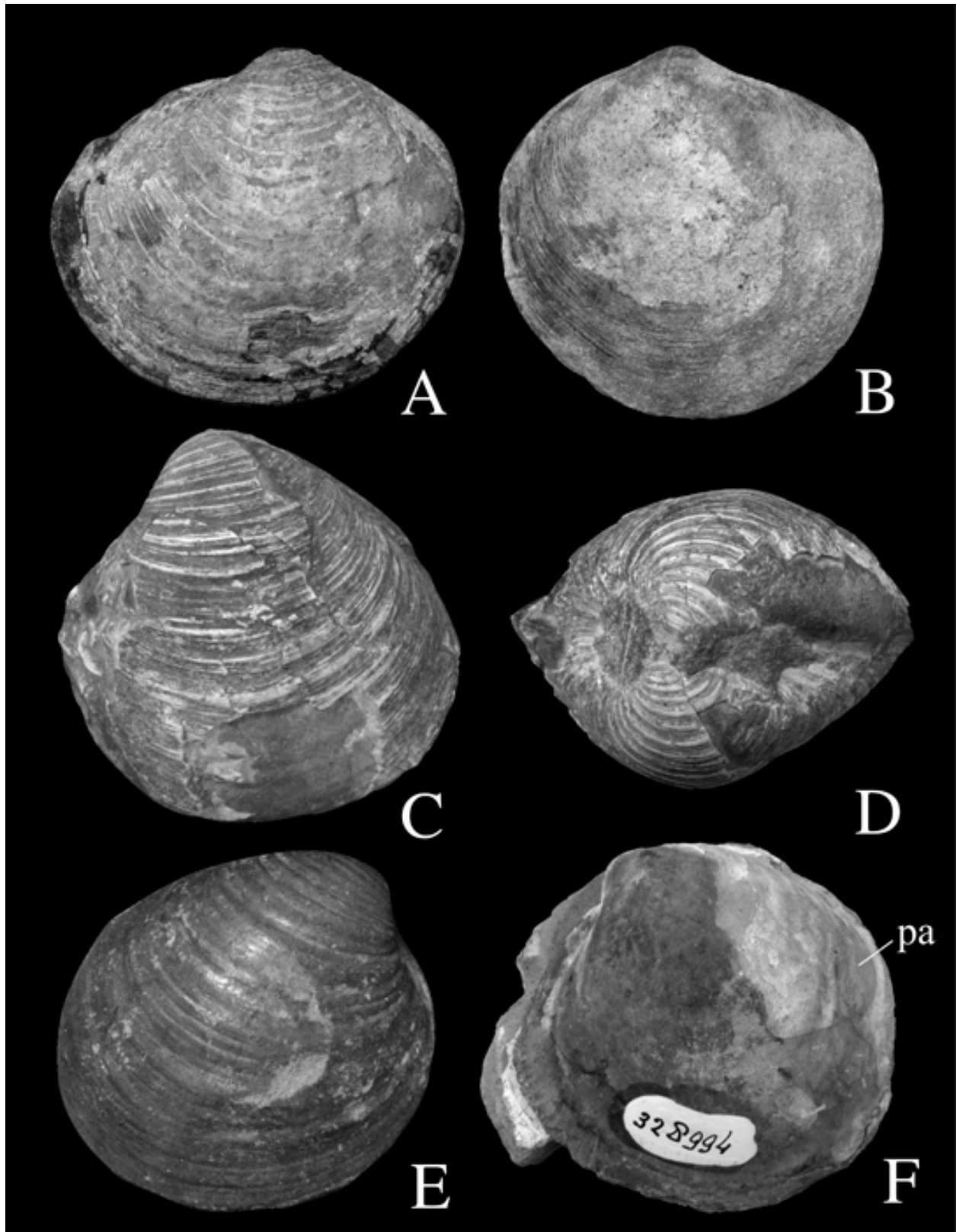


Fig. 10. Bivalvia, Heterodonta, Lucinidae and Veneridae. A. *Lucinoma* sp. (Fig. 10A). B. *Cyclina?* sp. (Fig. 10F). C-D. *Clementia vatheleti* Mabillet, 1901. E. *Clementia* sp. F. *Cyclina* sp. A. Shell length (SL) = 66.7 mm. B. SL = 58.2 mm. C-D. SL = 56.0 mm. E. SL = 42.0 mm. F. SL = 56.8 mm. Registration number 328994.

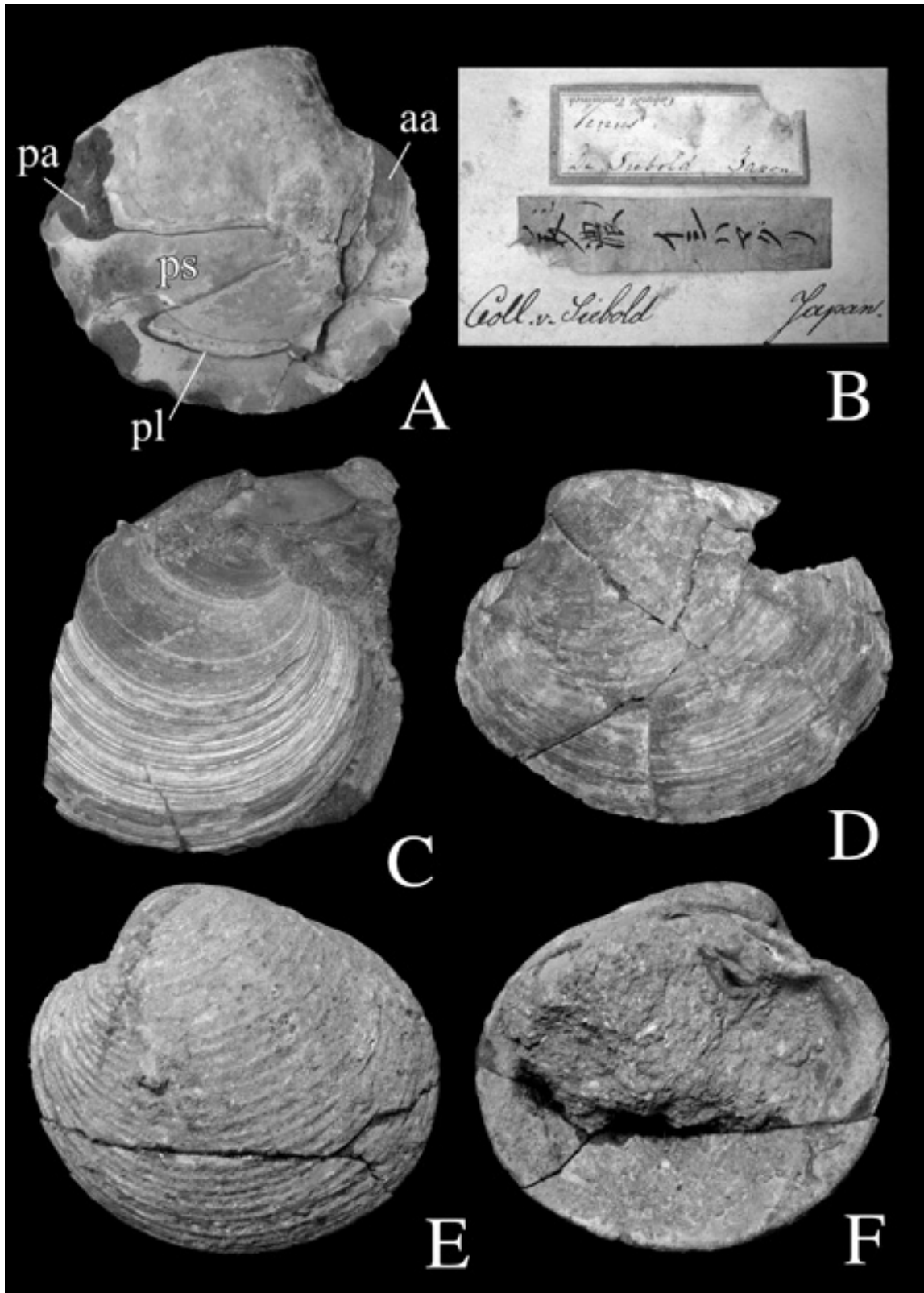


Fig. 11. Bivalvia, Heterodonta, Veneridae. A-B. *Phacosoma* cf. *kawagense* (Araki, 1960) “美濃 イシハマグリ [Mino, Ishihamaguri]” in the Japanese label (B) means “a stone clam from Mino”. “Hamaguri” is a Japanese vernacular name for clams. C. *Phacosoma* sp. D. Veneridae, gen. et sp. indet. E-F. *Globivenus* aff. *treuma* (Gould, 1850). Shell length (SL) = 41.3 mm. C. Length including matrix = 43.6 mm. D. SL = 82.2 mm. E-F. SL = 46.2 mm.

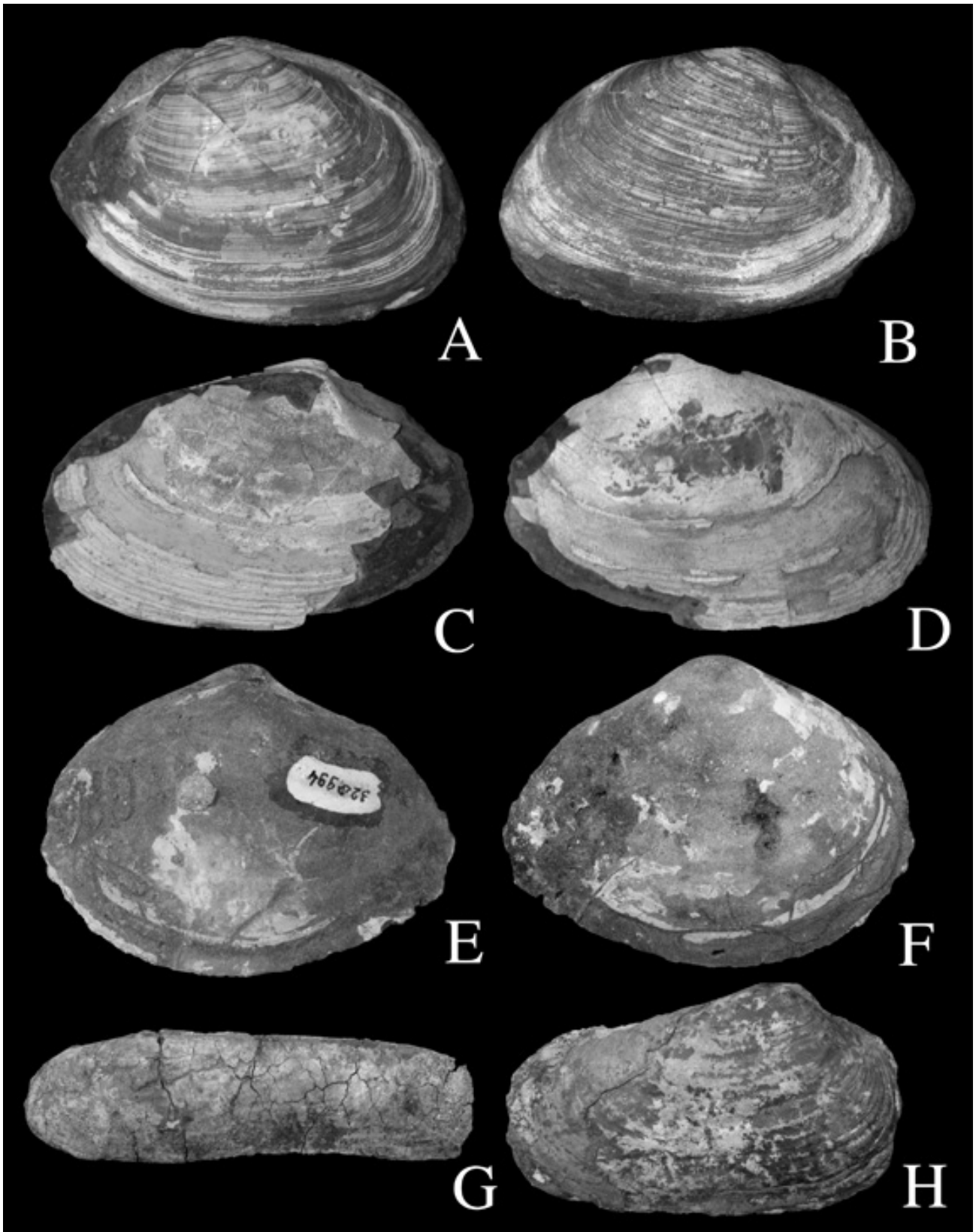


Fig. 12. Bivalvia, Heterodonta, Veneridae and other veneroid families. A-B. *Paphia (Paphia) schnelliana* (Dunker, 1867). C-D. *Paphia* sp. E-F. *Macoma* sp. G. *Cultellus izumoensis* Yokoyama, 1923. H. *Panopea* sp. A-B. Shell length (SL) = 64.9 mm. C-D. SL = 67.4 mm. E-F. SL = 74.7 mm. Registration number 328994. G. SL = 97.3 mm. H. SL = 67.3 mm.

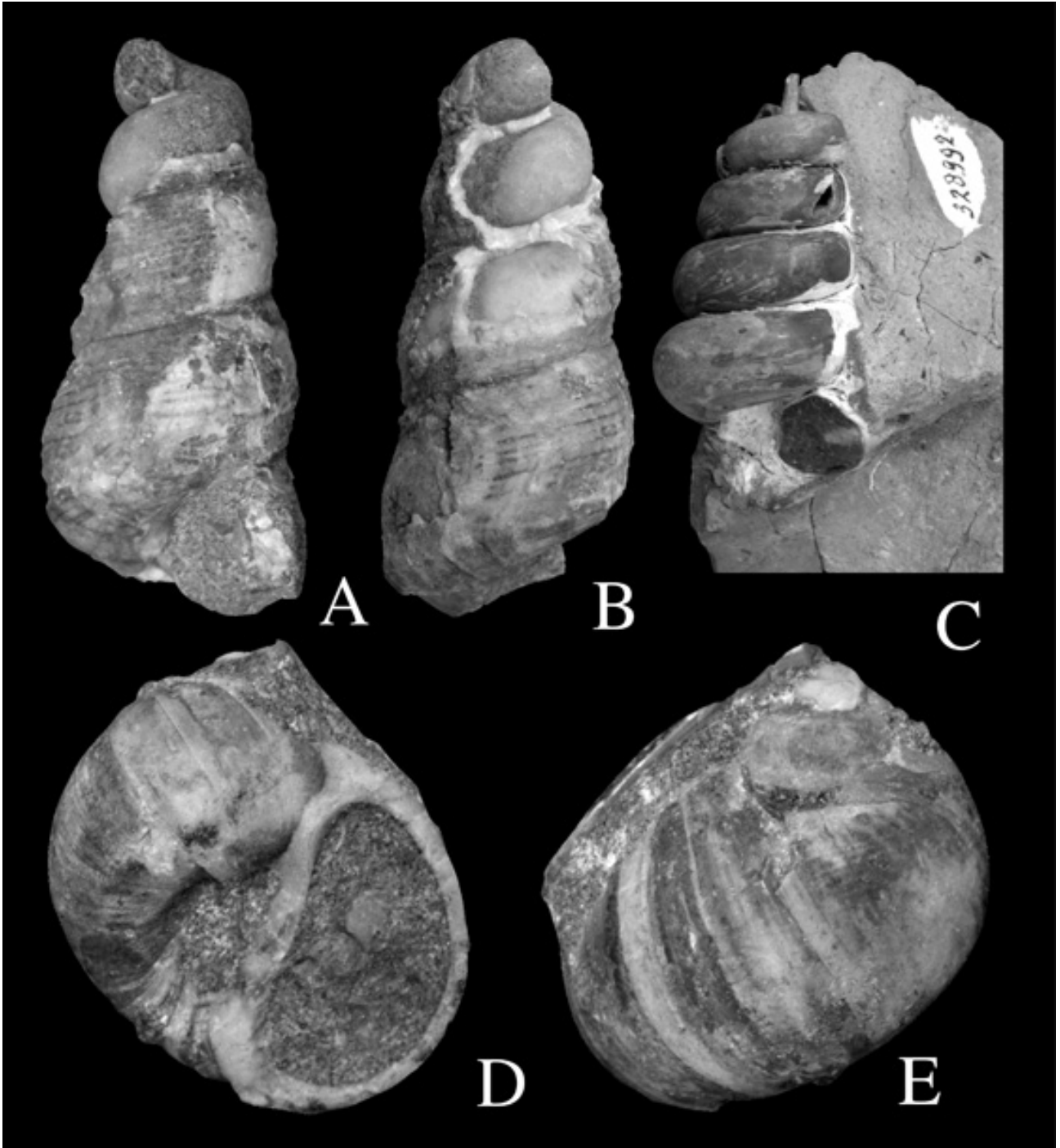


Fig. 13. Gastropoda. A-B. *Turritella (Hataiella) cf. sagai* Kotaka, 1951. C. *Vicarya yokoyamai* Takeyama, 1933. D-E. *Euspira cf. meisensis* (Makiyama, 1926). A-B. Shell height (SH) = 37.7 mm. C. SH = 59 mm. Registration number 328992. D-E. Naticidae. Shell width = 27.1 mm.

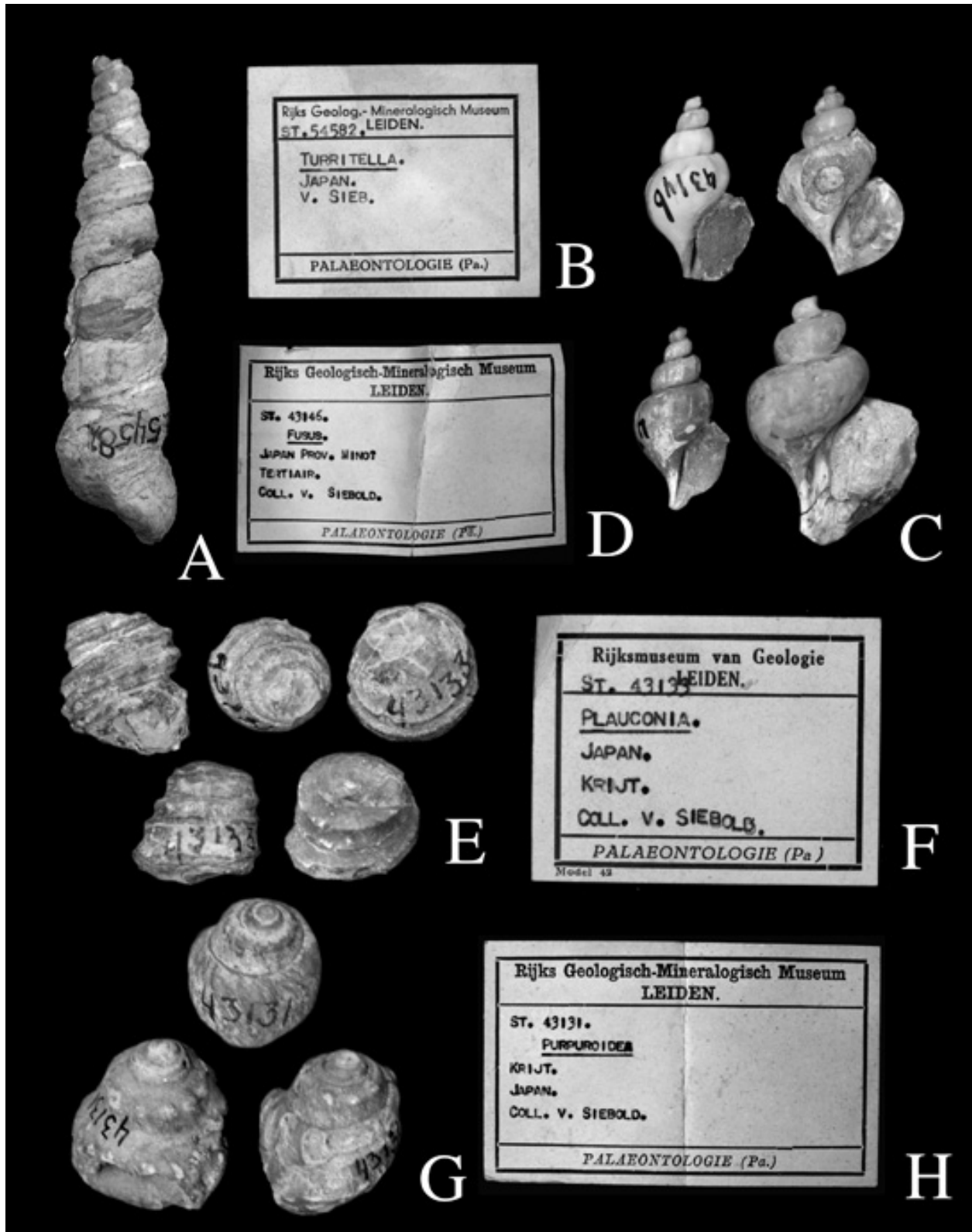


Fig. 14. Gastropoda. A-B. *Turritella* sp. C-D. *Siphonalia*? sp. E-F. *Cassiope neumayri* (Nagao in Yabe, 1927). G-H. *Microschiza japonica* (Nagao in Yabe, 1927). Shell height (SH) = 59.2 mm. C-D. SH of largest specimens in C = 26.2 mm. Sizes of other three specimens are proportional. Sizes of E and G were not measured. Registration number: A. 54582, C. 43146, E. 43133, G. 43131.

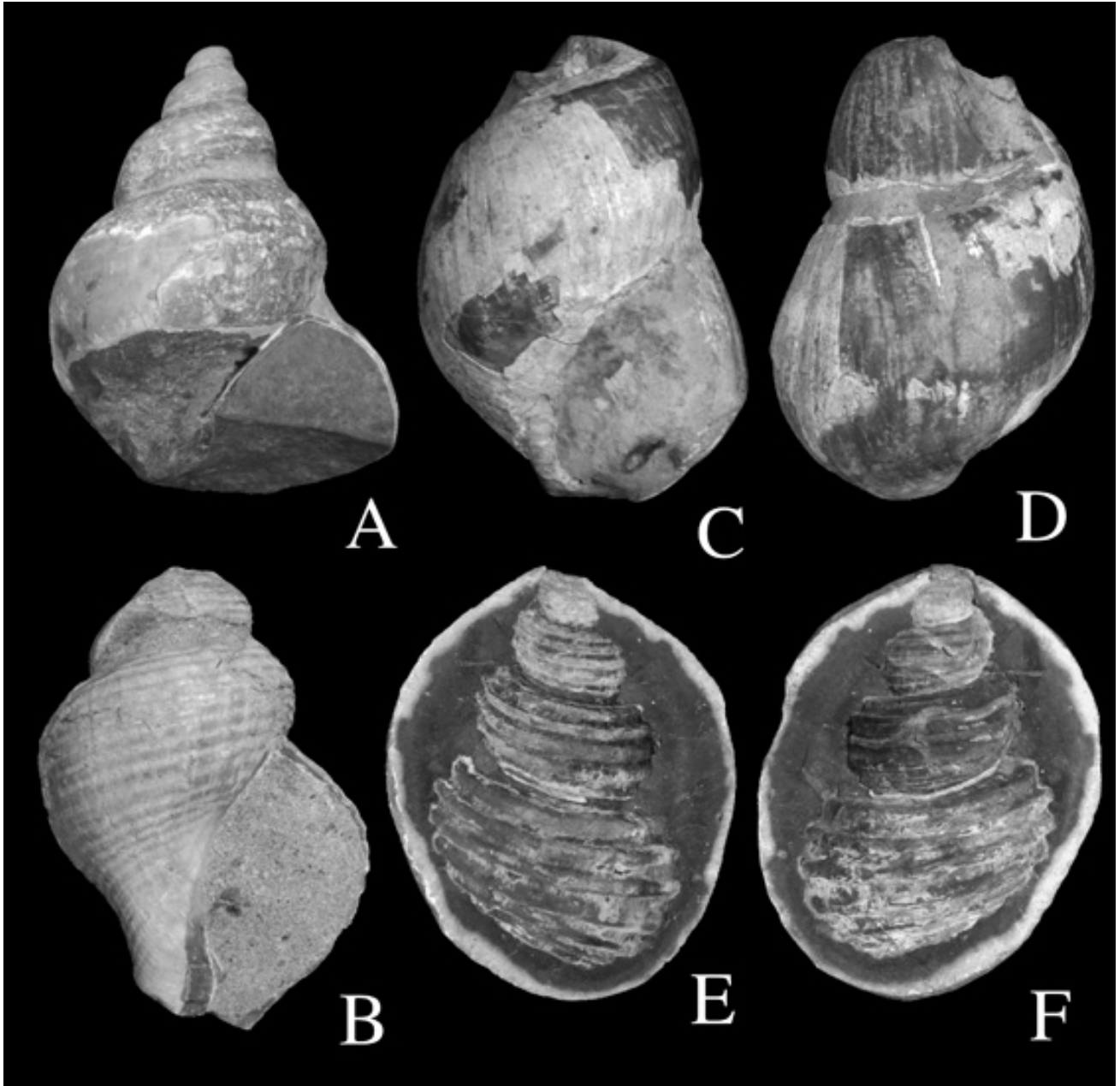


Fig. 15. Gastropoda, Buccinidae. A. *Neptunea* sp. B. *Neptunea* cf. *hukusimensis* Nomura & Hatai, 1936. C-D. *Japelion?* sp. E-F. *Ancistrolepis* cf. *mogamiensis* (Nomura & Zinbô, 1935). A. Shell height (SH) = 69.2 mm. B. SH = 80.6 mm. C-D. SH = 67.7 mm. E-F. SH = 88.8 mm.

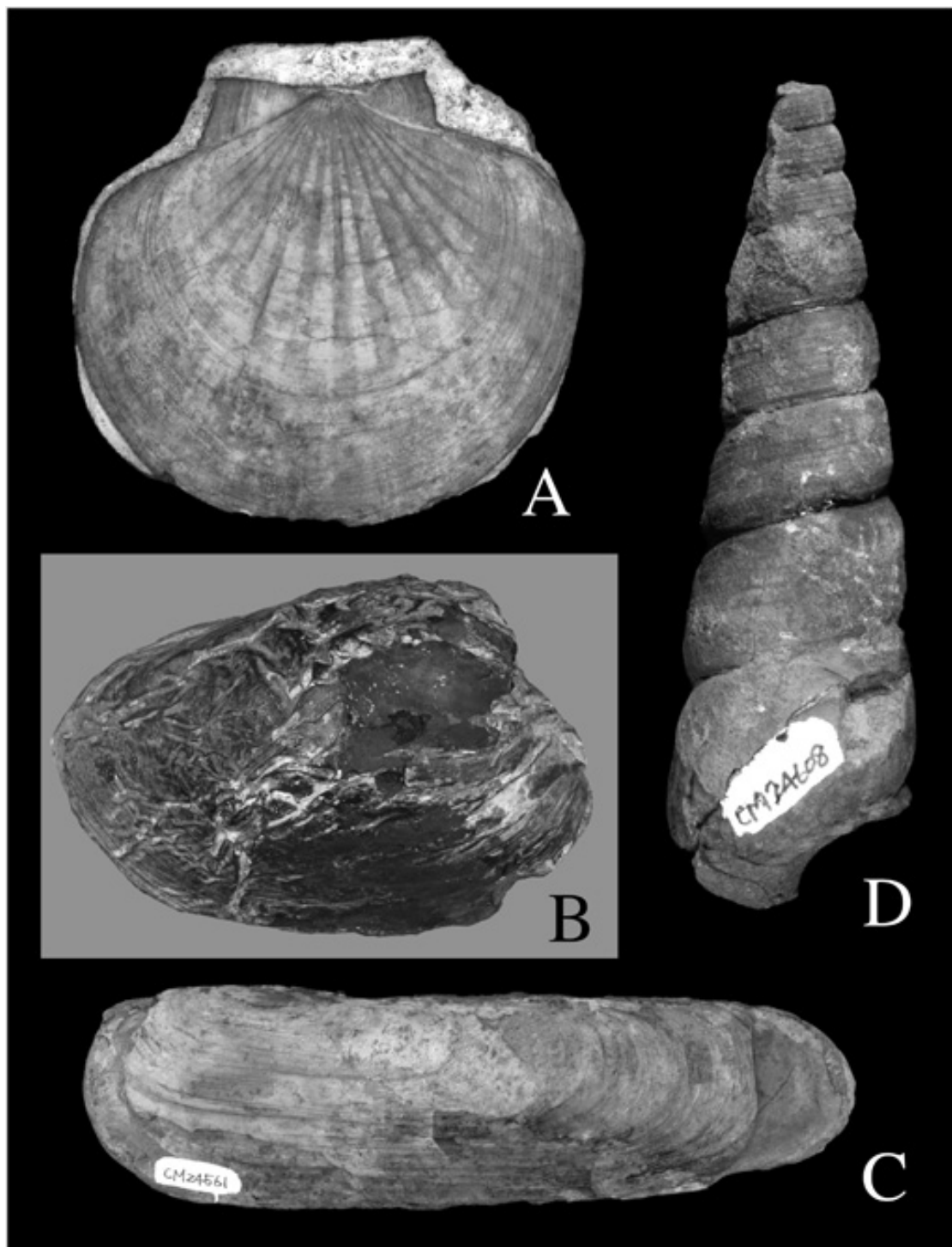


Fig. 16. Type specimens of Cenozoic molluscs for comparison. All specimens are deposited in The University Museum, The University of Tokyo (UMUT). A. *Pecten praesignis* Yokoyama, 1922. Holotype UMUT CM23491. Shell length (SL) = 125.8 mm. Locality: unknown, possibly Kochi Prefecture; Tônohama Group, Pliocene. B. *Cucullaea ponderosa* Yokoyama, 1925 [non Hutton, 1873]. Holotype UMUT CM24679. SL = 124.2 mm. Locality: Takamine, Aburahi-mura, Kôga-gun, Ômi (probably near Takamine, Kôga-cho, Shiga Prefecture); Kôga Formation, Kobiwako Group, Pliocene. C. *Cultellus izumoensis* Yokoyama, 1923. Syntype UMUT CM24561. SL = 119.3 mm. Locality: Fujina, Tamayu-mura, Yatsuka-gun, Shimane Prefecture; Fujina Formation, Miocene. D. *Turritella kiiensis* Yokoyama, 1924 ["1923"]. Lectotype (designated by Hatai & Nisiyama, 1952) UMUT CM24608. Shell height = 74.7 mm. Locality: Shirahama, Wakayama Prefecture; Shirahama Formation, Miocene.