

## Systematics

*Cerithium alucastrum* (Brocchi, 1814)

Figure 4 (main text)

*Murex alucaster* Brocchi 1814: 438, pl. 10, fig. 4.

*Cerithium vulgatum* var. *plicata* Philippi 1836: 193.

*C. stenodeum* Locard 1886: 184, 564.

*Gladiocerithium alucastrum* (Brocchi, 1814). – Monterosato 1910: 67, 68.

*G. directum* Monterosato 1910: 70, fig. 3.

*G. plicornatum* Monterosato 1910: pl. 1, fig. 4 (also see at

<http://www.museodizoologia.it/collezioni/collezioni-malacologiche> for an image of a syntype from the Monterosato collection housed at the Museo Civico di Zoologia in Rome).

*G. prismaticum* Monterosato 1910: 70, figs 8, 9.

*G. vulneratum* Monterosato 1910: 71, figs 5, 5a.

*Thericium (Gladiocerithium) alucastrum* (Brocchi). – Nordsieck 1974: 6, figs 10, 10a.

*T. (G.) punicum* (Pallary). – Nordsieck 1974: 6, fig. 15.

*Cerithium alucaster* (Brocchi, 1814). – Giannuzzi-Savelli *et al.* 1997: figs 1–3.

*Shell description.* - Conic to lanceolate, sometimes slightly turreted more or less slender shell reaching about 80 mm in height. About 20–22 moderately convex or flat teleoconch whorls. Protoconch multispiral, with 2.5–2.8 whorls and a diameter of 250–260 µm. Protoconch I smooth with less than 1 whorl. The early shell surface of protoconch II is moderately punctate. The rest of the larval shell is sculptured by robust curved subsutural plicae, 3–5 discontinuous spiral threads of strong tubercles and finer tubercles that are loosely disposed in spiral rows between the threads; a deep sinus on the upper part of the outer lip. Early teleoconch whorls with two major spiral cords and secondary fine spiral threads. Subadult and adult whorls with axial ribs, spiral lines and flat cords. Ribs are generally rounded, inclined or slightly curved; they may fade out, especially on the last whorl, or have knobs and tubercles which are not spiny and do not form a keel. Fine spiral cords, of 8–11 per whorl. A slight subsutural band with granules or depressed knobs. Last whorl with 3 or 4 main spiral cords, often knobbed. A slightly pronounced to thick, rounded to angulate varix usually occurs in opposition to the outer lip. Varices on the early teleoconch whorls. Aperture wide, ovate. Outer lip crenulated, usually flaring over the siphonal canal. Anal canal well defined by a columellar plica. Anterior canal straight or moderately curved. Columella concave with a very slight and narrow callus. Shell colour variable, generally consisting of a cream-whitish background

with reddish to rust-coloured spots and a dark reddish spiral band on the lower two-thirds of each whorl. Varices, knobs and tubercles may be white. Early teleoconch whorls white.

*Cerithium repandum* Monterosato, 1878

Figures 6, 7 and 8B

? *Cerithium vulgatum* var. *pulchella* Philippi 1836: 193, pl. 11, fig. 9; non *C. pulchellum* Sowerby, 1832, nec Dujardin, 1837.

*C. vulgatum* var. *tuberculata* Philippi 1836: 192, pl 11, fig. 6; non *C. tuberculatum* Lamark, 1822, nec Brown, 1827, nec *Strombus tuberculatus* Linnè.

*C. repandum* var. *citrina* Monterosato 1878: 97; 1884: 119.

*C. vulgatum* var. *gracilis* Philippi.—Bucquoy, Dautzenberg and Dolfus 1884: 200, pl. 22, fig. 9.

*C. vulgatum* var. *seminuda* Bucquoy, Dautzenberg & Dolfus 1884: 200, pl. 22, figs 11, 12.

*C. vulgatum* var. *longissima* Bucquoy, Dautzenberg & Dolfus 1884: 200, pl. 22, fig. 10.

*C. vulgatum* var. *mutica* Bucquoy, Dautzenberg & Dolfus 1884: 200, pl. 22, fig. 8.

*C. vulgatum* var. *hirta* Bucquoy, Dautzenberg & Dolfus 1884: 200, pl. 22, fig. 13.

*C. inscriptum* Monterosato 1884: 119.

*C. repandum* var. *sulphurea* Monterosato 1884, see Monterosato collection at the Museo Civico di Zoologia in Rome, at <http://www.museodizoologia.it/collezioni/collezioni-malacologiche/>.

*C. bourguignati* Locard 1886: 180, 562.

*C. servaini* Locard 1886: 180, 564.

*C. muticum* Locard 1886: 180, 564.

*C. compositum* Locard & Caziot ex Monterosato 1900: 106.

*C. payraudeau* Locard & Caziot ex Monterosato 1900: 109.

? *C. exilissimum* Locard 1902: 9.

*Hirtocerithium pungioniferum* Monterosato 1910: 74, pl. 1, fig. 18.

*H. clavulum* Monterosato 1923: 19, pl. 1, fig. 35.

*Thericium* (*T.*) *kobelti* Nordsieck 1974: 4, fig. 1.

*Thericium* (*Lithocerithium*) *bizertense* Nordsieck 1974: 12, fig. 80.

*T. (Gladiocerithium) turbatum* Monterosato. —Nordsieck 1974: 6, fig. 20.

*T. (Hirtocerithium) lybiense* Nordsieck 1974: 10, fig. 53.

*C. vulgatum* Bruguière pro parte Giannuzzi-Savelli et al. 1997: figs 19, 22, 25.

*C.* “lagoon” Boisselier-Dubayle and Gofas 1999: 672, fig. 2c.

*Shell description.* - solid, acute-conic, turreted, ventricose to slender shell reaching 45 mm in height. About 16–20 whorls. Protoconch paucispiral with 1–1.5 convex whorls and diameter of 300–330 µm. Protoconch sculptured by closely spaced tubercles forming irregular spiral rows arranged in bands in the early shells. Protoconch/teleoconch boundary marked by a sinuous scar. Early teleoconch whorls with two major, subequal, nodular, spiral cords and many secondary irregular fine spiral lirae. Subadult and adult whorls with one prominent spiral subcentral cord which may have knobs or acute tubercles, rarely spiny, sometimes forming a peripheral keel. Nodules and knobs may be slightly marked giving a crenulated aspect to the shell shape. Axial ribs rarely reaching the sutures. Secondary, irregular, smooth or nodular and slightly knobbed spiral threads, number 8 or 9. Subsutural band, usually indistinct in crenulated shells, with granules or little knobs. Four to six prominent nodular or beaded spiral cords, sometimes vanishing, at the base of the body whorl. A slight varix in opposition to the outer lip may occur. Varices on the early teleoconch whorls; crenulated shells are usually more varicose. Aperture ovate, sometimes broad, about one-half of the body whorl height. Outer lip crenulated and, rarely, flaring over the anterior canal. Anal canal well defined by a columellar plica. Anterior canal short, straight or moderately curved to the left. Columella concave with a slight and narrow callus. Shell colour extremely variable, generally with narrow, brown or reddish brown maculae in cream, greyish yellow, greyish green or reddish background; infrequently, shells are completely orange, yellow or pink. Usually white between nodes, granules knobs and tubercles; frequently these sculptural elements may be white. Early teleoconch usually whitish with reddish brown spots and subsutural brown lines.

*Cerithium vulgatum* Bruguière, 1792

Figure 5 (main text)

*Cerite Goumier* Adanson 1757: 156, pl. 10, fig. 3. Name disagreeing with Linnean nomenclature.

*Cerithium vulgatum* Bruguière 1792: 481.

*C. vulgatum* var. *nodulosa* Philippi 1836: 193, pl. 11, fig. 4.

*C. vulgatum* var. *spinosa* Philippi 1836: 193, pl. 11, fig. 3.

*C. provinciale* Locard 1886: 566.

*C. tuberculatum* (Linnè).—Locard 1902: 4.

*Pliocerithium holothurium* Monterosato 1910: 67, fig. 1.

*C. vulgatum* var. *octogenaria* Monterosato 1917: 8, fig. 9.

*Thericium* (T.) *provinciale lusitanicum* Nordsieck 1974: 4, fig. 3a.

T. (T.) *cazioti* Nordsieck 1974: 4, fig. 4.

T. (*Gladiocerithium*) *auriscalpium* (Kobelt). —Nordsieck 1974: 6, fig. 16.

*T. (G.) prismaticum* (Monterosato).—Nordsieck 1974: 6, fig. 13a.

*T. (G.) triviale* (Locard & Caziot).—Nordsieck 1974: 6, fig. 14.

*Cerithium vulgatum* Bruguière.—Giannuzzi-Savelli *et al.* 1997: figs 12–18, 20, 30, 33, 34–39, 45.

*Cerithium vulgatum* Bruguière.—Boisselier-Dubayle and Gofas 1999: 672, fig. 2a.

*Shell description.* - Acute-conic, turreted, ventricose to slender shell reaching 65 mm in height.

Protoconch multispiral, conical with about 2.1 to 2.5 whorls and a diameter of 220–235 µm.

Protoconch I smooth with less than 1 whorl. Protoconch II gently sculptured by one, rarely two very fine suprasutural threads, of which the lower is more marked and continuous, and loosely spaced, fine to very fine tubercles that may form very discontinuous spiral rows; in some specimens very weak to scarcely recognisable subsutural plicae may occur; a deep sinus on the upper part of the outer lip. Teleoconch of 16–20 whorls. Early whorls with two major, subequal, nodular, spiral cords and secondary irregular fine spiral lirae. Subadult and adult whorls with one prominent spiral subcentral cord which may have knobs or acute tubercles, sometimes spiny, forming a peripheral keel. Axial ribs rarely reaching the sutures. Secondary irregular spiral threads numbering 8 or 9. Subsutural band with granules or little knobs. Four to six prominent, nodular or beaded spiral cords at the base of the body whorl. A slight varix in opposition to the outer lip may occur. Varices usually occurs on the early teleoconch whorls. Aperture ovate and broad. Outer lip crenulated and sometimes flaring over the siphonal canal. Anal canal well defined by a columellar plica. Anterior canal short, moderately curved to left of shell axis or straight. Columella concave with a slight and narrow callus. Shell colour variable, generally with brown axial flammules in greyish-yellow background; rarely brown, reddish brown or orange. Usually white between nodes, knobs and tubercles, sometime with whitish tubercles. Outer lip internally brown, maculated. Early teleoconch whorls white or white with a brown subsutural band.

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