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**Two beautiful and new *Euthria* (Gastropoda: Buccinidae)
from the northern Cape Verde Archipelago**

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Abstract: Two beautiful species collected in the northern part of the Cape Verde Archipelago are described as new. *Euthria placibilis* sp. nov. is compared with *E. soniae* Rolán, Monteiro & Fraussen, 2003 and *E. ponsonbyi* Sowerby, 1889; *Euthria inesae* sp. nov. is compared with *E. josepedroi* Rolán & Monteiro, 2007 and *E. cecilea* Fraussen & Rolán, 2003.

Introduction: Commercial fisheries active in the Cape Verde Islands with trawling nets and lobster traps went to the northern part of the Archipelago, an area situated off São Vicente, Santo Antão, Santa Luzia and São Nicolau, to open new fishing grounds. The benthic fauna is found to harbour *Euthria* species which are different from the numerous species already known from elsewhere in the archipelago. The genus is well-known for its wide radiation in deeper waters, indeed, and it is no surprise that species unknown to science turn up after opening new fishing grounds. In the present paper we add *Euthria placibilis* sp. nov. and *Euthria inesae* sp. nov. to the fauna.

Genus *Euthria* M. E. Gray, 1850

Type species by original designation: "*Fusus lignarius* Chiaje" (this is *Fusus lignarius* Lamarck, 1816, a junior synonym of *Murex corneus* Linnaeus, 1758) from the Mediterranean, Recent.

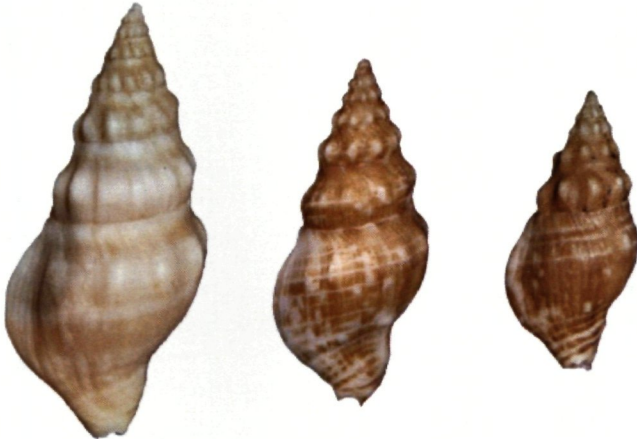
For a discussion of the use of *Euthria* as a genus and for a comparison with radulae of related genera, we refer to Shuto (1978: 358-361), Beets (1986: 92-93), Fraussen (1999: 73), Fraussen & Hadorn (1999: 120-121) and Rolán, Monteiro & Fraussen (2003: 125-126).

For a brief discussion of the infraspecific variability, we refer to Fraussen & Rolán (2003: 83-84) and Fraussen & Afonso (2011: 84, 86-87).

Euthria placibilis sp. nov.

(Text Fig. A, Figs 1-7)

Type material: **Holotype**, 30.3 mm, in Muséum national d'Histoire naturelle, Paris, MNHN-24752; **Paratype 1**, 29.9 mm, juvenile, in coll. Bernardino Monteiro; **Paratypes 2-6**, 29.3-33.4 mm, in coll. Bernardino Monteiro; **Paratype 7**, 37.7 mm, in coll. Koen Fraussen, nr. 6540; **Paratype 8**, 25.5, subadult, in coll. Koen Fraussen, nr. 5605; **Paratypes 9-10**, 33.4-37.3 mm, in coll. Frank Swinnen; **Paratype 11**, 35.0 mm, in coll. Peter Ryall, Austria; **Paratype 12-14**, 30.5-45.0 mm, in coll. José Rosado, Mozambique.



Text Fig. A. *Euthria placibilis* sp. nov., variability in colour and pattern. From left to right: paratype 14 (exceptionally large in combination with an exceptional pale colour; paratype 11 (medium sized, 35.0 mm, and with typical pattern); paratype 12 (small specimen in combination with a-typical pattern of only a few bands).

Type locality: Cape Verde Archipelago, northern part, fishing area situated off São Vicente, Santo Antão, Santa Luzia and São Nicolau, trawled at 120-180 m deep, 4/2000.

Range: Only known from the type locality, and most probably endemic to that part of the archipelago.

Description: Shell rather small to medium-sized for the genus, from 29.3 mm up to as large as 45.0 mm in length, thick and solid. Shape broadly fusiform with moderately high spire, siphonal canal short and broad. Whorls weakly convex with broad subsutural concavity.

Background colour pale yellowish brown. Pattern consisting of irregular, unequally spaced, pale orange brown spiral bands; occasionally (paratype 1) interrupted by irregular axial streaks of background colour; occasionally (paratype 14, text Fig. A) pale yellowish brown with only pale or obscure pattern; occasionally (paratype 12, text Fig. A) dark brown with only a few white spiral lines. Tip of siphonal canal slightly paler.

Protoconch pale yellowish brown, 1.7 mm in diameter, consisting of 2 convex whorls, first whorl slightly flattened. Surface of protoconch slightly eroded in all studied species. Transition to teleoconch indistinct, marked by the sudden presence of the first axial rib.

Teleoconch consisting of 5 ½ whorls. First teleoconch whorls eroded, but 7 fine spiral cords visible in axial interspaces. Their number increasing along second and third whorl. Fourth whorl with about 35 fine spiral cords. Body whorl with numerous fine, often hardly visible, spiral cords. All teleoconch whorls with 10 broad axial ribs, which give the whorls a weakly convex shape; interspaces of equal size. Along first whorl these axial ribs are running from suture to suture; while along second whorl they gradually become weaker on subsutural slope. From third whorl on these axial ribs are weak or absent on the subsutural slope but broad and forming a big knob at periphery, giving whorl a rather carinate appearance. Aperture semi-ovate. Outer lip thick, edge thick, smooth, glossy, white. Abapical part of outer lip ornamented with 5 (holotype) to 7 (paratype 7) broad, but weak internal knobs. Occasionally the outer lip is completely covered with 10 (paratype 9) big internal knobs. Columella gently curved, smooth, with a single weak but broad abapical knob on transition to siphonal canal. Callus thin, smooth, white. Siphonal canal short, broad, open. Aperture together with siphonal canal longer than 1/2 of total shell length.

Operculum, periostracum and radula unknown.

Comparison: *E. placibilis* sp. nov. is characterized by the rather broad shell with a more or less biconical appearance, the presence of fine, almost invisible fine spiral cords and the pale pattern of pale and hardly visible spiral bands.

E. soniae Rolán, Monteiro & Fraussen, 2003 (text Fig. B) is similar in shape and sculpture, but differs by the spiral cords which are fine, but more accentuated (visible with the naked eye instead of looking smooth), the rather narrower axial ribs with smooth body whorl (instead of big knobs also present on the body whorl), the more expressive pattern consisting of dark spots, the slenderer shape and the larger adult size.

E. ponsonbyi (Sowerby, 1889) from South Africa looks similar in shape but differs by the laterally flattened upper spire whorls, the much broader subsutural slope with the row of knobs situated closer to the lower suture, the presence of fine spiral cords on the spire whorls and the different range.

Etymology: *Euthria placibilis* sp. nov. species derives from Latin “*placibilis*”, (adjective) meaning “gentle” or “tender”, sometimes also used for “pleasant”, which refers to the rather tender colour and the pleasant pattern in combination with the smooth surface of this shell.



Text Fig. B. *Euthria soniae* Rolán, Monteiro & Fraussen, 2003, between Sao Vicente and Sao Nicolau, in lobster trap, 75-120 m deep.

Euthria inesae sp. nov.
(Text Fig. C, Figs 8-12)

Type material: **Holotype**, 30.1 mm, in Muséum national d'Histoire naturelle, Paris, MNHN-24753; **Paratype 1**, 31.3 mm in coll. Koen Fraussen, nr. 5293; **Paratypes 2-5**, 29.1-34.0 mm, in coll. Bernardino Monteiro; **Paratype 6**, 24.8 mm, in coll. Peter Ryall, Austria; **Paratype 7**, 25.7 mm, in coll. José Rosado, Mozambique.

Type locality: Cape Verde Archipelago, northern part, fishing area situated off São Vicente, Santo Antão, Santa Luzia and São Nicolau, in lobster traps, at 50-150 m deep, 2004.



Text Fig. C. *Euthria inesae* sp. nov., from left to right: paratype 6, 24.8 mm; paratype 3, 32.3 mm; paratype 4, 32.9 mm and paratype 5, 34.0 mm.

Range: Only known from the type locality, and most probably endemic to that part of the archipelago.

Description: Shell rather small, 31 mm in height, thick, solid. Shape broadly fusiform, rather semi-oval with moderately high spire, siphonal canal short and broad. Whorls laterally flattened with broad but weak subsutural concavity.

Background colour cream to flesh coloured. Pattern consisting of irregular, reddish brown, narrow (holotype) to broad (paratype 1), longitudinal streaks which are well defined along the subsutural slope but become diffuse and split into two just below the subsutural concavity. Axial streaks interrupted by two broad spiral bands of

background colour, one along periphery and one on upper part of base; traces of axial streaks may stay visible. Pattern on base more uniform (paratype 1) or ornamented with fine spiral lines (holotype). Tip of siphonal canal dark reddish brown.

Protoconch white, 1.4 mm in diameter, consisting of 2 whorls, first whorl slightly flattened. Surface of protoconch slightly eroded in all studied species. Transition to teleoconch indistinct, marked by the sudden presence of the first axial rib. Teleoconch consisting of 6 ½ whorls. First teleoconch whorls eroded, but 4 fine spiral cords visible in axial interspaces. Second whorl with 4 such spiral cords, a fifth spiral cord partly concealed under suture of following whorl. Upper spire whorls slightly eroded, but occasionally some traces of fine spiral cords visible on first and second whorl. Third whorl with about 7 feeble, hardly visible traces of spiral cords, interspaces of equal size. Fourth whorl smooth. Teleoconch and body whorl smooth. First and second teleoconch whorl with 10 narrow axial ribs, which give the whorls a weakly convex shape; interspaces of equal size. Third whorl with 11 weak axial ribs. Axial ribs gradually becoming weaker along fourth whorl, resulting in whorls with a laterally flattened shape. Fifth whorl smooth. Aperture semi-ovate. Outer lip thick, with 8 (holotype) to 10 (paratype 1) internal spiral lirae and a single longitudinally orientated abapical knob on transition to siphonal canal. Edge thick, smooth, glossy, white (holotype) or with 3 (paratype 1) broad, dark reddish brown dots according to the external spiral pattern. Columella smooth with a single weak but broad abapical knob on transition to siphonal canal. Callus thin, smooth, white; outer edge transparent, showing underlying pattern. Siphonal canal short, broad, open. Aperture together with siphonal canal longer than 1/2 of total shell length. Operculum, periostracum and radula unknown.

Comparison: *E. inesae* sp. nov. is characterized by the pattern consisting of a partly regular (subsuturally) and partly irregular (towards periphery) axial pattern in combination with two rather vivid, cream or flesh coloured spiral bands, the fine spiral and axial sculpture on the upper spire whorls in combination with the smooth penultimate and body whorl.

E. josepedroi Rolán & Monteiro, 2007 (text Fig. D) is identical in sculpture, but differs in shape by having a deeper subsutural concavity and in pattern by having a broader spiral band at the periphery. Differences in darkness or brightness of the ground colour and the axial pattern are subject to infraspecific variation in the genus, we therefore regard the paler pattern with weak or absent axial streaks as of minor importance to distinguish both species.

E. cecilea Fraussen & Rolán, 2003 is similar in shape and sculpture, but differs by the slightly deeper subsutural concavity, the spiral cords (on the upper spire whorls) which

are finer and more numerous, the presence of broad, but weak spiral cords on the base and a slightly larger adult size. The pattern of *E. cecileae* is quite variable but specimens with an eroded or absent axial pattern may show a very similar spiral pattern (text Fig. E).



Text Fig. D. *Euthria josepedroi* Rolán & Monteiro, 2007, holotype, after Rolán & Monteiro (2007: fig. 24)



Text Fig. E. *Euthria cecileae* Fraussen & Rolán, 2003, Sao Vicente, by divers; 20-80 m deep, showing a-typical pattern on ventral side

Etymology: This pretty species is named after Inês Monteiro, the daughter of the second author.

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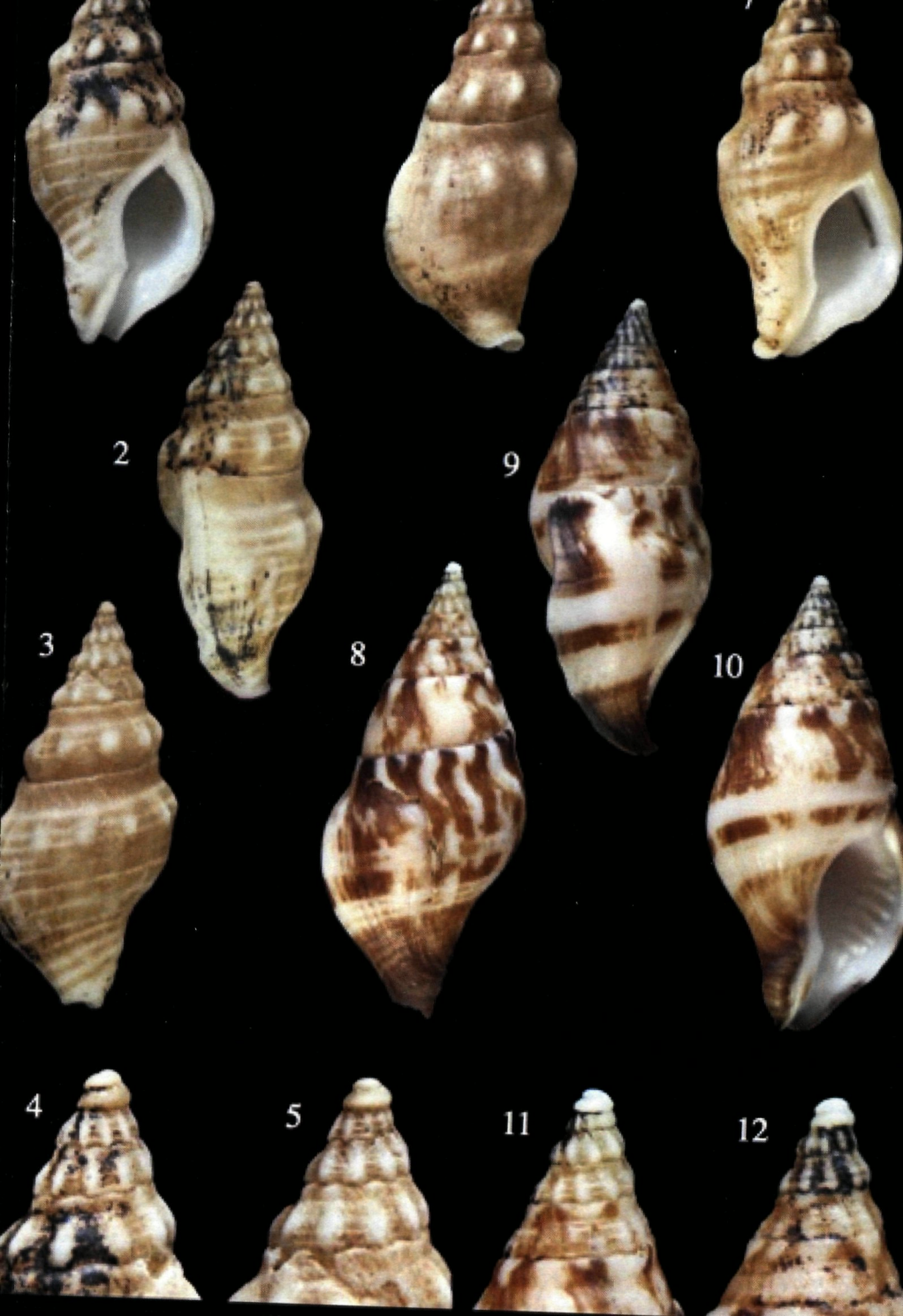
Plate:

1-7: *Euthria placibilis* sp. nov., Cape Verde Archipelago, northern part, trawled at 120-180 m deep.

1-5: holotype, 30.3 mm, MNHN-24752 .

6-7: paratype 7, 37.7 mm, in coll. Koen Fraussen.

8-12: *Euthria inesae* sp. nov., holotype, 30.1 mm, Cape Verde Archipelago, northern part, in lobster trap, 50-150 m deep, MNHN-24753.



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