

**Drymaeus zingarensis, a new land snail from Colombia
(Gastropoda Pulmonata: Bulimulidae)**

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Drymaeus (Drymaeus) zingarensis is a new species of land snail from the Cordillera Occidental, Colombia. This species differs from *D. (D.) aequatorianus* E.A. Smith, 1877, *D. (D.) smithii* (Da Costa, 1898) and *D. (D.) bellus* (Da Costa, 1906) in shape and colour of the shell.

Key words: Gastropoda, Pulmonata, Bulimulidae, *Drymaeus*, taxonomy, Colombia.

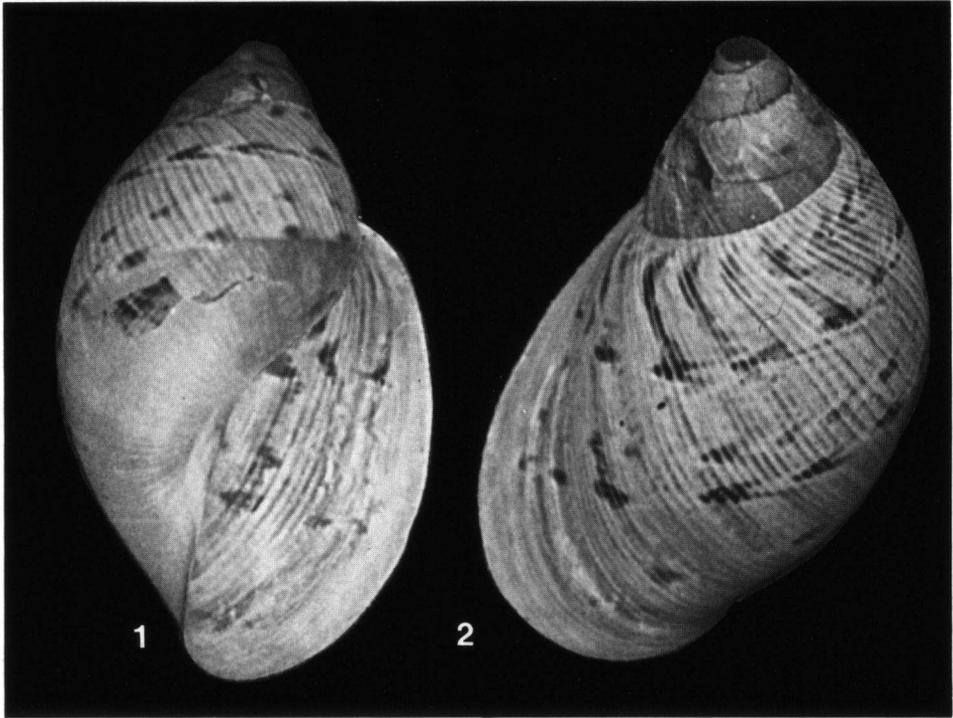
During a survey of the land snail fauna found between 1000 and 2000 m in the Cordillera Occidental of the Valle and Cauca departments in south-west Colombia, specimens were collected representing an undescribed species of *Drymaeus* s.s.

The genus *Drymaeus* Albers, 1850, ranges from eastern Brazil and the Andean region of South America through Central America to the West Indies and Florida (U.S.A.). It is divided into two subgenera, *Drymaeus* s.s. and *Mesembrinus* Albers, 1850. The first is found mainly in South America, reaching Central America; it occupies an altitudinal belt between 0-ca. 2900 m. *Mesembrinus* is found mainly in Central America, Florida and the West Indies, with some species in South America, and occupies an altitudinal belt between 0-1000 m (Breure, 1979).

The following abbreviations are used to indicate the location of the specimens: RMNH - Rijksmuseum van Natuurlijke Historie, Leiden; UVM - Colección de Malacología, Sección de Biología Marina, Universidad del Valle, Cali, Colombia. Measurements (all in mm) include height (H) and diameter (D) of the shell, and height (HA) and width (WA) of the aperture. Statistics of the measurements include mean value (M), standard deviation (SD), and maximum (mx) and minimum (mn) values for each character.

***Drymaeus (Drymaeus) zingarensis* sp. nov. (figs. 1-2)**

Description. — Shell up to 24.7 mm, ca. 1.6 times as long as wide, elongate-ovate, imperforate, rather thin with fine axial striae. Protoconch with a reticulate sculpture of axial riblets and spiral striae which are of equal strength. Whorls ca. 5.5, slightly convex, the last whorl inflated; suture impressed. Aperture subovate, ca. 1.6 times as long as wide, ca. 0.7 times the total length. Columellar margin thin and simple. Peristome



Figs. 1-2. Holotype of *Drymaeus (Drymaeus) zingarensis* sp. nov., highly enlarged, H 22.0 mm, UVM 83-010.

thin and expanded, pink. Parietal wall with a whitish callus. General colour creamy whitish, with brown spiral streaks, which in most specimens are interrupted, forming arrow-head spots directed towards the peristome.

Measurements of shells and ratios:

	H	D	HA	WA	H/D	HA/WA	HA/H
M	23.6	15.0	15.6	9.6	1.59	1.63	0.66
SD	1.06	0.45	0.44	0.37	0.08	0.07	0.03
mx	24.7	15.7	16.4	10.1	1.69	1.77	0.72
mn	21.9	14.5	15.1	9.2	1.46	1.56	0.63

Measurements of the holotype: H 22.0, D 15.0, HA 16.3, WA 10.1; 5.5 whorls.

Type material. — Colombia, Departamento del Valle, Finca Zingara, km 6 on the trail km 18 road Cali-Buenaventura-La Paz, 2000 m ($3^{\circ}31'N$ $76^{\circ}36'W$), leg. Manuel Giraldo, February 1983, UVM 83-010 (holotype), UVM 81-252/1, 82-032/1, 82-194/2, 83-007/1 (paratypes); Bosque de San Antonio (W. of Cerro de La Horqueta), km 14 on the road Cali-Buenaventura, 2100 m ($3^{\circ}28'N$ $76^{\circ}40'W$), UVM 82-131/2, 82-133/3, 82-164/1, 83-036/1, 83-115/1, RMNH 55838/1 (paratypes); Bosque de San Pablo, km 16 on the road Cali-Buenaventura, 1900 m ($3^{\circ}29'N$ $76^{\circ}38'W$),

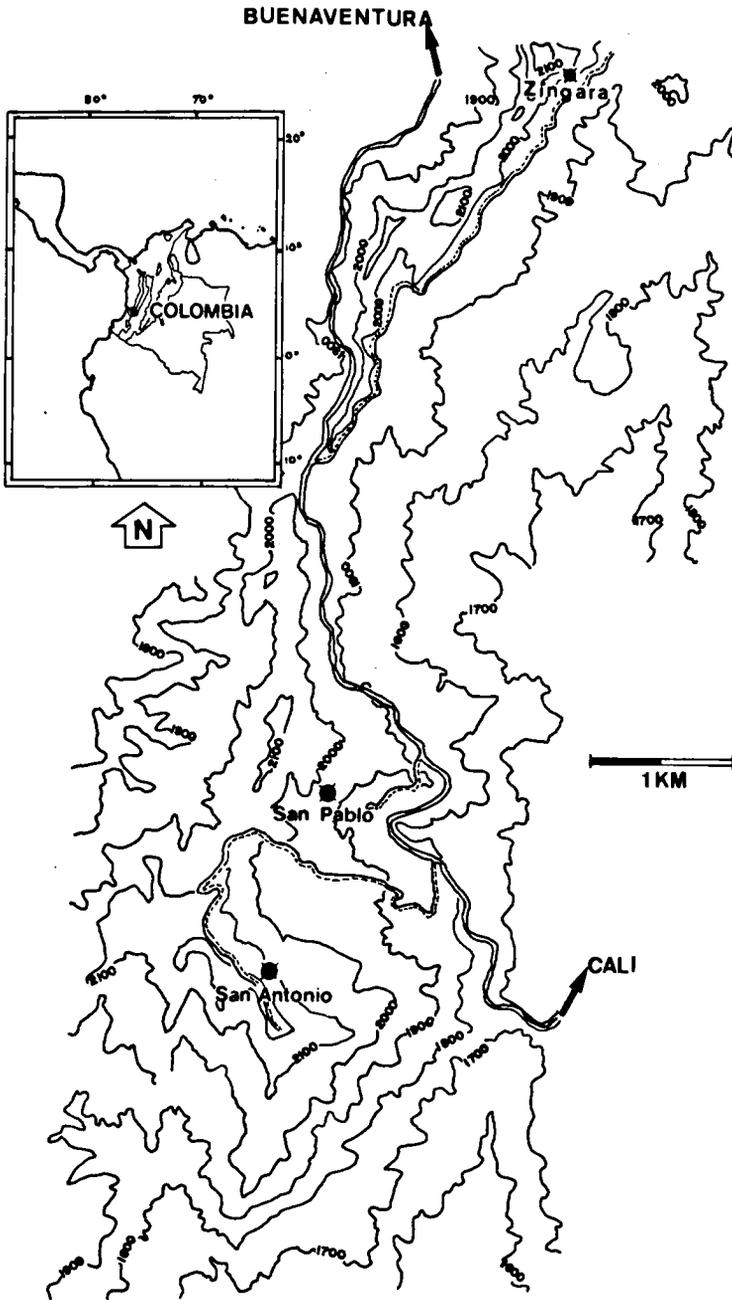


Fig. 3. Distribution of *Drymaeus (Drymaeus) zingarensis* sp. nov.

UVM 81-060/1, 82-210/1, RMNH 55839/1 (paratypes). See fig. 3 for the distribution of this species.

Remarks. — One paratype (UVM 82-131) has two small tubercles on the columellar margin. Live specimens or fresh shells have a very shiny surface with a creamy colour.

Comparisons. — The new taxon differs from *Drymaeus* (*D.*) *smithii* (Da Costa, 1898) by (1) the relatively larger aperture; (2) the thin and simple columellar margin; (3) being more squat (H/D ratio 1.6 vs. 2.0). It differs from *D.* (*D.*) *aequatorianus* E.A. Smith, 1877, by (1) the spiral bands, which are interrupted forming arrow-head shaped spots; (2) the thin and simple columellar margin; (3) being much more squat (H/D ratio 1.6 vs. 2.4). Finally the new species may be compared to *D.* (*D.*) *bellus* (Da Costa, 1906), from which it differs by (1) the pink peristome; (2) the whitish callus on the parietal wall; (3) being more squat (H/D ratio 1.6 vs. 2.0).

Ecology. — *Drymaeus* (*D.*) *zingarensis* inhabits the cloud forests of the low crest of the Cordillera Occidental, situated between the higher mountains of Los Farallones de Cali in the south and the Cuchilla Atravesada in the north and separating the Pacific and Cauca drainage. Most of the specimens were found as shells on the forest floor. A juvenile was found on the leaf of a shrub (1.5 m above the ground) and an adult on the ground in a clearing near the forest. Other species of land snails occupying the same habitat are *Incidostoma* cf. *giganteum* (Reeve, 1842), *Helicina steindachneri* Wagner, 1905, *Columbinia columbinia* (Polinski, 1924), *Synapterpes* cf. *amabilis* Pilsbry, 1906, *S. auratus* (L. Pfeiffer, 1846), *Obeliscus* spec., *Rhodea californica* (L. Pfeiffer, 1846), *Euglandina* cf. *striata* (Müller, 1774), *Hemibulimus dennisoni* (Reeve, 1849), *Isomeria oreas* (Koch, 1844), and other smaller forms not yet identified.

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