

A new species of *Amphidromus* (Mollusca: Gastropoda: Camaenidae) from Vietnam, and a Replacement Name for *Amphidromus berschaueri mingmini* Thach, 2019

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ABSTRACT A new species of genus *Amphidromus* Albers, 1850 is described from Vietnam and compared to two other species of this genus, *Amphidromus contrarius* (Müller, 1774) and *Amphidromus richardi* Severns, 2006. *Amphidromus berschaueri mingmini* Thach, 2019 is renamed to avoid homonymy.

KEYWORDS Gastropoda, Helicoidea, Camaenidae, *Amphidromus*, Bù Đăng, Bình Phước, Vietnam, *Amphidromus binhphuocensis*, *Amphidromus berschaueri mingi*, new taxon.

INTRODUCTION

The genus *Amphidromus* Albers, 1850 belongs to the family Camaenidae with many species collected in Vietnam. At the beginning of 2019, a new camaenid species was found. It was not listed in the works by Parkinson, Hemmen & Groh (1987), Abbott (1989), Schileyko (2011), Thach (2005, 2007, 2012, 2016, 2017) and Stark, 2017. It is here described as new to science. To avoid homonymy, *Amphidromus berschaueri mingmini* Thach, 2019 is renamed.

Abbreviations:

FMNH Field Museum of Natural History,
Chicago, USA
NNT Collection Dr Thach
BT Collection Bù Tiển
AH Aperture height
BH Body whorl height
SH Shell height
SW Shell width

SYSTEMATICS

Class Gastropoda Cuvier, 1797
Superfamily: Helicoidea Rafinesque, 1815
Family: Camaenidae Pilsbry, 1895
Subfamily: Camaeninae Pilsbry, 1895
Genus: *Amphidromus* Albers, 1850
Type species of genus: *Helix perversus*
Linnaeus, 1758

Amphidromus binhphuocensis Thach,
new species (Figures 1-8)

Description. Shell small for the genus (with height range 26.5-30.5 mm) elongate tapering with moderately tall spire and deep sutures. Shell width 53.3% of height (see Table 1 with measurements on four specimens). Body whorl inflated and occupying 67.8% of shell height, periphery rounded. Outer surface ornamented with a yellow spiral band at anterior part of body whorl and many broad axial stripes that are usually crossed by narrow white spiral lines. Sculpture consisting of fine, closely-spaced axial riblets and a green subsutural band followed by a brown stripe at each whorl. Aperture elongate-ovate with external pattern

visible within and occupying 49% of shell height, outer lip moderately thick and slightly reflected. Columella slightly curved, umbilicus closed. Color brown with white outer lip and columella, black apex and yellow spiral band. Type material was provided by Bui Thai Tien of Vietnam.

No.	1	2	3	4
SH (mm)	30.3	30.5	27.9	26.5
SW (mm)	15.3	15.7	15.6	14.8
SW/SH	0.50	0.51	0.56	0.56
Mean SW/SH	0.53			
AH (mm)	13.6	15.3	14.1	14.0
AH/SH	0.45	0.50	0.51	0.53
Mean AH/SH	0.49			
BH (mm)	19.8	20.8	19.0	18.5
BH/SH	0.65	0.68	0.68	0.70
Mean BH/SH	0.68			

Table 1. Morphometrics of *Amphidromus binhphuocensis* Thach, n. sp.

Diagnosis. The new species is characterized by broad, yellow spiral band at anterior body whorl and a green subsutural band followed by a brown stripe at each whorl.

Type Material. Holotype 30.3 mm in height FMNH with Registration No: FMNH-386365 (Figures 1, 2, 3, 4, & 8). Paratypes all from the type locality: Paratype 1: 30.5 mm in height (Figures 5 & 6) in NNT; Paratype 2: 27.9 mm high (Figure 7) and Paratype 3: 26.5 mm in height (not illustrated) in BT.

Type Locality. Bù Đẳng District, Bình Phước Province, South Vietnam.

Habitat. Found among leaf litter around trees.

Etymology. The new species is named for the Bình Phước Province of Vietnam where type material was collected.

Discussion. The new species is distinguished mainly from *Amphidromus contrarius* (Müller, 1774) (see Figure 9) by having a less inflated body whorl, broader spire, less constricted sutures, no abrupt increase of diameter from penultimate to last whorl and absence of a white, calloused triangle situated near the posterior end of outer lip (marked by small red letter “t” on Figure 9). It is close to *Amphidromus richardi* Severns, 2006 (see Figures 10 and 11) but type localities are different (Vietnam compared to Indonesia), aperture is not angulate at the anterior extremity, body whorl more inflated, early whorls not pink, outer lip more regularly convex with posterior margin more ascending (not strongly turned rightward) and the white, narrow spiral band bordering columella is lacking. *Amphidromus xiengensis* Morlet, 1891 differs mainly from the new species in many characters such as (1) spiral band at anterior body whorl much narrower and interrupted (not continuous), (2) apex not black, (3) aperture without external pattern visible within. The new species is not compared to *Amphidromus yifengi* Wang, 2019 that is not available as it was published in “Jungle Rainbow” which does not meet the criteria of the ICZN for what constitutes a publication (Philippe Bouchet, personal communication, July 2019).

Amphidromus berschaueri mingi nom. nov.
(Figure 12)

Amphidromus berschaueri mingini Thach, 2019 was recently described last quarter in The Festivus 51(3):231-236. With this article, it is renamed as *Amphidromus berschaueri mingi* nom. nov. in order to avoid homonymy with *Amphidromus mingini* Wang, 2019 which, along with *A. yifengi* Wang, 2019, is invalid.

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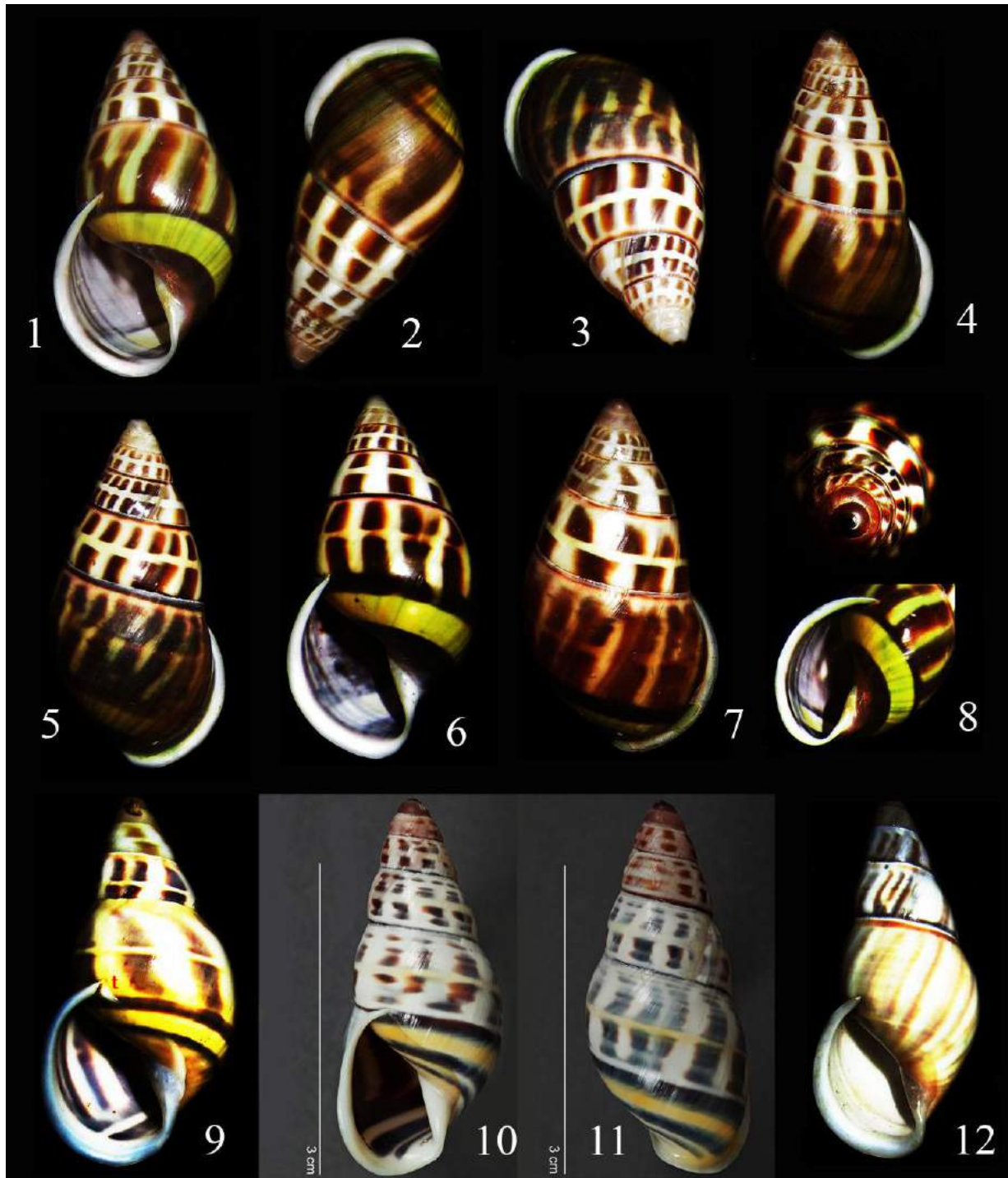


Plate 1. Comparison Images. *Amphidromus binhphuocensis* Thach, n. sp., Binh Phước, Vietnam: **1**= Holotype 30.3 mm with ventral view in FMNH; **2** = Holotype with reflected outer lip; **3** = Holotype with spire view; **4** = Holotype with dorsal view; **5, 6** = Paratype 1, 30.5 mm with dorsal and ventral views; **7** = Paratype 2, 27.9 mm with dorsal view; **8** = Holotype with enlarged apex (top) and umbilicus (bottom); **9** = *Amphidromus contrarius* ventral view for comparison; **10, 11** = *Amphidromus richardi* (holotype FHNH 308029) with ventral and dorsal views for comparison, photo by courtesy of FMNH; **12** = *Amphidromus berschaueri mingi* nom. nov., 2019, 38.7 mm ventral view for comparison.