

Comments on “Vandalism” in Malacology

Dr. Nguyen Ngoc Thach,¹ Dr. Luiz Ricardo L. Simone,²
 Jeff Parsons BAppSc, BSc (Hons),³ John Abbas,⁴ and Frank Huber⁵

¹ Former Research Associate, Oceanographic Institute,
 Nha Trang, Vietnam. thachshells267@yahoo.com

² Director, Museum of Zoology, University of São Paulo, Brazil. lr Simone@usp.br

³ 47 Elizabeth Street, Aitkenvale, Queensland, Australia 4814. jeffonese@yahoo.com.au

⁴ Lihue, Kauai, Hawaii - Jalan Demaga Baru, Muara Angke,
 Jakarta Utara Pos 14450, Jakarta, Indonesia. john123abba@yahoo.com

⁵ Stadplatz 1, A-4690 Schwanenstadt, Austria.

INTRODUCTION

Malacology, as any science, progresses thanks to the comments and constructive criticism of other scientists. Comments help us to see other people’s points of view, improve the scientific papers, and widen their importance. Constructive criticism and well thought out comments by Páll-Gergely expressed in his recent article (2020), as well as by any other malacologist or collector, are always welcome, where such criticism is communicated in a professional manner with the exclusive intention of improving the field of science. We understand that any arguments and criticism should provide an adequate scientific basis, accompanied by convincing proofs and avoiding personal attacks, insults, and the use of offensive words like “vandalism”. These provide the basic courtesies and support the foundation of science, and in malacology, as there are many more things in nature waiting to be discovered or better defined, *i.e.*, reviewed. Under this philosophy, we analyze and respond to the recent criticism and arguments of Páll-Gergely *et al.* (2020), in order to compare our viewpoints, and to show that we are strongly convinced of the validity of several previously described taxa by thoroughly reviewing the morphological characters that led us to those conclusions.

There can be doubts on the validity of any species hypothesis, and it is not rare to later conclude that some previously described species are only a variation that can be inferred from future examination of multiple specimens of a wide-ranging population. However, it is scientifically valid to maintain any morpho-species as an official taxon until a future more thorough study can be performed. The description of species is and has been widely subjective, and irrefutable proof, even from a molecular approach, does not exist.

ABBREVIATIONS

NHMUK	Natural History Museum, London, England, UK
RMNH	Naturalis Center of Biodiversity, Leiden, The Netherlands
ZMMU	Zoological Museum of Moscow University, Russia

DISCUSSION

Following we present some of our main arguments and supporting evidence why we are strongly convinced of the actual validity of some previously described taxa which have been challenged by Páll-Gergely *et al.* (2020), focusing primarily on *Amphidromus* species:

1. *Amphidromus cruentatus*, *A. daoae*, *A. daoae robertabbasi* do not have a reddish-brown aperture as argued (Páll-Gergely *et al.*, 2020, at p. 52). In fact, these species have a white aperture.

2. *Hempilecta pluto* has been interpreted as being highly variable in terms of basic shell morphology (Páll-Gergely *et al.*, 2020), an affirmative statement attributed to Inkhavilay *et al.* (2019), however, that paper does not support Páll-Gergely *et al.*'s statements of fact on any point.

3. *Amphidromus naggsi* (Figure 6, left) has been interpreted as being smoother than *A. ingens* (see Figure 6, right) (Páll-Gergely *et al.*, 2020, at p. 53), however the images clearly show *A. naggsi* has a more deformed shape, *i.e.* is less smooth than *A. ingens*.

4. There is an unjustified and unsupported accusation that the paper's the senior author has used other people's photos, *e.g.*, Bagni Liggia and Wikipedia (Páll-Gergely *et al.*, 2020, at p. 36). However, no specific figure(s) are referenced by Páll-Gergely as an example, and despite this unsupported allegation we see no problem in using other people's photos with their permission.

5. Many of the critical statements and conclusions of Páll-Gergely *et al.* (2020) were internally inconsistent, doubtful or unsupported, for example:

A. *Amphidromus thanhhoaensis* "is valid" (Páll-Gergely *et al.* (2020), at pg. 67) and only "apparently valid" (pg. 55);

B. *Cyclotus huberi* is "a valid species" on MolluscaBase since September 22, 2018 but "this species could be valid" (Páll-Gergely *et al.* (2020), at pg. 38);

C. *Cyathopoma huberi* has been accepted as valid on MolluscaBase since September 21, 2018, but it is "apparently invalid" (Páll-Gergely *et al.* (2020), at pg. 73, as "no comments").

6. Páll-Gergely did not contact the senior author before renaming taxa. The act of renaming *Amphidromus severnsi anhi* and *Satsuma huberi* breached the rules set forth in Appendix No. 3 of Code of Ethics in the 1999 ICZN, by not contacting the author beforehand to discuss the proposed changes.

7. There is a bold and unsupported assertion by Páll-Gergely *et al.* (2020, in the article's abstract) that all newly described species were "described in non-peer-reviewed journals." (It should be noted that the ICZN does not require peer review for a taxa to be valid.) However, the disputed taxa were published in the following journals which are peer-reviewed: Basteria, of the Netherlands (*Amphidromus naggsi*, *Acesta kronenbergi*); Conchylia, of Germany (*Amphidromus christabaerae*, *A. huynhanhi*, *A. keppensdhondtorum*, *A. renkeri*); Gloria Maris, magazine of Belgium (*Amphidromus huberi*, *A. setzeri*, *Camaena onae*, *Cyclophorus stevenabbasorum*); Malacologia Mostra Mondiale, of Italy (*Vasticardium kuboderai*); Miscellana Malacologica, of The Netherlands (*Solen moolenbeeki*, *Anadara dekkeri*); Novapex, of Belgium (*Pterocyclos huberi*, *Lanceolaria bogani*); The Festivus, of USA (*Bertia setzeri*, *Camaena abbasi*, *C. chuongi*, *Vasticardium berschaueri*, *Vepricardium eichhorsti*), Visaya (*Amphidromus ngai*, *A. sowyani*, *Solen poppei*); Xenophora Taxonomy, of France (*Fulgoraria alforum*, *F. bailorum*, *F. callomoni*), *etc.* This assertion by Páll-Gergely *et al.* is not only incorrect but it is potentially defamatory to both the senior author and each of these highly esteemed and peer reviewed journals.

8. The following species were considered by Páll-Gergely *et al.* 2020, to be simply color variants, however they furthermore differ in many other characters such as shell shape, columella shape, outer lip shape, *etc.* Set forth below are some typical examples, although other examples will be presented in a future paper.

- *Amphidromus baerorum* Thach, 2018 (Figure 1a) is significantly different from *A. smithii* Fulton, 1896 (Figure 1b) based on the following characters: (1) broader, twisted and not black columella; (2) wider aperture; (3) more inflated body whorl; (4) presence of orange spiral bands along sutures; (5) white (not black) outer lip; (6) presence of a white spiral band at mid-body whorl; and (7) green (not yellow) body whorl. There are seven character differences, but Pall-Gergely *et al.* (2020) apparently either could not detect them, or ignored them, and consider the former as a color variant of the latter. The appearance of columella is a major difference in shell sculpture, it is not a color variant, not a minor shell character, and is too important a character not to be used to distinguish or separate species. It is common knowledge even among collectors and dealers that they are not conspecific.

- *Amphidromus davidmonsecoruri* Thach, 2018 (Figure 2a) is significantly different from *A. smithii* Fulton, 1896 (Figure 2b) based on the six following characters: (1) white (not black) and not straight columella; (2) much wider aperture; (3) more inflated body whorl; (4) more constricted sutures; (5) red early whorls; and (6) purplish (not black) outer lip. The difference of the columella is a major difference in shell sculpture, it is not a color variant, and not a minor shell character. One should not engage in sophistry to consider this species as a synonym without proof of similarity. Any character in new species that Páll-Gergely described was

considered by him to be a major character, while characters used in new species described by other authors were considered by him to be minor characters. This argument is intellectually inconsistent and reflects poorly on Pall-Gergely *et al.* as it shows that they were not impartial in their analysis and comments.

- *Amphidromus fraussenae* Thach & Huber, 2017 (Figure 3a) significantly differs from *A. ventrosulus* Möllendorff, 1900 (Figure 3b) based on seven important characters: (1) columella broader, purple red (not pink) and directed leftward (not rightward); (2) outer lip thicker, more solid and extending far at posterior end before touching the remaining shell; (3) spire narrower, more slender and straight-sided; (4) lacking green subsutural bands; (5) aperture more elongate; (6) parietal wall wider, not yellow and more calloused; and (7) lacking axial stripes at body whorl. It is clearly visible that these two shells are not identical. We do not agree that the former is a synonym of the latter. These seven main differences are sufficient to separate them into two different species. Considering *A. fraussenae* as synonym is inappropriate. As Páll-Gergely *et al.* (2020) considered both *A. fraussenae* and *A. cargilei* as synonyms of *A. ventrosulus*, the shells must look alike. However, the individual shells shown in Figures 3a and 4a do not show any significant similarity between them.

- *Amphidromus cargilei* Thach & Huber, 2018 (Figure 4a) significantly differs mainly from *A. ventrosulus* Möllendorff, 1900 (Figure 4b) based on many important characters: (1) columella white (not pink), flared inward and directed leftward (not rightward); (2) outer lip thinner and flared outward; (3) sutures more constricted; (4) sutural bands not green; (5) aperture more elongate; (6) parietal wall well defined and black (not yellow); (7) lacking axial stripes at body whorl; and (8) body whorl more

inflated. It is clearly visible that these two shells are not identical. We do not agree that the former is a synonym of the latter. These eight main differences are sufficient to separate them into two different species. While Pall-Gergely *et al.* maintain that *A. cargilei* is a synonym of *A. ventrosulus*, they have not shown any proof of similarity on photos of these two shells.

- *Amphidromus daoae* Thach, 2016 (Figure 5a) is significantly different from *Amphidromus cruentatus* Morlet, 1875 (Figure 5b) based on the following characters: (1) inflated (not flat), narrower, black (not brown) columella; (2) more inflated body whorl; (3) more pointed and straight-sided spire; (4) not constricted sutures, (5) larger and greenish (not white) aperture; (6) black (not brown) outer lip with white (not black) inner margin; and (7) presence of axial stripes, especially at spire whorls. There are seven significant character differences between the two species however Páll-Gergely *et al.* (2010) engaged in sophistry to consider the former as a synonym of the latter. The conclusions by Páll-Gergely *et al.* are problematic as they are inconsistent with the available evidence, such as stating that the aperture of *A. cruentatus* is red-brown, and ignoring the difference in the columella which represents a major difference in shell character.

- *Amphidromus naggsi* Thach & Huber, 2014 (Figure 6a) is significantly different from *A. ingens* Möllendorff, 1900 (Figure 6b) based on the following characters: (1) rugose (not smooth) outer surface; (2) more numerous spiral grooves at body whorl (2-3 grooves versus one groove); (3) stronger sculpture; (4) wider aperture; and (5) posterior canal not pointed. These five character differences support the assertion that they are two different species. However, Páll-Gergely *et al.* engaged in sophistry to consider *A. naggsi* a synonym of *A. ingens*.

- *Amphidromus petuchi* Thach, 2018 (Figure 7) is significantly different from *A. reflexilabris* Schepman, 1892 (Figure 8) based on the following characters: (1) outer lip turned backward at anterior end, not rolled into a rounded tube at dorsal side and not pink; (2) angulate (not rounded) aperture; (3) taller spire; (4) slender shape; (5) presence of many spiral bands; (6) not curved and white (not pink) columella; and (7) adherent periostracum with brown stripes (not easily worn periostracum with green stripes). There are seven major character differences. However, Páll-Gergely *et al.* (2020) said there is only a difference of color (a mere color variant). The differences in characters (1) outer lip, (2) aperture, (4) shell shape, and (6) columella, are major differences in shell character, not mere variation of color. It is even common knowledge among collectors and dealers that these are two different species.

- *Amphidromus calvinabbasi* Thach, 2017 (Figure 9) is significantly different from *Amphidromus reflexilabris* Schepman, 1892 (Figure 8) based on the following characters: (1) not pink outer lip that is not rolled into a rounded tube at dorsal side; (2) sharply angulate (not rounded) aperture; (3) tall spire; (4) slender shape; (5) presence of many spiral bands; and (6) straight (not curved) and white (not pink) columella. There are six above-mentioned significant character differences. However, Pall-Gergely *et al.* (2020) engaged in sophistry to consider the former as a color variant of the latter. The differences in characters (1) of outer lip, (2) of aperture, and (6) of the columella are major character differences in shell sculpture, not a mere color variant.

- *Amphidromus juniorabbasi* Thach, 2018 (Figure 10) is significantly different from *Amphidromus reflexilabris* Schepman, 1892 (Figure 8) based on the following characters: (1) white outer lip that is not pink and not rolled

into a rounded tube at dorsal side; (2) angulate (less rounded) aperture; (3) tall spire; (4) slender shape; (5) presence of axial lines at body whorl; and (6) straight (not curved) and white (not pink) columella. There are six above-mentioned character differences, however Páll-Gergely *et al.* (2020) considered the former as color variant of the latter. The differences in characters (1) of outer lip, (2) of aperture, and (6) of columella are major character differences in shell sculpture, not a mere color variant.

• *Amphidromus richgoldbergi* Thach & Huber, 2017 (Figure 11) is significantly different from *A. "givenchyi"* of Sutcharit & Panha, 2006" (Figure 12) based on many characters such as: (1) much larger adult size; (2) much higher than wide (not stout shape); (3) pointed and more straight-sided spire; (4) not constricted sutures; (5) red (not brownish spot) on apex; (6) taller body whorl; (7) broader and longer columella; (8) presence of green varix; (9) more elongate aperture; (10) parietal wall with red blotch, not white like their *A. "givenchyi"* of Sutcharit & Panha, 2006" and well defined and bordered by green wavy line; (11) outer lip solid at dorsal side while that of their *A. "givenchyi"* is hollow and well visible in Figure 12; (12) posterior margin of outer lip not strongly convex and not steeply ascending; (13) straight (not curved) and longer columella; (14) deep yellow-orange at outer surface (not almost greenish like their *A. "givenchyi"*); and (15) umbilicus is closed in *A. richgoldbergi* and open in their *A. "givenchyi"*. These numerous differences support the species hypothesis that *A. richgoldbergi* is a separate species as it is significantly different from *A. "givenchyi"*. It is even common knowledge among collectors and dealers that they are two different species.

Many of the characters noted in the paragraphs above demonstrate why these species were

designated new species when originally described. It is understandable that some of these characters may have eluded or been undetected by Páll-Gergely *et al.*, as they are not experts in *Amphidromus* identification. However, personal attacks are unacceptable in science, and it was also inappropriate for Páll-Gergely *et al.* to ignore or intentionally overlook unique identifying shell characters in order to arrive at their desired conclusions, or due to what appears to be professional jealousy.

ACKNOWLEDGEMENTS

The author sincerely thanks the London National Museum of Natural History, the Leiden Naturalis Center of Biodiversity, the Zoological Museum of Moscow University and Andy Tan for the use of their photos of various *Amphidromus* species. Thanks are also due to the anonymous reviewers.

REFERENCES

- Inkhavilay K., Sutcharit C., Bantaowong U., Chanabun R., Siriwut W., Srisonchai R., Pholyotha A., Jirapatrasilp, P. & Panha, S. 2019.** Annotated checklist of the terrestrial molluscs from Laos (Mollusca, Gastropoda). *ZooKeys* 834:1-166.
<https://doi.org/10.3897/zookeys.834.28800>
- Páll-Gergely, B., A. Hunyadi & K. Auffenberg. 2020.** Taxonomic vandalism in Malacology: Comments on Molluscan taxa recently described by N.N. Thach and Colleagues (2014-2019). *Folia Malacologica*, Poland, 28(1):35-76.
- Thach, N.N. 2016.** Vietnamese New Mollusks. 48HrBooks Co., USA, 205 pp. (including 99 color plates).
- Thach, N.N. 2017.** New Shells of Southeast Asia 48HrBooks Co., USA, 128 pp. (including 68 color plates).
- Thach, N.N. 2018.** New Shells of South Asia. 48HrBooks Co., USA, 173 pp. (including 87 color plates).

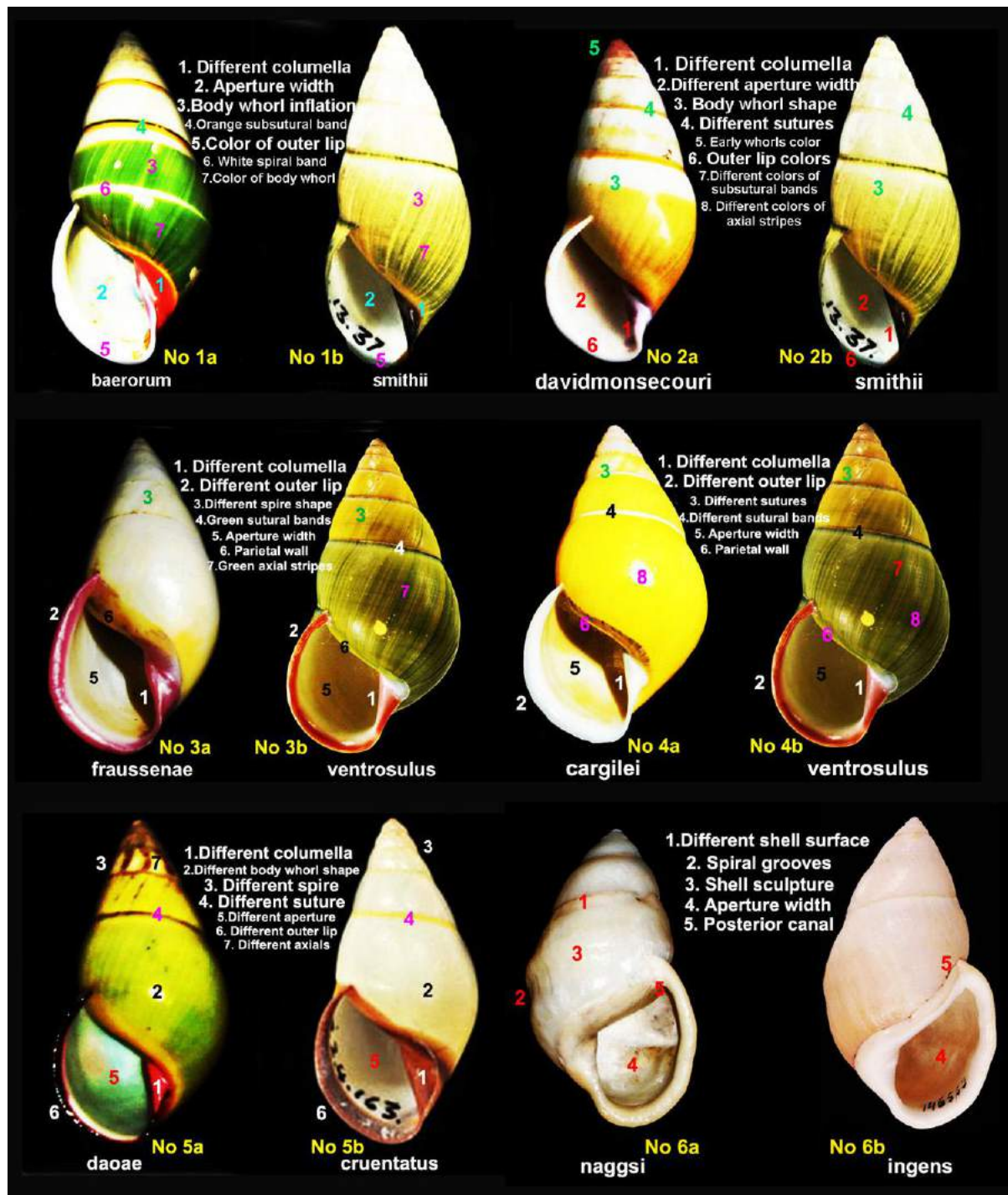


Plate 1. Diagnostic differences between species.

1a,1b. Difference between *Amphidromus baerorum* and *Amphidromus smithii*, photo of NHMUK.

2a,2b. Difference between *Amphidromus davidmonsecouri* and *Amphidromus smithii*, photo of NHMUK.

3a,3b. Difference between *Amphidromus frussenae* and *Amphidromus ventrosulus*, photo of NHMUK.

4a,4b. Difference between *Amphidromus cargilei* and *Amphidromus ventrosulus*, photo of NHMUK.

5a,5b. Difference between *Amphidromus daoae* and *Amphidromus cruentatus*, photo of NHMUK.

6a,6b. Difference between *Amphidromus naggi* and *Amphidromus ingens*, photo of ZMMU.

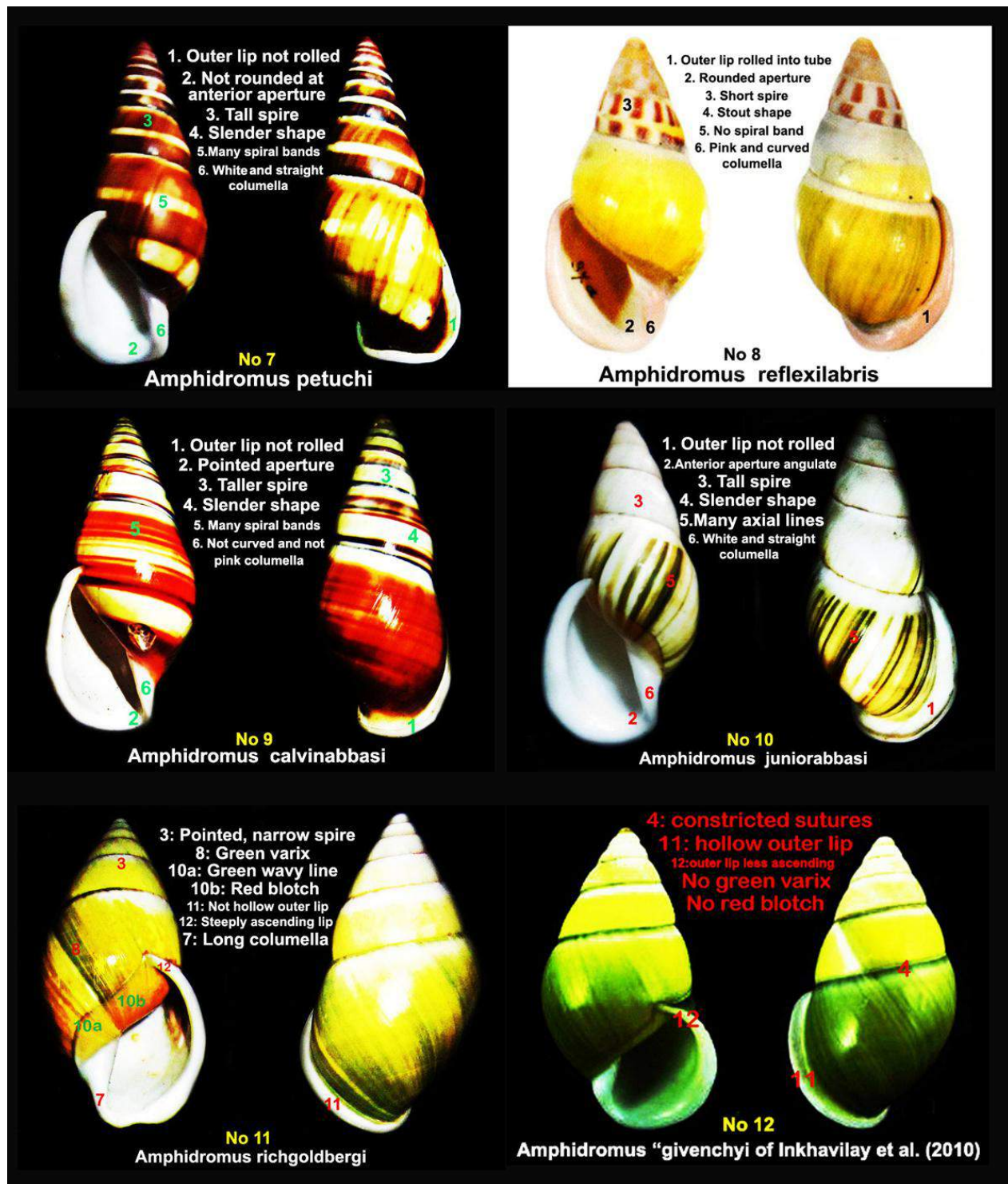


Plate 2. Diagnostic differences between species.

7. *Amphidromus petuchi* ; 8. *Amphidromus reflexilabris* for comparison, photo of RMNH; 9. *Amphidromus calvinabbasi*;
 10. *Amphidromus juniorabbasi*; 11. *Amphidromus richgoldbergi*; 12. *Amphidromus "givenchy"* of Sutcharit & Panha, 2016" for
 comparison, photo of Andy Tan.