On the discovery of a syntype of *Strombus robustus* G.B. Sowerby III, 1875 (Caenogastropoda, Strombidae) and its identity

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One of the syntypes of *Strombus robustus* G.B. Sowerby III, 1875 has been discovered in the collection of NHMUK and is designated as lectotype. The status of this species, allocated to *Margistrombus* Bandel, 2007, is addressed. Both *Strombus* (*Dolomena*) *marginatus sowerbyorum* Visser & Man in 't Veld, 2005 and *Margistrombus boucheti* Thach, 2016 are junior subjective synonyms of *S. robustus*. The lectotype of *S. robustus* and the holotype of respectively *S.* (*D.*) *m. sowerbyorum* and *M. boucheti* is illustrated.

Key words: Mollusca, Gastropoda, Strombidae, *Margistrombus*, lectotype, synonymy.

INTRODUCTION

George Brettingham Sowerby III (1843-1921), like his father and grandfather, contributed significantly to malacology (see Petit, 2009 for an overview of his publications). He was also a well-known shell dealer who sold his shells to both museums and private collectors (Fig. 1). Because it was not obligatory to deposit holotypes or syntypes in public institutions in those days, many type specimens of his ended

up in private collections. Even though many of these types have eventually landed up in museums, they may not be recognized as such unless they have been properly labelled or illustrated in the original publication. Understandably, some type specimens are lost in this manner.

On separate occasions, the authors, independent from one another, recognized a specimen in the NHMUK to be one of the illustrated syntypes of *Strombus robustus* G.B. Sowerby III, 1875, which has a confused identity and uncertain status in the literature. Visser & Man in 't Veld (2005: 58) regard *S. robustus* to be a junior synonym of *S. marginatus* Linnaeus, 1758, because Sowerby's figures (1875a: pl. 72: figs 5, 5a) "clearly depict" the Linnaean nominotypical subspecies in their opinion. Consequently, Sowerby's type locality (Hongkong) was believed to be dubious, and



Fig. 1. G.B. Sowerby III as a shell dealer: advertisement taken from Quarterly Journal of Conchology 1 (6): unnumbered p. 98.

resulted in Visser & Man in 't Veld (2005: 58) introducing the subspecific name *Strombus* (*Dolomena*) *marginatus sowerbyorum* for the Southeast Asian population. More recently a new species, *Margistrombus boucheti*, morphologically similar to Sowerby's figures, was described from Vietnam by Thach (2016).

The finding of one of the syntypes of *S. robustus* that has been apparently overlooked by recent authors, its confused identity and uncertain status in recent literature prompted us to write this paper. Here we report on one of the specimens illustrated by Sowerby (1875a: pl. 72 fig. 5a), and provide a description of this specimen, herein designated lectotype following ICZN art. 74.1, with notes of interest and figures. This paper is also a partial follow-up to Kronenberg (2008).

Abbreviations

AC-NMW: Amgueddfa Cymru - National Museum Wales, Cardiff, UK; ANSP: Academy of Natural Sciences, Philadelphia, U.S.A.; MNHN: Museum National d'Histoire Naturelle, Paris, France; NCB: Naturalis Biodiversity Center, Leiden, The Netherlands, formerly RMNH; NHMUK: Natural History Museum United Kingdom, London, UK, formerly BM(NH); NMR: Natuurhistorisch Museum, Rotterdam, The Netherlands; RMNH: Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands, collections in NCB; ZRC: Zoological Reference Collection of the Lee Kong Chian Natural History Museum, National University of Singapore, Singapore.

Sowerby's publication

Sowerby (1875a [not 1874, see Duncan, 1937; Petit, 2009]: 599-600) provided a diagnosis of the nominal species *Strombus robustus*, the English portion of which is as follows: "Shell conoid, solid, ventricose, bluish white, banded and blotched with dark brown; spire rather short, acute; whorls angulated and noduled at the angle, spirally striated above; last whorl almost smooth in the middle, then towards the margin conspicuously striated, grooved at the

base; aperture elongated, with a canal at the upper part, running up the spire; columella furnished with a thickened white enamel, which is faintly ridged; outer lip emarginated; interior ridged.". This description was published again only one month later (Sowerby, 1875b) with unaltered text. Sowerby's figures (1875a: pl. 72 figs 5, 5a), reproduced here (as Figs 2a-b), show the shell as described — with nodules or plications on the angular shoulder. Sowerby did not mention the number of specimens at hand.

In the Latin text of the description a "Var. β testa luteofusco fasciata" is mentioned, opposed to the "castaneo zonata et maculata" or "banded and blotched with dark brown" (Sowerby 1875a: 599). Sowerby's fig. 5 is this var. β , and 5a the "castaneo zonata et maculata" specimen. Sowerby (1875a, b) ended his description with the remark that his new species was "(...) much the same as those of S. septimus (Duclos), of which Mr. Cuthill has sent me several specimens from the same locality; but the form is very different, the latter being a narrow shell of the form of S. succinctus (Linn.), which is found in Ceylon." The type locality is indicated as "Hab. Hongkong" and the specimens were collected by Mr Cuthill.

It should be noted that the var. β is not part of the syntype series according to ICZN Art. 72.4.1: "The type series of a nominal species-group taxon consists of all the specimens included by the author in the new nominal taxon (whether directly or by bibliographic reference), except any that the author expressly excludes from the type series [Art. 72.4.6], or refers to as distinct variants (e.g. by name, letter or number), or doubtfully attributes to the taxon."

The references in the text and caption to the illustrations (1875a, pl. 72) in both papers do not correspond with the numbering on the plate. Here we present the references in the text and corresponding numbers on Sowerby's plate with the names currently in use (Table 1).

Sowerby's syntypes

There is no indication whatsoever in Sowerby's 1875a, b

Original name	Current name	Illustration reference in text and caption in Sowerby (1875a, b)	Illustration number on plate (Sowerby, 1875a, pl. 72)
Triton (Epidromus) comptus	Colubraria tenea (Gray, 1839)	figs 5, 5a	figs 2, 2a
Ovulum sinense	Margovula marginata (G.B. Sowerby I, 1828)	figs 1, 1a	figs 1, 1a
Strombus robustus	Margistrombus robustus (G.B. Sowerby III, 1875)	figs 3, 3a	figs 5, 5a
Columbella (Anachis) sinuata	Sincola sinuata (G.B. Sowerby III, 1875)	figs 2, 2a	figs 3, 3a
Ampullaria catamarcensis	Pomacea catamarcensis (G.B. Sowerby III, 1875)	fig. 4	fig. 4

Table 1. The species described in Sowerby (1875a) with current names and plate references. Current names taken from WoRMS.



Figs 2a-b. Margistrombus robustus (G.B. Sowerby III, 1875). Figures of shells copied from G.B. Sowerby III, 1875 pl. 72, figs 5, 5a (note: fig. 5 does not belong to the type series because of ICZN Art. 72.4.1; fig. 5a = lectotype). Figs 3a-c. Margistrombus robustus (G.B. Sowerby III, 1875). Lectotype of Strombus robustus, NHMUK 20100312. Hongkong, leg. Mr. Cuthill. Length 47.9 mm. Images of ventral and dorsal views taken by Phil Crabb, neg. no. 1799, apical view by Kevin Webb, NHMUK Photographic Unit. © The Trustees of the Natural History Museum, London, reproduced by kind permission.

papers about the number of specimens Sowerby received from Cuthill. Therefore we follow ICZN Recommendation 73F. Sometime after the publication of the description, one of the syntypes of *S. robustus* in possession of Sowerby was acquired by Mrs. De Burgh, who passed away in 1881 (not 1880 as indicated in Dance, 1986). An entry in the catalogue of her collection, present in NHMUK, mentions only one specimen of *Strombus robustus*, in the same handwriting as the small label glued upon the outer lip of the syntype. After her death, the collection of Mrs. De Burgh was acquired by Vernon W. MacAndrew, grandson of Robert MacAndrew (1801-1873), and nephew of James J. MacAndrew († 1915). Vernon W. MacAndrew bought his uncle's

collection in 1918 for € 600 and subsequently the De Burgh collection (handled by G.B. Sowerby III and H.C. Fulton (!)) in 1919 for € 1,000. Vernon W. MacAndrew died in 1940 and his collection was donated to the Natural History Museum of London in 1946, accession number 1563 (pers. comm. Andreia Salvador, February 2019), and the De Burgh specimens remain recognizable and are labeled as "De Burgh collection" in the boxes that contain the specimens.

Some material from the Vernon W. MacAndrew collection ended up in AC-NMW: "(...) some material in the Melvill-Tomlin collection in the National Museum of Wales in Cardiff. " (see https://museum.wales/curatorial/biosyb/mollusca/collections/sources/m-z/, accessed Febru-



Figs 4-6. Margistrombus robustus (G.B. Sowerby III, 1875). These are the specimens allegedly seen by Yen. Note that "China" was added to the specimen of Fig. 5a, the locality is not in any of the labels (coll. NHMUK). 4. Length 45.5 mm. 5. Length 43 mm. 6. Length 48 mm. © The Trustees of the Natural History Museum, London, reproduced by kind permission.

ary 2019, not accessible in July 2019). Trew (1990) noted: "In the Tomlin correspondence there is a list of shells sent on approval from Sowerby and Fulton to Tomlin from the MacAndrew collection dated 1917, some of which he certainly bought. Tomlin was well acquainted with V.W. MacAndrew and from correspondence we know he received shells direct from his source as well". Indeed, a specimen of S. robustus, ex MacAndrew collection is present in AC-NMW (image made available by Harriet Wood), but this specimen doesn't match either of Sowerby's (1875a pl. 72 fig. 5, 5a) fig-

ures, and its status as a syntype cannot be ascertained.

In the catalogue compiled by Yen (1942: 210), 3 specimens of *S. robustus* from "China", referring to Sowerby's publication as "*Strombus robustus*, *P.Z.S.* 599, pl. 72/3, 3a." are mentioned. We found a sample of three specimens labeled "China", in NHMUK. These cannot be from the MacAndrew collection, as this collection was acquired by NHMUK in 1946. These specimens could very well be the specimens referred to by Yen (1942) (Figs 4-6), which is confirmed in an e-mail from September 2002 from Kathie Way (for-



Figs 7-8. Margistrombus robustus (G.B. Sowerby III, 1875). 7a-c. Holotype of Strombus (Dolomena) marginatus sowerbyorum Visser & Man in 't Veld, 2005, NMR 15986, Borneo, Brunei, Kuala Belait, 27 July 1983, leg. J.N.J. Post. Length 42 mm. Images taken by Messrs. Joop Trausel and Frans Slieker (NMR), © NMR reproduced by kind permission. 8a-c. Holotype of Margistrombus boucheti Thach, 2015, MNHN-IM-2000-30134, Vietnam, Khánh Hòa Province, Nha Trang area, at 10 m. Length 45.3 mm. Images taken by M. Caballer, MNHN, Project RECOLNAT (ANR-11-INBS-0004), © MNHN, Paris, reproduced by kind permission.

merly nhmuk) to Rob Moolenbeek (who acted on behalf of Gerard Visser) "(...) but there are 3 specimens in the general collection which I think are probably the ones Yen saw - to me they do not look much like Sowerby's original figure at all and bear only a label saying "China"." And indeed, none of these three specimens matches the Sowerby, 1875a pl. 72 fig. 5 figure. The total number of specimens Sowerby (1875a, b) had at his disposal is not known, and the whereabouts of

the other illustrated specimen (Sowerby, 1875a pl. 72 fig. 5 [the var. β]), remain unresolved.

In order to unequivocally establish the identity of *Strombus robustus* we designate herein the syntype ex De Burgh collection, present in NHMUK with reg. no. 20100312 as lectotype of *Strombus robustus* G.B. Sowerby III, 1875.

SYSTEMATIC PART

Family Strombidae Rafinesque, 1815

Genus *Margistrombus* **Bandel, 2007** (originally as a subgenus of *Strombus*)

Type species (by original designation): *Strombus marginatus* Linnaeus, 1758.

Margistrombus robustus (G.B. Sowerby III, 1875) (Figs 2-8)

Types and type localities

Strombus robustus. Lectotype (here designated, Figs 3a-c): NHMUK 20100312 (ex Mrs. De Burgh colln., Acc. No. 1822), length 48 mm (Sowerby, 1875a: 599, pl. 72 fig. 5a), measured by us: 47.9 mm. Type locality: "Hab. Hongkong".

Strombus (Dolomena) marginatus sowerbyorum. Holotype (Figs 7a-c): NMR 15986, leg. J.N.J. Post, 27 July 1983, length 42 mm (Visser & Man in 't Veld, 2005: 58, figs 3-4). Type locality: Borneo, Brunei, Kuala Belait. Paratypes in private collections of L. Man in 't Veld and G. Visser.

Margistrombus boucheti. New synonym. Holotype (Figs 8a-c): MNHN IM-2000-30134, length 45.3 mm (Thach, 2016: 39, fig. 77). Type locality: Vietnam, Khánh Hòa Province, Nha Trang area, at 10 m. Paratypes in ANSP, NCB and private collection of N.N. Thach.

Chresonymy

Strombus succinctus — Linnaeus, 1767: 1212, # 509 (partim), see Kronenberg (2008) on discussion of the spelling of the name of this species.

Strombus accinctus — Thomae, 1767: 1212, # 509 (partim; incorrect subsequent spelling).

Strombus accinctus — Born, 1778: 280, 281; Born, 1780: 283, pl. 10 figs 14-15 (incorrect subsequent spelling of *Strombus succinctus* Linnaeus, 1767).

Strombus robustus G.B. Sowerby III, 1875a: 599, pl. 72, figs 5, 5a; Sowerby, 1875b: 79.

Strombus marginatus Linn. — Tryon, 1885: 116 (partim), fig. 54, not fig. 53 (= *M. marginatus*).

Strombus septimus Duclos — Crosse & Fischer, 1890: 287. Strombus robustus Sowerby, 1874 — Yen, 1942: 210.

Labiostrombus succinctus (Linné) — Kira, 1959: 36, pl. 15 fig. 14.

Dolomena marginata robusta (Sowerby) — Kira, 1965: 36, pl. 16 fig. 14; Habe, 1970: 42, pl. 16 figs 16-17.

Strombus (Dolomena) marginatus robustus Sowerby, 1874

— Abbott, 1960: 100-101, pl. 17 figs 8-9, pl.76; Ma, 1976: 363, pl. 4 fig. 2; Kronenberg & Berkhout, 1984: 320, pl. 5 fig. 2; De Turck et al., 1999: 43, pl. 85 figs 1-6; Chim et al., 2009: 379, figs 1-5; Zhang, 2016: 78-79, pl. 2 fig. 6.

Strombus (Dolomena) marginatus marginatus Linnaeus, 1758 var. *robustus* Sowerby — Walls, 1980: 116, 115 bottom figures.

Strombus robustus Sowerby II, 1874 [sic] — Swennen et al., 2001: 116, fig. 337.

Dolomena marginata robusta (Sowerby, 1874) — Raven, 2002: 11-13, fig. 2, pl. 4 figs 18a-22c.

Strombus (Dolomena) marginatus marginatus Linnaeus, 1758 — Dharma, 2005: pl. 11 figs 16a, b.

Strombus (Dolomena) marginatus robustus Sowerby III, 1874 — Thach, 2005: 59, pl. 16 fig. 26.

Strombus (Dolomena) marginatus sowerbyorum Visser & Man in 't Veld, 2005: 58, pl. 1 figs 3-4, pl. 2 fig. 2, pl. 3 figs 3-4; Kronenberg, 2008: 57, figs 9-15.

Strombus marginatus succinctus Linnaeus, 1767 — Cob et al., 2009: 43, fig. 4a-g.

Strombus marginatus robustus Sowerby, 1875 — Tan & Woo, 2010: 38.

Margistrombus sowerbyorum (Vissier [sic] & Man in 't Veld, 2005) — Thach, 2012: 83, pl. 25 fig. 285.

Margistrombus robustus (Sowerby III, 1874) — Thach, 2012: pl. 25 fig. 286 top, pl. 26 fig. 298.

Margistrombus robustus (G.B. Sowerby III, 1875) — Liverani, 2013a: 79, pl. 1 fig. 3, pl. 2 figs 4-5; Liverani, 2013b: 37, pl. 152 figs 4a, b; 5a, b.

Margistrombus boucheti Thach, 2016: 39, figs 2, 77-82. **New synonym.**

Remarks

As the original figure-references by Linnaeus to his *S. succinctus* are a mixture of species, including *Margistrombus robustus*, we list it here in the chresonomy. The lectotype of *Strombus succinctus* present in the Linnaean collection (box number LSL.437), is erroneously indicated by Dodge (1956: 279) as "holotype". This specimen is figured in Kronenberg (2008: figs 6-8) and is a specimen of what now is generally known as *Margistrombus septimus* (Duclos, 1844) (see discussion in Kronenberg, 2008: 57-61). The specimen measures 51.47 mm in length (Kronenberg, 2008: 60). The type locality given by Linnaeus (1767: 1212, # 509) "in India" is in error for all Linnaeus' references, including the lectotype, and is in all probability the source of confusion surrounding the identity of *S. succinctus*.

Abbott (1960: 100) already noted that none of Linnaeus' figure references referred to his concept of *S. succinctus*. Abbott furthermore relied on Hanley (1855: 274) who had stated that "*The* Strombus succinctus of authors is marked (Sow. Thes. Conch. vol. i. pl. 6, f. 20) for this species in the Linnaean cabinet and answers correctly to the description.". However, fig. 20 is not the *S. succinctus* of authors, here identified as Margistrombus septimus. Strombus succinctus auct. is the species illustrated as fig. 21 in G.B. Sowerby II (1842: pl. 6). Hanley (1855: 274) continued: "The cited figures

are rather unsatisfactory; although with the exception of the longer spired Strombus in Seba (plate 62 f. 20 which nevertheless presents its general aspect) they are usually admitted to be meant for this shell.".

In his text, G.B. Sowerby II (1842: 28) refers to both figs 20 and 21 on pl. 6, believing that they represented one species, and referred to fig. 20 as "The pink variety is in the collection of the rev. F.J. Stainforth.". Stainforth's collection is in NHMUK or AC-NMW (see Dance, 1986: 226), but a further discussion is beyond the topic of this paper.

Description of lectotype of S. robustus

Shell solid, 47.9 mm in length, protoconch broken off, teleoconch with about 7 whorls, first two teleoconch whorls with small, close set axial folds, crossed by very fine spiral cords, that continue on the subsutural ramp; on third teleoconch whorl axial folds gradually transit into small, close set knobs on the shoulder, about 25 small knobs on the fourth teleoconch whorl; penultimate whorl with 23 visible knobs, gradually getting elongated, last whorl with five, elongated small knobs, from sixth onwards increasing in size in abapical direction, two of them merging, resulting in a fold-like axial plica, when viewed with the aperture in front, on the left-hand side of the last whorl, followed by five more knobs, last one, mid dorsal being the largest. Last part of the last whorl with fine growth lines, base of last whorl with 15 incised lines. Columellar callus slightly thickened, well defined, smooth in the middle, and with seven plicae on the abapical part, not reaching the tip of the anterior canal, and eight plicae on the adapical part, callus extending further into adapical direction, crossing two sutures. Outer lip not widely expanded, thickened near rim, rim however sharp, adapically extended, forming a posterior canal with the extension of the columellar callus. Tip of wing extension going abapically with a sinus, outer lip straight towards strombid notch; strombid notch relatively broad, shallow and well defined. Adapertural side of outer lip with numerous fine plicae, from close to the rim running into the aperture. Shell white with a dense pattern of four distinct chestnut brown colour bands, adapical one with irregular blotches, second band with more or less chevron-like blotches on dorsal side, third with blotches merging into a band on dorsum, most abapical band with axially elongated blotches. Columella and aperture white.

Distribution

Margistrombus robustus is reported from southern Japan, south along the coasts of China, including Taiwan, the coasts of Vietnam and eastern Thailand south to Singapore, the eastern coast of Sumatera to Kepulauan Seribu, off western Jawa (Dharma, 2005) and western coast of Kalimantan in Indonesia, including Sarawak and Brunei (Raven, 2002).

DISCUSSION

Abbott (1960: 101) first mentioned that "the type" of *Strombus robustus* Sowerby, 1875, is in the British Museum (Natural History) (presently the Natural History Museum), but the basis of his information is unknown and Abbott has never visited the museum. Oddly enough, previous attempts to locate possible type material of this species in NHMUK were unsuccessful, as can be concluded from communications by Kathie Way (formerly of NHMUK) to Rob Moolenbeek (formerly of NBC) on behalf of Gerard Visser (e-mail September 2002) and Amelia MacLellan (formerly of NHMUK) to the second author (e-mail March 2010).

We have no doubt that the specimen reported herein is a genuine syntype of *S. robustus*. The measurement of the specimen is nearly the same (only 0.1 mm difference compared to Sowerby's measurement), and the dorsal pattern is the same, apart from some negligible minor differences, that may be due to artistic freedom when colouring the plate (compare our Fig. 2b and Fig. 3b).

The syntypes of *S. robustus* were collected by Mr. Cuthill, and were sent to Sowerby III along with specimens identified by Sowerby III as *S. septimus*, a name introduced by Duclos (1844). The whereabouts of any of these specimens is not known. Currently there are no reliable records of *S. septimus* from Hong Kong or the Chinese coast. In all probability, these specimens are forms of *M. robustus* subsequently described as *Strombus* (*Dolomena*) *marginatus sowerbyorum*.

On the label attached to the lectotype specimen of *S. robustus*, the locality is clearly indicated as "China". It is unclear when, why, and by whom, the locality "Hongkong", as indicated by Sowerby III, was changed into "China". In the De Burgh catalogue, compiled by Mrs. De Burgh, there is no indication of the locality of the specimen of *S. robustus* in her collection.

Margistrombus robustus appears to be a very variable species (our Figs 4-6; pers. observ. of collections in zrc; ncb; nhmuk; and several private collections, seen by the first author), see also figures in Sowerby III (1875a), Yen (1942), Abbott (1960), Kira (1965), Habe (1970), Ma (1976), Walls (1980), Kronenberg & Berkhout (1984), De Turck et al. (1999), Swennen et al. (2001), Raven (2002), Thach (2005; 2012; 2016), Visser & Man in 't Veld (2005), Kronenberg (2008), Chim et al. (2009), Liverani (2013a; 2013b), Zhang (2016) and internet sources, e.g. http://www.marinespecies.org/aphia. php?p=image&tid=565466&pic=62966 and http://www.stromboidea.de/?n=Species.MargistrombusRobustus (note that the bottom image on this latter website is M. marginatus, as already indicated by the comment made by V. Liverani). Different forms are often found in a single population.

Intraspecific variation in sculpture is quite common in strombids and this may be very well be an ecophenotypic phenomenon and / or induced by the presence or absence of predators, but more research is required. The variability within *M. robustus*, such as specimens with no knobs and a rounded shoulder to specimens with distinct axial plicae is reminiscent of other strombids (e.g. *Canarium urceus* and *C. labiatum*, where specimens with strong axial sculpture and smooth specimens are known).

We concur with Liverani (2013a: 79) that *Strombus* (*Dolomena*) *marginatus sowerbyorum* is a subjective synonym of *S. robustus*, and should be allocated to *Margistrombus* Bandel, 2007. Thach (2012: pl. 25 fig. 286 top, pl. 298 fig. 298) correctly identified specimens from off Vietnam as *Margistrombus robustus*, albeit with a wrong year of publication. Therefore we do not understand Thach's (2016) subsequent action of describing *Margistrombus boucheti* as a new species. In our opinion the differences indicated by Thach (2016: 40, figs 2, 77-82) are either not correct or refer to intraspecific variability. Thus we consider *M. boucheti* to be a junior synonym of *Strombus robustus*.

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REFERENCES

- Aввотт, R.T., 1960. The genus *Strombus* in the Indo-Pacific. Indo-Pacific Mollusca 1 (2): 33-146.
- BANDEL, K. 2007. About the larval shell of some Stromboidea, connected to a review of the classification and

- phylogeny of the Strombimorpha (Caenogastropoda). Freiberger Forschungshefte, C 524. Paläontologie, Stratigraphie, Fazies, 15: 97-206.
- BORN, I. VON, 1778. Index rerum Naturalium Musei Caesarei Vindobonensis. Pars I. Testacea. Verzeichniss der natürlichen Seltenheiten des k.k. Naturalien Cabinets zu Wien. Erster Theil. Schalthiere: i- xlii + 1-458 + 1-78. Officina Krausiana, Vindobonae [Vienna].
- Born, I. von, 1780. Testacea Musei Caesarei vindobonensis que jussu Mariae Theresiae angustae disposuit et descripsit Ignatius a Born: i-xxxvi + 1-442 + (index), pls 1-18. Joannis Pauli Kraus, Vindobonae [Vienna].
- CHIM, C.K., NEO, M.L & LOH, K.S., 2009. The status in Singapore of *Strombus* (*Dolomena*) *marginatus sowerby-orum* Visser & Man in 't Veld, 2005 (Mollusca: Gastropoda: Strombidae). Nature in Singapore 2: 379-384.
- COB, Z.C., ARSHAD, A., BUJANG, J.S. & GHAFFAR, M.A., 2009. Species description and distribution of *Strombus* (Mollusca: Strombidae) in Johor Straits and its surrounding areas. Sains Malaysiana 38 (1): 39-46.
- CROSSE, H. & FISCHER, P., 1890. Note sur la faune conchyliologique marine de l'Annam. Journal de Conchyliologie 37 (4) ["1889"]: 281-296.
- DANCE, S.P., 1986. A history of shell collecting: [unpaginated plate] + i-xv + 1-265, pls 1-32. E.J. Brill / Dr. W. Backhuys, Leiden.
- DE TURCK, K., KREIPL, K., MAN IN 'T VELD, L. & POPPE, G.T., 1999. Family Strombidae. In: POPPE, G.T. & GROH, K. (eds.). A Conchological Iconography 2: 1-58, pls 1-130.
- DHARMA, B., 2005. Recent & fossil Indonesian shells: 1-423. ConchBooks, Hackenheim.
- Dodge, H. 1956. A historical review of the mollusks of Linnaeus, 4. The genera *Buccinum* and *Strombus* of the class Gastropoda. Bulletin American Museum of Natural History 111: 153-312.
- Duncan, F.M., 1937. On the dates of publication of the Society's 'Proceedings,' 1859-1926. With an Appendix containing the dates of Publication of 'Proceedings,' 1830-1858, compiled by the late F.H. Waterhouse, and of the 'Transactions,' 1833-1869, by the late Henry Peavot, originally published in P. Z. S. 1893, 1913. Proceedings of the Zoological Society of London, Series A (General and Experimental), 107 (1): 71-84.
- HABE, T., 1970. Common shells of Japan in color: I-XVIII + 1-223. Hoikusha, Osaka.
- Hanley, S., 1855. Ipsa Linnaei Conchylia. The shells of Linnaeus determined from his manuscripts and collection. Also an exact reprint of the Vermes Testacea of the 'Systema Naturae' and 'Mantissa': [1] + 1-556 + [1], pls 1-5. Williams & Norgate, London.
- International Commission on Zoological Nomen-Clature, 1999. International Code of Zoological Nomenclature, Ed. 4: i-xxix + 1-306. London.

- KIRA, T., 1959. Coloured illustrations of the shells of Japan, enlarged and revised edition: 1-239. Hoikusha, Osaka.
- KIRA, T., 1965. Shells of the western Pacific in color, Vol. 1: [7] + 1-224. Hoikusha, Osaka.
- Kronenberg, G.C., 2008. Born's strombs (Mollusca: Gastropoda), with some notes on *Strombus succinctus* Linnaeus, 1778. Annalen des Naturhistorisches Museum in Wien, Ser. B, 109: 51-66.
- Kronenberg, G.C. & Berkhout, J., 1984. Strombidae. Vita Marina 31 (1/6): sect. buikpotigen 263–362. [imprint 1980; published 1984]
- LINNAEUS, C., 1767. Systema Naturae per Regna tria Naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Editio 12, reformata. Tomus I. Regnum Animale. Pars II: 533-1327, [1-36]. Laurentii Salvii, Holmiae [Stockholm].
- LIVERANI, V., 2013a. A new species of *Margistrombus* Bandel, 2007 (Gastropoda: Strombidae) with some comments on the genus. Visaya 4 (1): 77-83
- LIVERANI, V., 2013b. The superfamily Stromboidea. Addenda and Corrigenda. In: РОРРЕ, G.T., GROH, K. & RENKER, C. (eds.). A Conchological Iconography, Supplement 1: 1-54, pls 131-164.
- Ma, S.-T., 1976. Notes on Chinese species of the family Strombidae (Prosobranchiata, Gastropoda). Studia Marina Sinica 12 (11): 355-371, 5 pls.
- MARTINI, F.H.W., 1777. Neues Systematisches Conchylien-Cabinet, geordnet und beschrieben von Friedrich Heinrich Wilhelm Martini (...): Vol. 3, i-vi + 1-434 + pls 66-121. Gabriël Nikolaus Raspe, Nürnberg.
- Petit, R.E., 2009. George Brettingham Sowerby, I, II & III: their conchological publications and Molluscan taxa. Zootaxa 2189: 1-218.
- RAVEN, H., 2002. Notes on molluscs from NW Borneo. 1. Stromboidea (Gastropoda, Strombidae, Rostellariidae, Seraphidae). Vita Malacologica 1: 3-32.
- SOWERBY, G.B., II, 1842. Monograph of the genus *Strombus*.

 Thesaurus Conchyliorum, or monographs of Genera of Shells 1 (1): 25-39, pls 6-10.
- Sowerby G.B., III, 1875a. Descriptions of five new Species of Shells. Proceedings of the Zoological Society of London 42 (4) ["1874"]: 598-600, pl. 72. (April)
- SOWERBY G.B., III, 1875b. Descriptions of five new species of shells. Quarterly Journal of Conchology 1 (5): 78-80. (May)

- Swennen, C., Moolenbeek, R.G., Ruttanadakul, N., Hobbelink, H., Dekker, H. & Hajisamae, S., 2001. The molluscs of the Southern Gulf of Thailand. Thai Studies in Biodiversity 4: 1-210.
- Tan, S.K. & Woo, H.P.M., 2010. A preliminary checklist of the molluscs of Singapore: 1-78. Raffles Museum of Biodiversity Research, Singapore.
- THACH, N.N., 2005. Shells of Vietnam: 1-338 + 91 pls. ConchBooks, Hackenheim.
- THACH, N.N., 2012. New records of molluscs from Vietnam: 1-276 + 151 pls. 48HrBooks Company, Akron.
- THACH, N.N., 2016. Vietnamese new mollusks: Seashells-Landsnails-Cephalopods, with 59 new species: 1-205. 48HrBooks Company, Akron.
- THOMAE, I., 1767 Caroli a Linne, Equites aur de Stella Polari, Archiatri regii (...) Systema Naturae per Regna tria Naturae, secundum classes, ordines, genera, species cum characteribus, differentiis, synonymis, locis. Tomus 1. Editio decima tertia, ad editionem duodecimam reformatum Holmiensem: 1-1317. Typis ioannis Thomae nob. de Trattnern, Caes. Reg. Aulae Typogr. et Bibliopolae, Vindobonae [Vienna]. Note: a page-to-page reprint of the Twelfth edition of Linnaeus.
- TREW, A., 1990. John R. le B. Tomlin's new molluscan names: 1-101. National Museum of Wales, Cardiff.
- Tryon, G.W., 1885. Family Strombidae. Manual of Conchology 2 (7): 99-152, pls 1-12.
- VISSER, G. & MAN IN 'T VELD, L., 2005. Contributions to the knowledge of Strombacea. 7: Notes on the *Strombus* (*Dolomena*) marginatus-complex (Gastropoda: Strombidae) and the status of *Strombus* (*Dolomena*) robustus Sowerby, 1874; with description of a new subspecies, and a neotype designation of *Strombus* (*Dolomena*) marginatus Linnaeus, 1758. Gloria Maris 44 (3-4): 55-68.
- Walls, J.G., 1980. Conchs, Tibias and Harps: 1-191. T.F.H. Publications, Neptune.
- YEN, T.-C., 1942. A review of Chinese gastropods in the British Museum. Proceedings of the Malacological Society of London 24 (5-6): 170-289, pls 11-28.
- ZHANG, S., 2016. Fauna Sinica: Invertebrata Vol. 56, Mollusca, Gastropoda, Strombacea and Naticacea: i-viii + 1-317, 10 pls. Science Press, Beijing.