

Description of a new *Scabrotrophon* (Gastropoda: Muricidae) from Taiwan

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Summary

Scabrotrophon lani n.sp. is described from Pratas Island, southwest of Taiwan. It is compared with another Taiwanese species, *Scabrotrophon chunfui* Houart & Lan, 2001, with *S. regina* (Houart, 1985) from the Philippine Islands and with *S. Scitulus* (Dall, 1891) from the Northeastern Pacific.

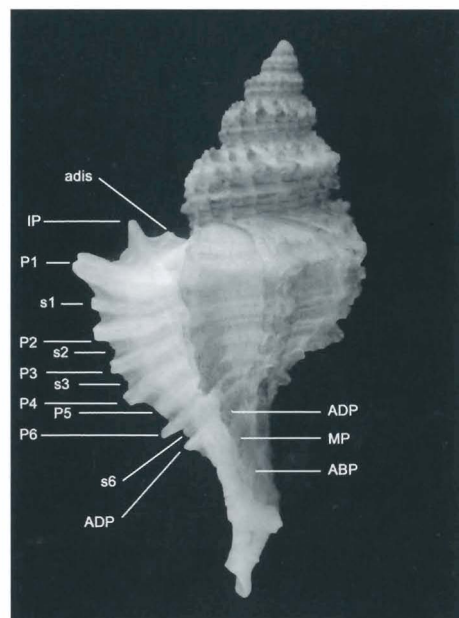
Introduction

Scabrotrophon was described by McLean (1996: 93) in order to separate a group of species previously classified in *Nipponotrophon* Kuroda & Habe, 1971 by Radwin & D'Attilio (1976), in *Trophonopsis* by Rice (1971), Abbott (1974), Kaicher (1979), Abbott & Dance (1982), and Egorov (1993), and in *Boretrophon* and *Trophonopsis* by Foster (1981). *Scabrotrophon* differs from *Nipponotrophon*, the most resembling taxon, in its spiral sculpture, having two visible spiral cords in the early teleoconch whorls instead of one or two in *Nipponotrophon*, and in having more extensive, squamose spiral and axial sculpture. Differences are also observed in the morphology of the operculum (Houart & Lan, 2001). Currently there are two species of *Scabrotrophon* known with certainty to occur in the China Sea: *S. chunfui* Houart & Lan, 2001 and *S. lani* n. sp. Other species live in the Northeastern Pacific, in the Bering Sea, the Okhotsk Sea, the Kurile Islands, off northern Japan, in the Philippine Islands, and in the northeastern Atlantic.

Abbreviations

IRSNB: Institut royal des Sciences naturelles de Belgique, Brussels.

P	Primary cord
s	secondary cord
IP	Infrasutural primary cord (primary cord on shoulder)
adis	adapical infrasutural secondary cord (shoulder)
P1	Shoulder cord
P2-P6	Primary cords of the teleoconch whorl
s1-s6	secondary cords of the teleoconch whorl
s1	secondary cord between P1 and P2; s2 : secondary cord between P2 and P3, etc.
ADP	adapertural primary cord on the siphonal canal
ads	adapertural secondary cord on the siphonal canal
MP	median primary cord on the siphonal canal
ms	median secondary cord on the siphonal canal
ABP	abapertural primary cord on the siphonal canal
APERTURE	
ID	Infrasutural denticle
D1 to D5	Abapical denticles



The terminology (Fig.1) is occasionally put between brackets, this means that the character was observed in one shell only.

Fig. 1. Terminology of the spiral sculpture

SYSTEMATICS

FAMILY MURICIDAE Rafinesque, 1815

Genus *Scabrotrophon* McLean, 1996

Type species (by original designation) : *Trophon maltzani* Kobelt and Küster, 1878.
Northeastern Pacific.

Original diagnosis : Shell small to medium in size, canal moderately long, open; protoconch paucispiral, of 1.5 rounded, well-separated whorls. Sculpture axial and spiral; early sculpture dominated by 2 strong spiral cords; spiral cords scabrous, overriding axial ribs of mature sculpture.

Scabrotrophon lani n.sp.

Figs 1, 2, 3--7

Type material: Holotype IRSNB IG 30323/526; paratype coll. Ying Jay Lee, #30 sec.2 Jong shan north rd., Taipei City 100, Taiwan

Type locality (Fig. 2): South China sea, near Pratas Island, 20°35'-20 50' N—116°35'-116°55' E, about 350 m depth

Distribution: South China Sea, near Pratas Island, living in about 350 m.

Dimensions: Holotype 40.05 mm x 19.30 mm, paratype 40.90 x 22.20 mm

Description

Shell large sized for the genus, up to 40.9 mm in length at maturity, angulate, weakly spinose, lightly built. Spire high with 1.45 protoconch whorls and up to 5 broad, convex, weakly angulate, shouldered, teleoconch whorls. Suture impressed, partially obscured by small axial lamellae of following whorl. Protoconch (Figs 6-7) large, broad, bulbous, whorls rounded; terminal varix unknown (eroded). Axial sculpture of first to penultimate teleoconch whorl consisting of low, narrow,

frilly, irregularly placed, numerous lamellae. First whorl partially eroded, second with 17 or 18 lamellae, third with 18-23, fourth with 20 or 21, last whorl with 9-12 lamellate varices. Spiral sculpture of high, strong, narrow, primary and secondary cords, ending as short, broadly open spinelets on axial lamellae. Visible part of first teleoconch whorl with IP, P1, P2, second whorl with adis, IP, P1 and P2, third with adis, IP, P1, s1, P2, fourth with adis, IP, P1, s1, P2, s2, last with adis, IP, P1, s1, P2, s2, P3, (s3), P4, P5, (s5), P6, s6, ADP, ads, MP, ms, ABP. s1, s2, s3 decreasing in strength abapically and abaperturally. Spinelets more strongly developed on last teleoconch whorl; shoulder spinelet strongest and longest.

Aperture large, broadly ovate. Columellar lip broad, smooth, rim partially erect, adherent at adapical extremity. Anal notch shallow, broad. Outer lip weakly erect, smooth, with 6 very weak, broad denticles within (ID, D1 - D5). Siphonal canal long, about 41-45% of total shell length, narrow, weakly abaxially bent, open. Operculum light brown, ovate, with terminal nucleus. Shell white.

Etymology: Named after our friend T.C. Lan (1931-2004) who found the holotype of this species and who devoted most of his life to malacology.

Remarks

Scabrotrophon lani n.sp. differs from *S. regina* from the Philippines in having a last whorl more constricted at its base, a longer, smoother and comparatively smaller siphonal canal, an erect columellar lip (adherent in *S. regina*), more numerous and more frilled axial lamellae, and broader, less numerous, spiral cords: in *S. regina* IP is broad and only present from second teleoconch whorl; adis is present from third or fourth whorl, it is very weak, only discernable by the presence of a short open spine on the axial lamellae. From *S. chunfui*, *S. lani* differs in having a more shouldered shell, in being more squamose with more numerous axial lamellae, and in having a broader, larger, and bulbous protoconch. It also has a different morphology of the spiral cords: *S. chunfui* has low primary and secondary cords of almost the same strength in penultimate and last teleoconch whorls, while they are high in *S. lani* and the secondary cords being almost 4 times narrower than the primary cords.

S. lani differs from *S. scitulus* in many ways but especially in axial and spiral sculpture. There are no spiral cords on the shoulder in *S. scitulus*, and only very few secondary spiral cords: s3 is very small, and not always present, while s4 is very low, almost obsolete.

Acknowledgements

We are most indebted to Mr. Ding Fa Shi, for his only specimen (holotype) for this study, and to Mr. Ying Jay Lee for the loan of the paratype.

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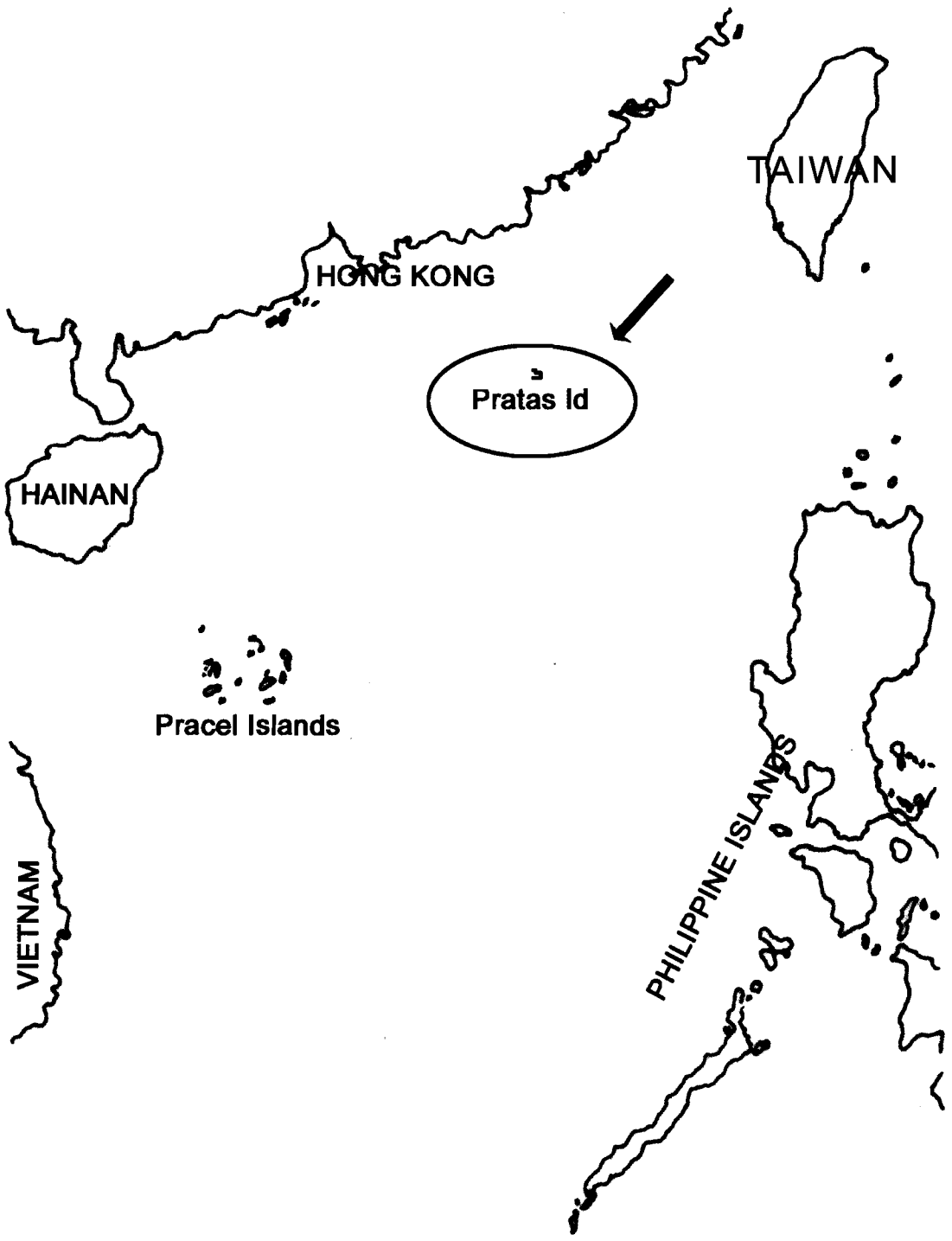
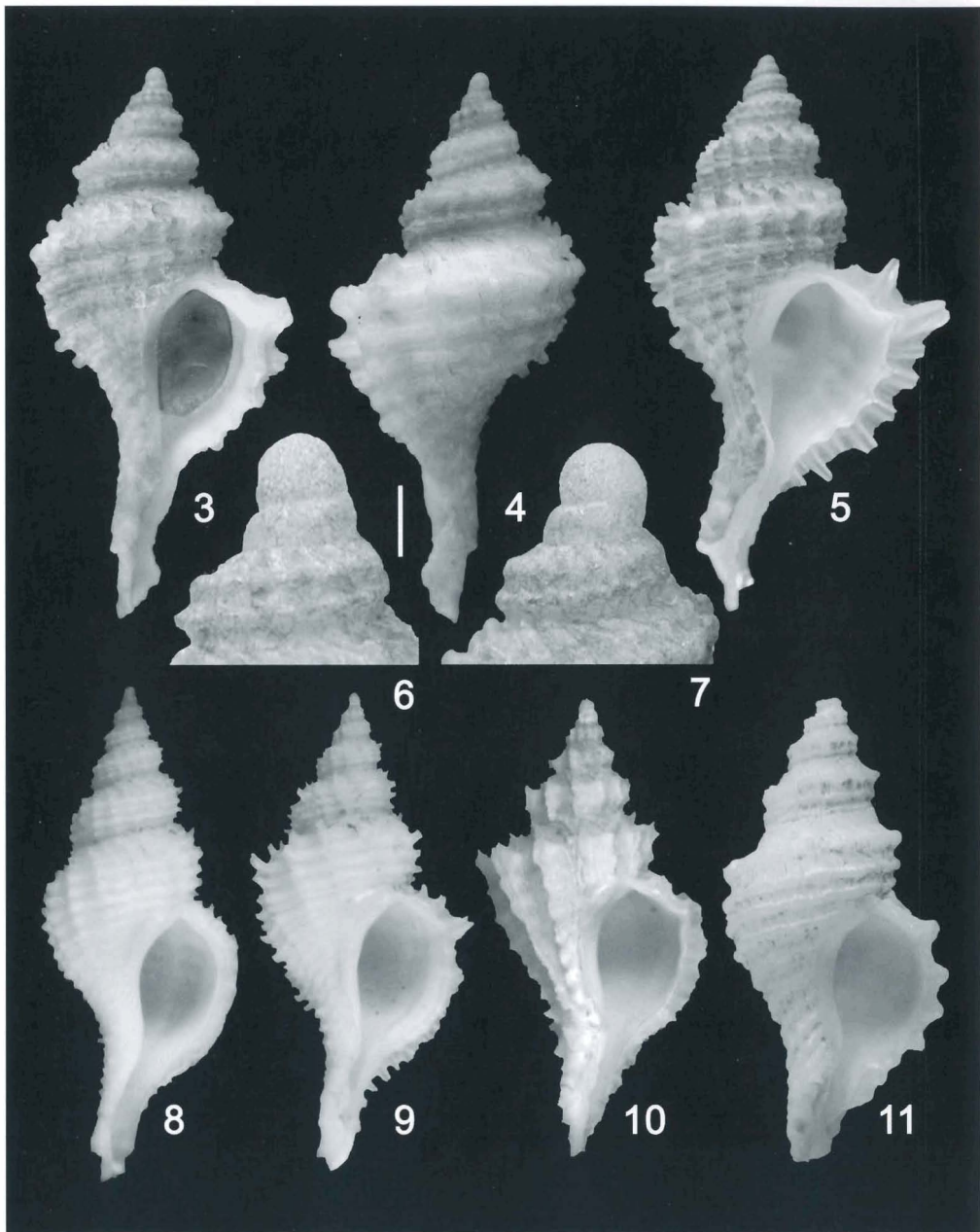


Fig. 2. Distribution map



Figures 3-11

3-7. *Scabrotrophon lani* n.sp.

3 - 4. holotype IRSNB 30323/526, 40.05 mm x 19.30 mm

5. paratype coll. Ying Jay Lee, 40.90 x 22.20 mm

6 - 7. Protoconch and first whorl of the holotype (scale bar: 1 mm)

8-9. *Scabrotrophon chunfui* Houart & Lan, 2001, Northeast Taiwan, in 200-250 m

8. Holotype MNHN, 32.4 mm

9. Paratype NSMT-Mo 72864, 33.3 mm

10. *Scabrotrophon regina* (Houart, 1985), Philippine Islands, 13°44' N, 120°31.6' E, 682-770 m, 31 mm, holotype MNHN

11. *Scabrotrophon scitulus* (Dall, 1891), Kurile Islands, Shikotan Island, coll. R. Houart, 36.3 mm

台灣產新種骨螺

Roland Houart & 孫志良

簡介東沙群島海域產新種骨螺

科名：*Muricidae*

屬名：*Scabrotrophon*

種名：藍氏(*lani*)

全名：藍氏骨螺(*Scabrotrophon lani n. sp.*)

標本：模式標本由比利時皇家自然科學院收藏，副模式標本由李英傑先生收藏

產地：東沙群島海域約350米深

備註：此新種紀念為貝類學奉獻一生的藍子樵先生，新種亦由其發現紀錄

謝辭：著者感謝施丁法先生提供模式標本；李英傑先生出借副模式標本得以完成此新種之命名