# Conus (Lilliconus) kuiperi spec. nov. (Gastropoda, Conidae), from the Sultanate of Oman\*

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A new species of the genus *Conus* is described from Masirah island. It is named in honour of Dr Hans Kuiper, a well-known *sphaeriid* specialist, on the occasion of his 90th birthday.

Key words: Gastropoda, Conidae, Conus, Lilliconus, taxonomy, Sultanate of Oman

### INTRODUCTION

Several new species of the (sub)genus *Lilliconus* have been described from the Indian Ocean during the last decade, particularly from the northwestern part (Raybaudi Massilia, 1992, 1993, 1994; Moolenbeek & Coomans, 1993; Korn & Raybaudi Massilia, 1993; Lorenz, 1997). In 1998, the author visited the Sultanate of Oman at the invitation of Dr Donald Bosch for research on the distribution of marine molluscs in the region. Part of this research took place on Masirah Island, known for its endemic molluscan fauna (Bosch et al., 1995). Off the northern part of the island, a peculiar tiny *Conus* species was found in sediment-samples collected by SCUBA diving. It is described here as new to science.

Abbreviation: ZMA, Zoölogisch Museum Amsterdam.

## Conus (Lilliconus) kuiperi spec. nov. (figs 1-5)

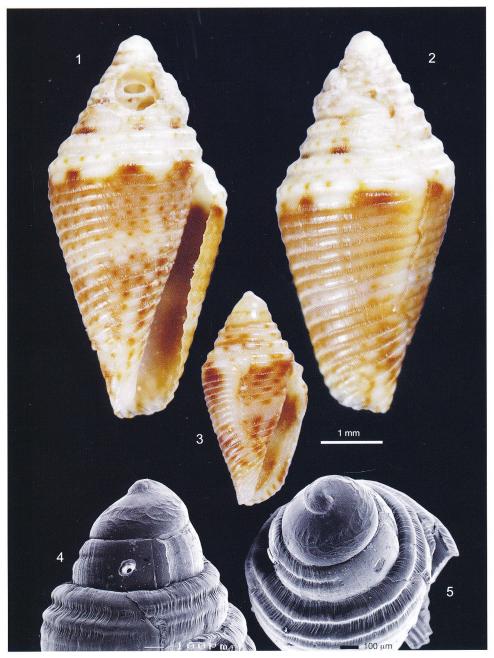
Type material.— Holotype (ZMA Moll. 4.05.017), 18 paratypes (ZMA Moll. 4.05.018, 021-022), 2 paratypes Oman Natural History Museum (ONHM), 1 paratype Nationaal Naturhistorisch Museum, Leiden (NNM), and resp. 1 paratype in the private collections of Piet van Pel, Bill Fenzan and Arnold Zandbergen.

Type locality.— Sultanate of Oman, Masirah Island, Hilf near British Eastern Relay Station (BERS), 20°38'N, 58°52'E, 10-15 m, 14 November 1998, leg. R.G. Moolenbeek.

Etymology.— This tiny cone is named in honour of my colleague and friend Dr Hans Kuiper, who has been fascinated by tiny freshwater bivalves of the family *Sphaeriidae* nearly all his life. During many fine French dinners over the years, I have learned a great deal from Dr Kuiper about the history of the Netherlands Malacological Society (*Nederlandse Malacologische Vereniging*), and malacology in general. Even after his 90th birthday, I can still send Dr Kuiper samples of *Sphaeriidae* for identification knowing that they will be promptly returned with their proper name.

Description. — Shell small (holotype length 5.0 mm, width 2.9 mm), turbinate, nearly

<sup>\*</sup>Studies on the marine molluscan fauna of Oman, n°, 15.



Figs 1-5. *Conus kuiperi* spec. nov., Sultanate of Oman, Masirah Island,  $20^{\circ}38$ 'N  $58^{\circ}52$ 'E. 1-2, holotype (size  $5.9 \times 2.9 \text{ mm}$ , ZMA Moll. 4.05.017). 3. juvenile paratype (size  $3.2 \times 1.7 \text{ mm}$ , ZMA Moll. 4.05.021). 4-5, SEM photographs of protoconch of juvenile paratype (size shell  $2.4 \times 1.2 \text{ mm}$ , ZMA Moll. 4.05.022).

biconic, with 4.75 stepped whorls, and deep sutures. Periostracum thin, very light, with a brown/translucent color. Protoconch consists of two smooth shiny white whorls; its initial part a bit uplifted. Towards the teleoconch, a small brown line appears. First postnuclear whorl has only one deep groove. Gradually, a second groove is formed on following whorls. Fine opisthocline riblets are present in these grooves. Body whorl straight, with about 20 spiral grooves containing fine axial riblets.

Ground colour of the upper whorl is white, with irregular brown spots. Spiral ribs above and below sutures have darker brown spots. On shoulder of body whorl is a spiral cord with about eight larger dark brown spots. Body whorl of a light brown colour with darker brown spots on the spiral cords. In the middle of the body whorl is a white band where these brown dots are more prominant. Ventral side of anterior tip of body whorl white.

Remarks. — Dimensions of the paratypes range from 2.2-4.5 mm (most are juveniles). Colour pattern of these specimens is more or less the same. Some are a bit lighter or more yellowish in colour, while others have more pronounced brown spots on the body whorl.

Conus (Lilliconus) kuiperi spec. nov. looks most similar to C. sagei Korn & Raybaudi Massilia, 1993 and C. biraghii s.l. Raybaudi Massilia, 1992. Conus sagei has more or less the same shape but lacks the strong spiral grooves and has a different colour pattern. C. biraghii s.l. lacks the spiral grooves and shells often have fine granules on the first post-nuclear whorls, a different colour pattern and a more nipple-like protoconch.

### **ACKNOWLEDGEMENTS**

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## REFERENCES

- BOSCH, D.T., S.P. DANCE, R.G. MOOLENBEEK & P.G. OLIVER, 1995. Seashells of Eastern Arabia: 1-296. Dubai.
- KORN, W. & G. RAYBAUDI MASSILIA, 1993. Conus sagei n.sp. & Conus biraghii congruens n.ssp. (Prosobranchia: Conidae). La Conchiglia 25(268): 32-41.
- LORENZ, F., 1997. Notes on the genus *Lilliconus* G. Raybaudi Massilia 1994 (Gastropoda: Conidae).

  Schriften zur Malakazoologie 10: 4-6.
- MOOLENBEEK, R.G. & H.E. COOMANS, 1993. New cones from Oman and the status of *Conus boschi* (Gastropoda; Conidae). Apex 8: 19-26.
- RAYBAUDI MASSILIA, G., 1992. A new conid species from Somalia: *Leptoconus* (*Thoraconus*) *biraghii* n.sp. Acta Conchyliorum 3: 31-33.
- RAYBAUDI MASSILIA, G., 1993. Conus (Leptoconus) korni n.sp. (Prosobranchia: Conidae). La Conchiglia 25(267): 24-28.
- RAYBAUDI MASSILIA, G., 1994. Prosobranchia: Conidae: A new genus. Lilliput, yet fully grown, active predators. La Conchiglia 256(270): 13-22.