Viridotheres marionae, a new genus and species of pinnotherid crab from West Africa (Crustacea: Decapoda: Brachyura)

R.B. Manning

Manning, R.B. *Viridotheres marionae*, a new genus and species of pinnotherid crab from West Africa (Crustacea: Decapoda: Brachyura).
Zool. Med. Leiden 70 (19), 31.xii.1996: 271-273, fig. 1.— ISSN 0024-0672.
Raymond B. Manning, Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560, U.S.A.

Key words: Decapoda; Brachyura; Pinnotheridae; commensal; *Cardium*; *Viridotheres*; Cape Verde Islands.
The new genus *Viridotheres* is recognized for three West African species that share an elongate, spatulate propodus and a short, styliform dactylus inserted near its midlength on the third maxilliped as well as an elongate dactylus on the second walking leg.

Introduction

In 1994 Jay Schneider, Smithsonian Tropical Research Institute, brought me a pinnotherid crab from the Cape Verde Islands that he found in the mantle cavity of a species of *Cardium*. The crab proved to be an undescribed species and it and a second species from the Cape Verde Islands are assigned to a new genus below.

The unique type of the new species is in the collection of the Nationaal Natuurhistorisch Museum, Leiden (RMNH). The third maxilliped is abbreviated to MXP3 and the pereopods are abbreviated to P1-P5 (P1 the cheliped, P2-5 the walking legs). Measurements are in mm. The measurement given after the sex of the specimen is carapace length x carapace width.

Description

Viridotheres gen. nov.

Diagnosis.— Size medium, length and width less than 10 mm. Carapace subcircular, length and width subequal or width greater, regions poorly defined, front not projecting. MXP3 exopod with flagellum; ischium and merus indistinguishably fused, elongate; palp 3-segmented; propodus much longer than carpus, subrectangular; palp styliform, articulated near midlength of ventral margin of propodus, not extending beyond end of propodus. Walking legs subequal right and left; P3 longest of walking legs, dactylus of P3 longest of dactyli of walking legs. Abdomen of 7 free somites in both sexes. Male gonopod simple.

Type species.— *Viridotheres viridis* (Manning, 1993), new combination, by present designation.

Etymology.— Derived from the Latin for green, viridis, and *-theres*, to guard, as used in *Pinnotheres*. Gender masculine.

Included species.— Three: *V. marionae*, named below, and the type species *V. viri-*

dis, both from the Cape Verde Islands; and *V. lillyae* (Manning, 1993), new combination, from the Ivory Coast.

Remarks.— The subrectangular, spatulate propodus on MXP3 with the styliform dactylus inserted near the middle of the ventral margin and the long dactylus on P3 are diagnostic for members of this genus. When I named *V. viridis* as a member of *Nepinnotheres* I was not certain of its placement, but with only one specimen I was reluctant then to establish a new genus for it. The absence of P2 in the type of *V. viridis* contributed to my not recognizing the longer dactylus on P3. That is clearly shown in my original figure of *V. viridis* (1993: fig. 30d) and of *V. lillyae* (fig. 22e) as well as in the species described here (fig. 1e).

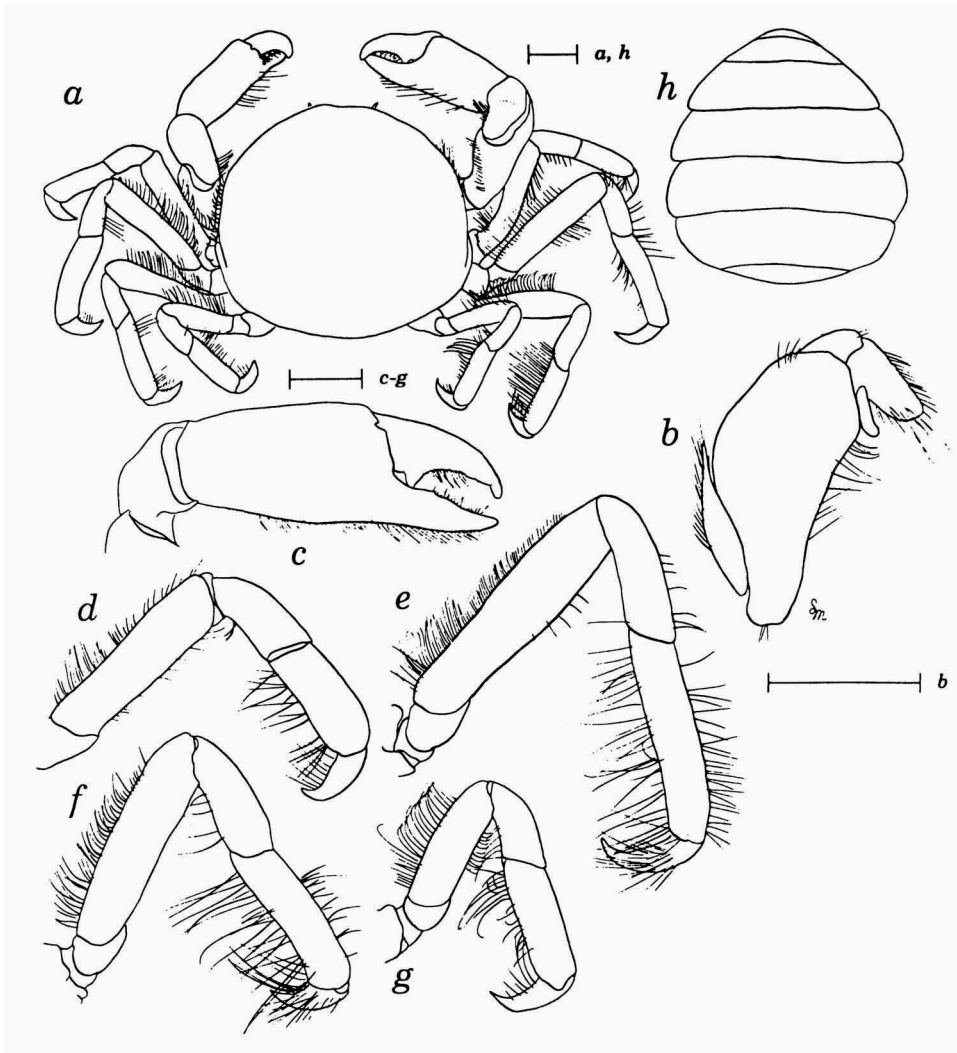

Fig. 1. *Viridotheres marionae* gen. nov. & spec. nov. Female holotype, 6.0 × 6.8 mm: a, dorsal view; b, MXP3; c, P1; d-g, P2-P5.

Viridotheres marionae spec. nov.
(fig. 1)

Material.— Cape Verde Islands, SW of Boa Vista, 15°55'N, 23°04'W, depth 91 m, on sand, rectangular dredge, "Tydeman" Cape Verde Islands Expedition 1982, 13.vi.1982: 1 ♀, 6.0 × 6.8 mm (holotype, RMNH Crust. D 46773).

Description.— Post-hard female: Size medium, cl 6.0 mm. Carapace firm, hard; greatest width posterior to midlength. Front not projecting beyond outline of carapace. MXP3 propodus stout, length about twice height. Chela with movable finger $^4/_5$ length of palm, latter about 1.5 times height; movable finger with large, triangular tooth proximally, fixed finger unarmed; palm with ventral fringe of setae. Walking legs slender, propodi of P3 and P4 more than 3 times longer than high; relative lengths P3>P4>P2>P5; P5 not extending to dactylus of P4; carpus shorter than propodus on P3 and P4, subequal to propodus on other legs; P3 and P4 lacking swimming setae; P2-P5 variably setose, as figured.

Size.— 6.0 × 6.8 mm.

Host.— Bivalve mollusk, family Cardiidae, *Cardium caparti* (Nicklès), in mantle cavity between foot and siphon.

Habitat.— Sublittoral, depth 91 m.

Etymology.— Named for Marion Erwin, in thanks for preparing many of the figures for my review of the West African pinnotherids.

Remarks.— *Viridotheres marionae* and *V. lillyae* both lack a large tooth on the cutting edge of the fixed finger of the chela, and in this feature differ from *V. viridis* which has a distinct tooth there. All three species have a prominent basal tooth on the cutting edge of the movable finger. *Viridotheres marionae* has much longer and slenderer walking legs than *V. lillyae*. These and the longer dactylus of the chela will serve to distinguish the two species.

Distribution.— Known only from the type locality.

Acknowledgments

I thank Jay Schneider for bringing this crab to my attention and C.H.J.M. Fransen for allowing me to work with it. The figure was prepared by my wife Lilly. My studies on the systematics of pinnotherid crabs are supported by the Smithsonian Marine Station at Link Port, Fort Pierce, Florida. This is contribution no. 406 from that station.

Reference

Manning, R.B., 1993. West African pinnotherid crabs, subfamily Pinnotherinae (Crustacea, Decapoda, Brachyura).— Bull. Mus. natn. Hist. nat. Paris, série 4, 15 (sec. A, nos. 1-4): 125-177.

Received: 10.v.1996
Accepted: 10.v.1996
Edited: C.H.J.M. Fransen