



A new species of *Tethycometes* Sarà, 1994 (Porifera: Hadromerida: Tethyidae) from Singapore

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Eight species of stalked tethyids have been described previously from the tropics (Sarà & Burlando, 1994; Van Soest et al., 2005; Sarà, 2002). These stalked species are now placed in three genera, namely, *Halicometes* Topsent, 1898, *Burtonitethya* Sarà, 1994, and *Tethycometes* Sarà, 1994. The three genera are distinguished principally on the relative length of the stalk in relation to the size of the hemispherical body which is attached to one end of the stalk (Sarà, 1994, 2002; Sarà & Burlando, 1994). Members of the genus *Halicometes* have stalks between two and four times the length of the body. Six species have been described from depths of 150–2100 m in the Atlantic and Indo-Pacific regions (Sarà, 2002). In contrast, the monotypic *Burtonitethya* is characterized by a short stalk that is only as long as the subspherical body. The type species *B. gemmiformis* Sarà, 1994 was described from the Andaman Islands from an unknown depth (Sarà, 1994, 2002). More recently, specimens collected off Java in 1900 at a depth of 82 m and possessing a long stalk eight times the length of the ovoid body were designated as type species for *Tethycometes* (see Sarà, 1994, 2002). This paper describes a new species of *Tethycometes* dredged from waters less than 15 m deep off the coast of Singapore Island, Southeast Asia. With a long stalk eight times the length of its ovoid body, it is the second species to be assigned to the recently erected genus *Tethycometes*. It differs from the type species *T. sibogae* Sarà, 1994 in the presence of oxyspherasters which form a thin but distinct cortex. It also differs from all other stalked tethyids in having a partially detached tangential skeleton surrounding the stalk, as well as in possessing rooting processes emanating from the basal half of the stalk.

Order Hadromerida Topsent, 1894

Family Tethyidae Gray, 1867

Genus *Tethycometes* Sarà, 1994

Tethycometes radicata sp. nov.

Holotype, with eight slide preparations. ZRC.POR.1. Singapore, Singapore Strait; sandy and muddy substratum; depth 10 m. Coll. T.M. Sin, M. Lee, S. Ang and L. Lim, 23/iii/2006. Paratypes. ZRC.POR.2. Singapore, Singapore Strait; sandy and muddy substratum, 10 m depth. Coll. T.M. Sin, M. Lee, S. Ang and L. Lim, 23/iii/2006, 1 specimen. ZRC.POR.3. Singapore, Singapore Strait; sandy and muddy substratum, 10 m depth. Coll. T.M. Sin, M. Lee, S. Ang and L. Lim, 08/v/2006, 1 specimen. A total of 12 specimens from the same locality were examined.

Etymology. The species is named for the prominent and numerous rooting processes present on the basal half of the stalk.

Description of Holotype. The specimen has a distinct ovoid body attached to a long, narrow stalk (Fig. 1A). The ovoid body is 5 x 4 mm (length x width) in size, while the stalk is 40 mm in length, with a diameter of between 1 and 2 mm. The ovoid body surface bears spicule brushes on tubercles that are often covered with and obscured by fine silt. The basal end of the stalk bears root-like processes covered with debris such as sand grains and biogenic material. Rooting processes can only be observed after removal of debris (Fig. 1B). These root-like processes, which may serve to keep the sponge anchored to the substratum, cover more than half the length of the stalk. Living specimens obtained in situ from grab samples were in an upright position with the ovoid body and stalk partially exposed above the substratum. The basal half of the stalk bearing rooting processes was completely embedded in the sandy–mud substratum. The ovoid body and stalk were mustard yellow when alive, turning white in ethanol. Oscules were not observed in both preserved and live specimens. While the ovoid body has a firm, slightly compressible consistency, the stalk and rooting processes are frag-