A New Marine Tube-Dwelling Diatom *Parlibellus latirostris* (Bacillariophyceae) from Japan

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A new species of *Parlibellus*, *P. latirostris*, was observed forming a large tubular colony on the sands at a depth of 10 meter on the central Pacific coast of Japan. Its morphology was examined by light and scanning electron microscopy; details are described herein. This new species is morphologically most similar to *P. protracta* and *P. protractoides* in having a lanceolate valve outline, constricted valve apices and a straight raphe, but differs from the latter taxa in its broader rostrate apices, tiny central area, dense striae and parallel and evenly spaced striae arrangement.

**Key words:** Japan, marine diatom, new species, *Parlibellus latirostris*.

The genus *Parlibellus*, established by Cox (1988), includes 30 species, three varieties and two forms (Guiry and Guiry 2015) that previously belonged to the genus *Navicula* Bory sensu lato. *Parlibellus* as a genus has the following characteristics (Cox 1988, Round et al. 1990): 1) cells naviculoid, often encased in mucilage tubes; 2) two butterfly-shaped plastids; 3) valves lanceolate or linear, with broadly rostrate apices; 4) valve face convex; 5) striae uniseriate, containing small linear or irregular areolae occluded by hymens; 6) external central raphe endings simple or slightly expanded; 7) short terminal fissures turned towards the same side of the valve; 8) internal central endings simple, or raphe fissure continuing into a narrow rib-like or helictoglossa-like structure; and 9) cingulum composed of many open bands, each bearing one or two transverse rows of areolae. In this study, an unidentified species of *Parlibellus* has been observed forming a large tubular colony on the sands at the depth of 10 meters in Uchiura-bay, Nishiurahirasawa, Numazu-shi, Shizuoka Pref., on the central Pacific coast of Japan. Critical examination by light microscopy (LM) and scanning electron microscopy (SEM) and perusal of the literature revealed that this diatom represents a new taxon; we propose the name *P. latirostris* Hidek. Suzuki & M. Miyauchi. Details of the morphological features are described below.

The material was treated using the bleaching method (Nagumo and Kobayasi 1990, Nagumo 1995, Osada and Nagumo 2001). The LM and SEM techniques were essentially the same as those used in Kishi et al. (2015). Prepared

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鈴木秀和 a, 宮内由美 a, 秋田晋吾 a, 南雲保 b, 田中次郎 a: 本邦沿岸からの海産管棲珪藻の 1 新種, Parlibellus latirostris (珪藻綱)

静岡県沼津市西浦平沢沖（内浦湾）水深 10 m の砂地から管棲珪藻の 1 新種, Parlibellus latirostris Hidek. Suzuki & M. Miyauchi を記載した。この新種は、殻の大きさや殻の外形が披針形、殻端がくびれる、縦溝が直線状であることから P. protracta (Grunow) Witkowski, Lange-Bertalot & Metzeltin と P. protractoides (Hustedt) Witkowski & Lange-Bertalot に似る。しかし、これら 2 種の 1) 殻端が円形、2) 中心域が円形、3) 条線の密度がそれぞれ 14–21 本 /10 μm および 20 本 /10 μm、4) 条線の配列が殻全面で放射状、5) 生育場所が汽水域であることがに対し、新種が 1) 殻端が広嘴形、2) 中心域が極めて小さい、3) 条線の密度が 25–26 本 /10 μm で密、4) 条線の配列が殻全面で平行、中央部でわずかに放射状、5) 生育場所が海底の砂地であることで区別される。

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