

## ***Frontonia lynni* n. sp., a new marine ciliate (Protozoa, Ciliophora, Hymenostomatida) from Qingdao, China**

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### **Abstract**

The morphology, infraciliature and silverline system of a new marine ciliate, *Frontonia lynni* n. sp., isolated from a sandy beach at Qingdao, China, was investigated using live observation and silver staining methods. The new species is recognized by the combination of the following characters: body about 100–210 x 70–150  $\mu\text{m}$  *in vivo*, elliptical in outline; dorsoventrally flattened (3:1); one large contractile vacuole equatorially located, right of median; 71–83 somatic kineties and three vestibular kineties; small oral cavity with peniculi 1 and 2 each having four ciliary rows and peniculus 3 possesses five gradually shortened rows.

**Key words:** Marine ciliate; *Frontonia lynni*; morphology; new species

### **Introduction**

The peniculine ciliates *Frontonia* are commonly found as members of the pelagic and benthic fauna in both fresh and marine biotopes and most species have been well described using silver impregnation methods (Borror 1963; Burkovsky 1970; Dragesco 1972; Foissner 1987; Foissner *et al.* 1994; Gil & Perez-Silva 1964a, b, c; Kahl 1931; Petz *et al.* 1995; Roque 1961a, b, c; Roque & de Puytorac 1972; Song & Wilbert 1989). Taxa belonging to this genus are separated from each other by the combination of the following characters: the body shape and size, number of somatic kineties, morphology of the oral apparatus, the position of the contractile vacuole, and their habitats (Corliss 1979; Dragesco & Dragesco-Kernéis 1986; Foissner *et al.* 1994; Roque & de Puytorac 1972).

Recently, the authors isolated an unknown *Frontonia* from a sandy beach at Qingdao. After detailed investigation, it is believed to be a previously unknown member of this genus. The results are documented here.