The Phillipsastraeacea, characterized by a tendency to a vertical growth of septa and dissepimentarium, fan-like disposition of trabeculae and presence or absence of horse-shoes, comprise the following families: 1) The Macgeeidae (Różkowska, 1951, subfam.) Schouppe, 1958, with a type genus *Macgeea* Webster, 1889, mostly singular, very seldom as massive colonies, similarly as in Marisastridae, have the epitheca and horse-shoes which are lacking in the new family; 2) The Phillipsastraeidae (Roemer, 1883) sensu Schouppe, 1958, includes forms with massive colonies and have the pseudotheca, which disappears in some places and, therefore, a tendency is here shown to integration of the colony. Two groups of species have been distinguished among them: a) genus *Phillipsastraea* d’Orbigny, 1849 with its type species *Astraea hennahi* Lonsdale, 1840, having the pseudotheca and horse-shoes, which are situated on the boundary between the tabularium and dissepimentarium, b) genus ”Phillipsastraea” of most authors, including such species as *P. pentagona* (Goldfuss) and *P. goldfussi* (de Verneuil & Haime). This group has the pseudotheca, but has not the horse-shoes. Accordingly, there is no family among the Phillipsastraeacea in which the new genus - *Marisastrum* - with massive colonies, as well as singular forms, assigned to *Ceratophyllum* Gürich, 1896, might be included.

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