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# Order Halisarcida Bergquist, 1996

**Patricia R. Bergquist & Steve de C. Cook**

Department of Anatomy, School of Medicine, University of Auckland, Private Bag 92019, Auckland, New Zealand.
(pr.bergquist@auckland.ac.nz; cooknz@bigfoot.com)

Halisarcida Bergquist (Demospongiae) contains a single family and genus, characterised by the possession of a skeleton composed only of fibrillar collagen, lacking any fibrous or mineral elements, and with choanocyte chambers that are tubular, branched and wide-mouthed.
**Keywords:** Porifera; Demospongiae; Halisarcida.

## DEFINITION, DIAGNOSIS, SCOPE

### Synonymy

Halisarcida Bergquist, 1996: 24.

### Definition

Demospongiae in which the choanocyte chambers are tubular, branched and wide-mouthed. Larvae are incubated parenchymellae (dispherulae) with simple undifferentiated histology and cilia of uniform length. Skeleton is fibrillar collagen only, there are no fibrous or mineral elements present; ectosomal and subectosomal collagen is highly organised (Bergquist, 1996).

### Remarks

Halisarcida contains a single family and genus. The placement of this family in Dendroceratida by de Laubenfels was equivocal (Bergquist *et al*., 1990b), and subsequently a new order Halisarcida Bergquist was proposed based on more recent data and re-evaluation of older evidence (Bergquist, 1996), including ultrastructural studies of Boury-Esnault *et al*. (1990). Together these studies found *Halisarca* to be atypical of both Dendroceratida and Dictyoceratida – indeed unrelated to any other group of Porifera – having a unique larval type, and chamber organisation with cylindrical tubular, branched construction, choanocytes had a smooth flagellum, and unflagellated apopinacocytes were present. By comparison, other Demospongiae have sac-like/spherical choanocyte chambers, leuconoid-type organisation, and flagellated apopinacocytes.