

AKADEMIE DER WISSENSCHAFTEN UND DER LITERATUR

MATHEMATISCH-NATURWISSENSCHAFTLICHE KLASSE

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Morphology and Systematics  
of the Xenotrichulidae  
(Gastrotricha, Chaetonotida)

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With 28 Figures



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FRANZ STEINER VERLAG GMBH · WIESBADEN

### Xenotrichulidae Remane, 1936

Paucitubulatina, semicircular in cross section with a ventral anus. Long caudal furca, greater than 1/2 of its length covered with a constant number of longitudinal rows of overlapping scales. Longitudinal body muscles extend nearly to the adhesive tube. Ventral cilia and head sensoria modified as cirri (bundles of cilia); 3 pairs of head sensoria present; at least 5 pairs of elongated sensory cilia along the length of the body. Inner fibrous mass of the brain in anterior third of the pharynx. Hydrofoil scales present ventrolaterally (Figs. 12, 17). Marine, brackish, subtidal and intertidal in distribution.

#### Draculiciterinae n. subfam.

Xenotrichulidae with elongated body form; weakly delimited furca with a regular pattern of scales. Ventral cirri in two, uninterrupted, longitudinal rows to the midbody region; caudal pairs of head cilia form a single pair of tufts. Pharynx long. Dorsoventral muscles present; longitudinal muscles with little regional specialization. "Cerebral eyes" absent.

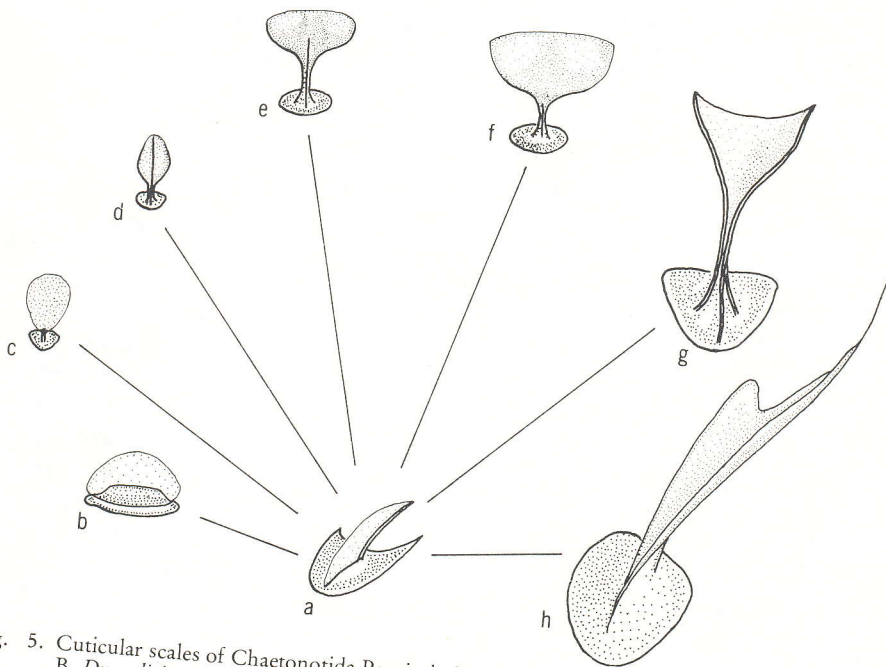


Fig. 5. Cuticular scales of Chaetonotida Paucitubulatina. A, keel scale, e.g. *Heterolepidoderma*; B, *Draculiciteria*-type compound scale; C, *Polymerurus*-type scale ("Blattschuppe"); D, *Aspidiophorus*-type ("lancetform"); E, intermedia-type; F, *subterranea*-type; G, H, forms occurring in *Chaetonotus* spp.