

**A REVISION OF THE MICROLAIMIDAE,
DESCRIPTION OF THE MOLGOLAIMIDAE N. FAM.
AND REMARKS ON THE SYSTEMATIC POSITION
OF *PARAMICROLAIMUS* (FREE-LIVING NEMATODES)**

by

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SUMMARY

The up to now classified species of Microlaimidae (Nematoda, Desmodorida) are herein revised and a diagnosis, discussion and keys to each of the groups treated are given with the exception of keys to the species of *Microlaimus* and *Prodesmodora*.

The main differentiating characters applied are : the structure of the head region (cephalic sense organs, amphids and buccal cavity), shape of the oesophagus, position of the excretory pore, shape of the tail, the gonads and the cuticle. The presence of porids and preanal supplements is stressed and their significance as distinguishing characters is discussed.

The family Microlaimidae contains Bolbolaiminae n. subfam. (*Bolbolaimus* syn. *Pseudomicrolaimus*) and Microlaiminae (*Calomicrolaimus*, *Ixonema* and *Microlaimus*), distinguished by the situation of the cephalic sense organs, sclerotization of the buccal cavity, shape of the oesophagus and structure of the copulatory apparatus. Microlaimidae is closely related to Desmodoridae.

Molgolaimidae n. fam. is established in order to accomodate species with a weakly developed head region, oval to spherical bulb of oesophagus, excretory pore anterior to nerve ring, posterior portion of tail cylindrical, ovaries usually reflexed and smooth or striate cuticle, i.e., Aponematinae n. subfam. (*Aponema* n. gen.) and Molgolaiminae n. subfam. (*Molgolaimus* and *Prodesmodora*), distinguished by the sclerotization of the amphids and structure of the copulatory apparatus. Molgolaimidae n. fam. is closely related to Spiriniidae.

Paramicrolaimus is removed from the Microlaimidae and transferred to the Spiriniidae ; it is closely related to the genera of Stilbonematinae.