

Subfamily MOLGOLAIMINAE subfam.n.

Diagnosis. Molgolaimidae. Head small, but distinct. Cuticle finely striate to apparently smooth. Amphids weakly sclerotized. Excretory pore anterior to nerve ring. Terminal bulb of oesophagus spherical or oval. Female reproductive system with reflexed ovaries. Spicules of varying shape, short and bent to long and elongate. Gubernaculum rather weakly sclerotized, apophyses mostly absent.

Type genus: *Molgolaimus* Ditlevsen, 1921

Remarks. The new subfamily Molgolaiminae contains molgolaimids with weakly sclerotized amphids and copulatory apparatus, i.e., *Molgolaimus* and *Prodesmodora*; species of these two genera are distinguished by the shape of the terminal bulb of the oesophagus, situation of the excretory pore and their habitat.

Key to the genera of Molgolaiminae subfam.n.

1. Terminal bulb of oesophagus spherical; excretory pore anterior to nerve ring; marine *Molgolaimus* Ditlevsen, 1921
- Terminal bulb of oesophagus large and oval; excretory pore close to nerve ring; limnic (only females known)
Prodesmodora Micoletzky, 1923

Molgolaimus Ditlevsen, 1921

Diagnosis. Molgolaiminae. Terminal bulb of oesophagus spherical. Excretory pore anterior to nerve ring. Marine.

Type species: *Molgolaimus tenuispiculum* Ditlevsen, 1921

Remarks. The above diagnosis of the *Molgolaimus* and the Molgolaiminae subfam.n. is mainly based on the new information given by Lorenzen (1976) in his redescription of the type species. The excretory pore penetrates the cuticle at one third of the oesophageal length from the front end; I presume that this position is anterior to the nerve ring, even though the latter has not been found. Those species of *Microlaimus* which in the present revision are transferred to *Molgolaimus*, have, however, been described with the excretory pore anterior to the nerve ring. The male gonads are not described in the type species, but Lorenzen (1976, p. 69, fig. 2C) shows a total view of a male in which the anterior branch is fully developed and contains triangular to rectangular clusters, each containing numerous granules. These granules are slender sperm coiled as in *Molgolaimus allgeni* (present study, pp. 170–1, fig. 6H).

The following species of *Microlaimus* fulfill the diagnostic characters of *Molgolaimus* and are therefore transferred to it; *Microlaimus allgeni* Gerlach, 1950; *M. citrus* Gerlach, 1959; *M. cuanensis* Platt, 1973; *M. demani*¹ nom.nov.; *M. labradorensis* Allgén, 1957; *M. lazonus* Vitiello, 1971; *M. longispiculum* Timm, 1961; *M. parallgeni* Vitiello, 1973; *M. tenuicaudatus* Allgén, 1959; *M. tenuilaimus* Allgén, 1932; *M. turgofrons* Lorenzen, 1972.

Even though *M. demani* is described as having “ovaries not reflexed”, it has all other characters in common with *Molgolaimus*, which justify its transference; the shape of the spicules is very similar to that found in *M. allgeni*.

M. citrus, *M. cuanensis*, *M. lazonus* and *M. parallgeni* are very closely related; material of these species has not been examined and it is possible that a reexamination may reveal that *M. citrus* and *M. lazonus* represent one species.

Descriptions of *M. labradorensis*, *M. tenuilaimus* and *M. tenuicaudatus* are so poor that these species are regarded as species inquirendae.

Key to the species of Molgolaimus

1. Spicules elongate, 2 or more×anal diameter long 2
- Spicules not elongate, about 1×anal diameter or less 4
2. Spicules straight, about 9×anal diameter
M. longispiculum (Timm, 1961) **comb.n.**, syn. *Microlaimus longispiculum* Timm, 1961
- Spicules sinusoid in several curves, about 5×anal diameter
M. tenuispiculum Ditlevsen, 1921
- Spicules sinusoid in one curve, about 2×anal diameter 3
3. Amphids close to cephalic setae; gubernaculum small, with apophyses directed dorsoanteriorly
M. allgeni (Gerlach, 1950) **comb.n.**, syn. *Microlaimus allgeni* Gerlach, 1950
- Amphids 1.5×head diameter behind cephalic setae; gubernaculum slender, without differentiations
M. demani **nom.nov.**, syn. *Microlaimus tenuispiculum* De Man, 1922
4. Spicules strongly bent; gubernacular apophyses sickle-shaped
M. turgofrons (Lorenzen, 1972) **comb.n.**, syn. *Microlaimus turgofrons* Lorenzen, 1972
- Spicules curved; gubernacular apophyses not sickle-shaped 5
5. Third crown of cephalic sense organs papilloid
M. citrus (Gerlach, 1959) **comb.n.**, syn. *Microlaimus citrus* Gerlach, 1959
- Third crown of cephalic sense organs setose, cephalic setae 2 µm long (30% of head diameter)
M. lazonus (Vitiello, 1971) **comb.n.**, syn. *Microlaimus lazonus* Vitiello, 1971
- Setae of third crown 4.5–5 µm long (50% of head diameter); gubernaculum slender and proximally weakly sclerotized
M. cuanensis (Platt, 1973) **comb.n.**, syn. *Microlaimus cuanensis* Platt, 1973
- Setae of third crown 6 µm long (60% of head diameter); gubernaculum gradually tapering and distinctly sclerotized proximally
M. parallgeni (Vitiello, 1973) **comb.n.**, syn. *Microlaimus parallgeni* Vitiello, 1973

¹ *Molgolaimus demani* nom.nov., pro *Molgolaimus tenuispiculum* (De Man, 1922), syn. *Microlaimus tenuispiculum* De Man, 1922 subjective homonym to *Molgolaimus tenuispiculum* Ditlevsen, 1921.