

364 A new nematode genus (Rhabditida: Panagrolaimidae) from pitcher plants

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Measurements, line drawings and scanning electromicrographs are provided of a new nematode species and genus, isolated from pitcher fluid of *Nepenthes* sp. from Thailand. The new genus differs from all known nematodes in having two opposing and offset spermathecal pouches at the junction of oviduct and uterus. It also differs from all known Rhabditida in having four cephalic setae instead of papillae. Phylogenetic analysis of small subunit rDNA sequence data robustly places the new genus within Panagrolaimidae, as sister taxon to *Panagrellus*.

These unusual nematodes resemble *Panagrellus* in e.g., body size (1.8-2.5 mm in females, 1.3-1.8 in males) and in the monodelphic, prodelpic female reproductive system with thickened vaginal walls and prominent postvulval sac. However, they differ from *Panagrellus* in the characters mentioned above, in the presence of liplets around the mouth opening, in their comparatively longer stegostom, and in the shape of the male spicules. Because of its aberrant characters, inclusion of this new genus in Panagrolaimidae will entail changes to the family diagnosis.