

## The Namanereidinae (Polychaeta: Nereididae). Part 1, Taxonomy and Phylogeny

CHRISTOPHER J. GLASBY

National Institute for Water & Atmospheric Research, PO Box 14-901, Kilbirnie, Wellington, New Zealand  
c.glasby@niwa.cri.nz

**ABSTRACT.** A cladistic analysis and taxonomic revision of the Namanereidinae (Nereididae: Polychaeta) is presented. The cladistic analysis utilising 39 morphological characters (76 apomorphic states) yielded 10,000 minimal-length trees and a highly unresolved Strict Consensus tree. However, monophyly of the Namanereidinae is supported and two clades are identified: *Namalycastis* containing 18 species and *Namanereis* containing 15 species. The monospecific genus *Lycastoides*, represented by *L. alticola* Johnson, is too poorly known to be included in the analysis. Classification of the subfamily is modified to reflect the phylogeny. Thus, *Namalycastis* includes large-bodied species having four pairs of tentacular cirri; autapomorphies include the presence of short, subconical antennae and enlarged, flattened and leaf-like posterior cirrophores. *Namanereis* includes smaller-bodied species having three or four pairs of tentacular cirri; autapomorphies include the absence of dorsal cirrophores, absence of notosetae and a tripartite pygidium. *Cryptonereis* Gibbs, *Lycastella* Feuerborn, *Lycastilla* Solís-Weiss & Espinasa and *Lycastopsis* Augener become junior synonyms of *Namanereis*.

Thirty-six species are described, including seven new species of *Namalycastis* (*N. arista* n.sp., *N. borealis* n.sp., *N. elobeyensis* n.sp., *N. intermedia* n.sp., *N. macroplatis* n.sp., *N. multisetata* n.sp., *N. nicoleae* n.sp.), four new species of *Namanereis* (*N. minuta* n.sp., *N. serratis* n.sp., *N. stocki* n.sp., *N. sublittoralis* n.sp.), and three widespread species groups (*Namalycastis abiuma*, *Namanereis littoralis*, *N. quadraticeps*). Fourteen species are newly placed into synonymy, *Lycastis maxillo-falciformis* Harms, *L. maxillo-ovata* Harms, *L. maxillo-robusta* Harms, *Lycastis meraukensis* Horst, *L. nipae* Pflugfelder, *L. ouanaryensis* Gravier, *L. ranauensis* Feuerborn, *L. vivax* Pflugfelder, *Lycastopsis augeneri* Okuda, *L. tecolutlensis* Rioja, *Namalycastis rigida* Pillai, *N. tachinensis* Rosenfeldt, *N. vuwaensis* Ryan, and *Namanereis littoralis* Hutchings & Turvey. A neotype is designated for *Namalycastis hawaiiensis* (Johnson), and lectotypes are designated for *Namalycastis geayi* (Gravier), *N. senegalensis* (Saint-Joseph), *N. terrestris* (Pflugfelder), *Namanereis amboinensis* (Pflugfelder) and *N. littoralis* (Grube). Keys to genera and species are given.

Namanereidinae are generally confined to the tropics and subtropics. Maximum species-diversity occurs in the Caribbean and Indo-Pacific, in particular in coastal areas subjected to recent uplifting, where both littoral-zone and freshwater (riparian and subterranean) forms occur. Phylogenetic results indicate that in both *Namalycastis* and *Namanereis* there is a preference for freshwater habitats among species with apomorphic traits (corollary being that marine habitats are favoured by the plesiomorphic members). This suggests that the ancestor of the Namanereidinae was a euryhaline coastal species.