



# Taxonomy of extant Diplopoda (Millipeds) in the modern era: Perspectives for future advancements and observations on the global diplopod community (Arthropoda: Diplopoda)\*

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## Abstract

The modern era in diplopod taxonomy began in 1971 with publication of the *Nomenclator Generum et Familiarum Diplopodorum*. Along with the internet and electronic communications, this pioneering work catalyzed an increased output of synthetic publications beyond mere species descriptions, thereby leading to accelerating advancements. Significant taxonomic and/or cataloging studies have since occurred in 14 of the 16 established orders, all except Stemmiulida and Siphoniulida. Important faunistic works have appeared on Canada, Mexico, Asian Russia, China, Taiwan, Vietnam, Thailand, Iran, Turkey, central Asia in general, Belgium, Scandinavia, Great Britain & Ireland, Madagascar, and the Comoros, Canary, Cape Verde, and Galapagos Islands. The complete known ranges of four orders, four superfamilies, and 47 families have been mapped along with partial, regional mappings for seven other orders and seven families. With only one resident taxonomist, continental regions of the Neotropics warrant concentrated attention in future years, and emphasis on Chinese millipeds will surely continue because of the discovery of a substantial southeast Asian callipodidan fauna. Taxonomic emphases are needed in the Spirobolidea (Spirobolida), to assess affinities between the 10 component families, and Spirostreptida, to determine taxonomic positions of the suborders Cambalidea & Epinannolenidea. Resolution of the latter may derive from development of the "8<sup>th</sup> gonopod clade" concept, involving the orders Chordeumatida, Callipodida, Stemmiulida, Polydesmida, & Siphoniulida, and the suborder Spirostreptidea (Spirostreptida). Attributes of the global diplopod community are discussed.

**Key words:** Diplopoda, taxonomy, faunistics, mappings, catalogues, diplopod community