

Records of Centipede Fauna In Sri Lanka

Duminda S. B. Dissanayake and Sriyani Wickramasinghe
Department of Biological Science, Faculty of Applied Sciences,
Rajarata University of Sri Lanka

Introduction

Sri Lanka even though a small island is listed as one of the biodiversity hotspots of the world (Bossuyt et al. 2004; Myers et al. 2000). Most invertebrate fauna of Sri Lanka have been inadequately studied both in terms of their diversity and conservation priorities (Attems 1930; Balan et al 2012; IUCN Sri Lanka and MoENR 2007; Sureshan et al. 2006). Sri Lanka consisting of miscellaneous geographic and climatic zones joined with vast environment diversity and maintained rich of species in the whole island, this has been comprehensive for flora and fauna especially in vertebrates' fauna and several invertebrate fauna also (Bambaradeniya 2006). Although Centipedes are not as popular animal as, Butterflies, Dragonflies and Fresh water crabs. The last comprehensive study was conducted more than a century ago by several foreign researchers such as Newport (1845), A. Humbert (1865), Haase (1887), R.I Pocock (1892), Verhoeff (1905), F. Silvestri (1903). In 1973 E.H Eason was described a new centipedes fauna from the collection by R.I Pocock from 1890 to 1901 in British Natural History Museum. There is no involvement of local researchers in centipedes' taxonomy in Sri Lanka.

Literature review in progress by me contributing to a significant revision of our understanding of the actual diversity of Centipedes in the Sri Lanka. Aims of this paper are to provide a check list of Centipedes fauna of Sri Lanka and to highlight research gaps and priorities for further investigation.

Materials And Methods

All scientific names of Centipedes cited by Pocock in Vol. 7 (1892) of the journal of the Bombay Natural History Society are recorded below in checklist format. The checklist was completed with author and year of each name, current order and family in which the species is placed and the current valid name. The information incorporated in this checklist includes the synonyms of each species. For the delegation of the current valid names for each species, the latest taxonomic scrutiny reference was reviewed. I follow the works of Newport G. (1844), Templeton R. (1846), Haase E. (1887), Silvestri F. (1919), Verhoeff K.W. (1925), Attems C. (1930, 1947), Dowdy W.W. (1951), Koch L.E. (1983, 1985) Eason E.H. (1990), Shelley R.M. (2000), Edgecombe G.D & Giribet G. (2004, 2009), Lewis J, Edgecombe G, Shelley R (2005), Edgecombe G.D (2011), Edgecombe and Bonato (2011) and Schileyko A.A & Stagl V. (2004). Also, all current valid names were checked with the use of the online database Chilobase (Minelli et al. 2006).

Results And Discussion

According to the literature the centipedes of Sri Lanka belong to the four orders, representing six families. The total centipedes species in Sri Lanka described to date includes 19 species; classified under; Order Scolopendromorpha (Family Scolopendridae – 12 species), Order Geophilomorpha (Family Mecistocephalidae – 2 species, Oryidae – 1 species), Order

List of the Species

Order - Scolopendromorpha Pocock, 1895

Family - Scolopendridae Newport, 1844

- 1). *Scolopendra hardwickei* Newport, 1844 Synonym(s): *Scolopendra bicolor* Humbert, 1865, *Scolopendra histrionica* C.L. Koch, 1847
- 2). *Scolopendra crassa* Templeton, 1846
- 3). *Scolopendra subspinipes* Leach, 1815. Synonym(s): *Otostigmus politoides* Attems, 1953, *Otostigmus politoides* Attems, 1953, *Otostigmus puncticeps* Attems, 1953, *Rhomboccephalus gambiae* Newport, 1845, *Rhomboccephalus smaragdinus* Butler, 1876, *Scolopendra aringensis* Sinclair, 1901, *Scolopendra atra* Wood, 1861, *Scolopendra audax* Gervais, 1837, *Scolopendra aurantipes* Tömösváry, 1885, *Scolopendra bispinipes* Wood, 1862, *Scolopendra borbonica* Blanchard, 1844, *Scolopendra byssina* Wood, 1861, *Scolopendra cephalica* Wood, 1861, *Scolopendra ceylonensis* Newport, 1845, *Scolopendra damnosa* L. Koch, 1878, *Scolopendra dinodon* Wood, 1861, *Scolopendra elongata* Porat, 1871, *Scolopendra flava* Newport, 1845, *Scolopendra flavicornis* Tömösváry, 1885, *Scolopendra gervaisii* Newport, 1845, *Scolopendra gracilipes* Wood, 1861, *Scolopendra lutea* Newport, 1845, *Scolopendra machaeropus* Attems, 1900, *Scolopendra macracanthus* Bollman, 1889, *Scolopendra mactans* C.L. Koch, 1847, *Scolopendra meyeri* Haase, 1887, *Scolopendra nesuphila* Wood, 1862, *Scolopendra newporti* Lucas, 1849, *Scolopendra ornata* Newport, 1845, *Scolopendra parvidens* Wood, 1861, *Scolopendra placeae* Newport, 1845, *Scolopendra planiceps* Newport, 1845, *Scolopendra plumbeolata* Wood, 1861, *Scolopendra polyodonta* Daday, 1893, *Scolopendra rarispina* Gervais, 1847, *Scolopendra repens* Wood, 1862, *Scolopendra rugosa* Meinert, 1886, *Scolopendra sandwichiana* Gervais, 1847, *Scolopendra septemspinosa* Brandt, 1840, *Scolopendra sexspinosa* Newport, 1844, *Scolopendra sulphurea* C.L. Koch, 1847, *Scolopendra variispinosa* Tömösváry, 1885, *Scolopendra cephalica gracilis* Wood, 1861, *Scolopendra subspinipes gracilipes* Daday, 1891, *Scolopendra subspinipes molleri* Verhoeff, 1892
- 4). *Cormocephalus sarasinorum* Haase, 1887
- 5). *Cormocephalus inermipes* Pocock, 1891
- 6). *Rhysida ceylonica* Gravely, 1912
- 7). *Rhysida longipes* Newport, 1845. Synonym(s): *Branchiostoma affine* Kohlrausch, 1878, *Branchiostoma gracile* Kohlrausch, 1878, *Branchiostoma longipes rotundatum* Haase, 1887, *Otostigmus simplex* Chamberlin, 1913, *Rhysida yanagiharai* Takakuwa, 1935
- 8). *Rhysida immarginata* Porat, 1876. Synonym(s): *Branchiostoma gymnopus* Kohlrausch, 1878, *Branchiostoma indicum* Kohlrausch, 1878, *Branchiostoma subspinusum* Tömösváry, 1885, *Branchiostoma immarginata celebense* Haase, 1887, *Rhysida nuda brevicornis* Wang, 1951, *Rhysida nuda brevicornuta* Wang, 1951.

- 9). *Scolopendra morsitans* Linnaeus, 1758. Synonym(s): *Eurylithobius slateri* Butler, 1876, *Scolopendra afzelii* Porat, 1871, *Sv*, *Scolopendra angulipes* Newport, 1844, *Scolopendra attenuata* Porat, 1871, *Scolopendra bilineata* Brandt, 1840, *Scolopendra brachypoda* Peters, 1862, *Scolopendra brandtiana* Gervais, 1837, *Scolopendra carinipes* Humbert & Saussure, 1870, *Scolopendra chlorocephala* Porat, 1871, *Scolopendra cognata* Porat, 1871, , *Scolopendra crassipes* Brandt, 1840, *Scolopendra elegans* Brandt, 1841, *Scolopendra erythrocephala* Brandt, 1840, *Scolopendra fabricii* Newport, 1845, *Scolopendra formosa* Newport, 1845, *Scolopendra fulvipes* Brandt, 1841, *Scolopendra grandidieri* Saussure & Zehntner, 1902, *Scolopendra impressa* Porat, 1876, *Scolopendra infesta* C.L. Koch, 1847, *Scolopendra intermedia* Porat, 1871, *Scolopendra leachii* Newport, 1844, *Scolopendra limbata* Brandt, 1840, *Scolopendra lineata* Saussure & Zehntner, 1902, *Scolopendra longicornis* Newport, 1844, *Scolopendra modesta* Wood, 1862, *Scolopendra mossambica* Peters, 1862, *Scolopendra pella* Wood, 1861, *Scolopendra picturata* Porat, 1871, *Scolopendra pilosella* Porat, 1871, *Scolopendra planipes* C.L. Koch, 1847, *Scolopendra platypoides* Newport, 1844, *Scolopendra platypus* Brandt, 1840, *Scolopendra porphyra* Wood, 1861, *Scolopendra richardsoni* Newport, 1845, *Scolopendra saltatoria* Porat, 1871, *Scolopendra spinosella* Saussure & Zehntner, 1902, *Scolopendra tigrina* Newport, 1845, *Scolopendra tongana* Gervais, 1847, *Scolopendra tuberculidens* Newport, 1844, *Scolopendra vaga* Porat, 1871, *Scolopendra varia* Newport, 1845, *Scolopendra wahlbergi* Porat, 1871, *Scolopendra morsitans amazonica* Bücherl, 1946, *Scolopendra morsitans calcarata* Daday, 1891, *Scolopendra morsitans fasciata* Attems, 1930, *Scolopendra morsitans procera* Haase, 1887, *Scolopendra morsitans scopoliana* C.L. Koch, 1841, *Scolopendra morsitans sulcipes* Haase, 1887, *Trachycormocephalus jodhpurensis* Khanna, 1977.
- 10). *Ethmostigmus rubripes* Brandt, 1840. Synonym(s): *Ethmostigmus australianus* Chamberlin, 1920, *Heterostoma bisulcatum* Tömösváry, 1885, *Heterostoma crassipes* Silvestri, 1894, *Heterostoma fasciata* Newport, 1845, *Heterostoma flava* Newport, G, 1845, *Heterostoma rubripes grossipes* Pocock, 1891, *Scolopendra megacephala* Newport, 1844, *Scolopendra rapax* Gervais, 1847, *Scolopendra scabriventris* Newport, 1844, *Scolopendra spinulosa* Brandt, 1840, *Scolopendra squalidens* Newport, 1844, *Scolopendra sulcicornis* Newport, 1844, *Scolopendra sulcidens* Newport, 1844.
- 11). *Otostigmus (Otostigmus) ceylonicus* Haase, 1887.
- 12). *Otostigmus (Otostigmus) scaber* Porat, 1876. Synonym(s): *Branchiotrema multicarinatum* Kohlrausch, 1878, *Otostigmus carinatus* Porat, 1876, *Otostigmus malayanus* Chamberlin, 1914, *Otostigmus (Otostigmus) striatus* Takakuwa, 1940, *Otostigmus carinatus insulare* Haase, 1887, *Otostigmus (Otostigmus) striatus porteri* Dobroruka, 1960, *Otostigmus (Otostigmus) striatus striatus* Takakuwa, 1940.

Order- Geophilomorpha Pocock, 1895

Family- Mecistocephalidae

- 13). *Mecistocephalus heteropus* Humbert, 1865,
- 14). *Mecistocephalus subinsularis* Silvestri, 1919,

Family- Oryidae Cook, 1896

- 15). *Orphnaeus brevilabiatu*s Newport, 1845. Synonym(s) *Orphnaeus bilineatus* Peters, 1855, *Orphnaeus lividus* Meinert, 1870, *Orphnaeus phosphoreus* Linnaeus, 1758, *Orphnaeus xanti* Tömösváry, 1885,
Order - Lithobiomorpha Pocock, 1895
Family- Lithobiidae Newport, 1844
- 16). *Australobius sculpturatus* Pocock, 1901. Synonym(s): *Australobius ceylanicus* Attems, 1909.
- 17). *Australobius palnis* Eason, 1973
Order - Scutigermorpha
Family - Scutigerinidae
- 18). *Scutigerina weberi* Silvestri, 1903. Synonym(s): *Scutigerina transvaalicus* Silvestri, 1903.
Order- Scutigeridae Gervais, 1837
- 19). *Thereuopodina tenuicornis* Verhoeff, 1905.

According to the present knowledge altogether 19 described centipedes' species from five families occur in Sri Lanka. It is evident that at present we know very little about Centipedes of Sri Lanka. According to published information on the ecology, biology and endemic representatives is virtually non-existent, while our knowledge on the taxonomy and distribution is very poor. And also not a single Centipedes species from Sri Lanka is included in the global 2007 IUCN Red List.

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