

REVIEW OF *SIBAMBEA* AND *DISCOSOMATICUS* (LANIATORES, COSMETIDAE, DISCOSOMATICINAE)

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Cosmetidae is a large New World family of Laniatores with ca. 700 species. Most species descriptions are summary and poorly illustrated. Systematics of genera is based on the combination of a small number of characters, such as tarsal formula, spination of mesotergum and tergites. Tarsal formula is known to vary intra species and the spines and apophysis of some species are variable, reduced and visible only in the ultraviolet light. Subfamily Discosomaticinae is distributed in the Neotropical areas of broadleaf rainforest, with highest diversity in Central America, Caribbean and northern South America, also occurring in Paraguay, Argentina, southeastern and northeastern Brazil. The sole synapomorphy that supports this taxon is the presence of pectinate claws on posterior tarsi. *Sibambea* is known only from Ecuador. *Discosomaticus* occurs in northern Brazil, Colombia and Peru. Both occur in areas of Amazonian forest. *Sibambea* currently contains one nominal species, and *Discosomaticus* contains three nominal species. Both genera are very similar and may be recognized by the smooth and glossy discoid dorsal scutum, with posterior border straight and scutal grooves not marked, mesotergal areas unrecognizable. Areas I and II may contain a pair of small spines. Chelicerae normal (not inflated) in male and female. Legs long and straight, coxa IV not visible in dorsal view, femur IV can contain basal apophysis. Dorsal scutum brown to black, circled by a partial or complete white ring. Areas I and II may contain a pair of white dots, coxa IV can contain a yellowish or white lateral spot. This is the first comparative study that involves all the species of the two genera. A survey of external and genital morphological characters (mostly new) is done, species are rediagnosed and given standardized illustrations. Status of the nominal species is evaluated as well as the status of the current taxonomic characters.

Poster, Monday 6th

PRELIMINARY PATTERNS OF SPIDER (ARANEAE) DIVERSITY IN THE SAVANNA BIOME OF SOUTH AFRICA

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Understanding patterns of species diversity in time and space are the essential templates for planning rational conservation management. Refinements in predictive ability resulting from better knowledge of such patterns can progressively render our conservation efforts more sensitive and more comprehensive. Invertebrates provide both advantages (diversity and abundance) and barriers (meaningful interpretation of vast amounts of results) to their use in conservation assessments. Focal taxa are therefore a viable alternative to all-taxon surveys, and this is especially true for poorly surveyed groups such as invertebrates. The South African National Survey of Arachnida (SANSA) has identified the potential of spiders (Araneae) as such a focal taxon and as part of its initial phase, spider diversity patterns in the Savanna Biome have been mapped. The Savanna Biome is the largest biome in South Africa and occupies over one third of the country's surface area. A grassy ground layer and distinct upper layer of woody plants characterize it. The major delimiting factors are the effects of fire and rainfall, the latter varying from 235 to 1000 mm per year. Here we present a map of spider species richness patterns for the savanna biome based on the largest and most comprehensive species list compiled to date (including >14000 records obtained from historical literature and more recent surveys). Preliminary patterns suggest a rich spider fauna associated with this biome with most species occurring in the eastern parts of South Africa. At present a total of 57 families represented by 282 genera and 1100 species have been recorded from the Savanna Biome. More than 400 sites have been sampled in this biome including at least 11 long-term sites varying between one to five years. Further surveys are however needed, as several regions in this biome are either under sampled or have not been sampled at all. Based on this preliminary data, potential species rich areas important for conservation and areas in need of further spider surveys have been identified. The latter result is important to guide the proposed field surveys planned for phase II of SANSA to start in October 2007. Future research aims and products are also discussed.

Poster, Monday 6th