

Hannah M. Wood

Smithsonian National Museum of Natural History, Washington, D.C., USA
woodh@si.edu

Palpimanoid spiders are comprised of five extant families, and have an extensive fossil record going back to the Jurassic. Palpimanoids have been described from Burmese amber (Cretaceous age), as well as from other parts of the world (e.g., Baltic amber, Eocene age, Inner Mongolia compression fossils, Jurassic age). Previous total evidence analysis of Archaeidae revealed a distinct Northern and Southern Hemisphere clade, with timing of divergence congruent with the break-up of Pangaea into Laurasia and Gondwana. Since then, many more palpimanoid fossils have been discovered. The current study expands upon this previous work by increasing taxon sampling to focus on the palpimanoids, rather than Archaeidae, and includes examination of over 100 fossil specimens. A morphological matrix of ca. 300 characters was developed with the goal of understanding the evolutionary relationships between extant and extinct palpimanoids. Preliminary findings suggest that all extant palpimanoid families have fossil representatives, with evidence that some had already begun to diverge in the Jurassic. Other results suggest that lineages in Burmese amber have Gondwanan affinities, whereas lineages in Indian amber have affinities to northern Europe. This research reveals ancient diversification patterns in an unusual group of spiders that have persisted over vast geological time scales.

Spiders of Iran: past, present and future

Alireza Zamani*

Zoological Museum, Biodiversity Unit, University of Turku, Finland
zamani.alireza5@gmail.com

Although the morphology, biology, and behavior of spiders have been used frequently as metaphors by Iranian (Persian) poets throughout the history and the first published observation of these arachnids in this country dates back to 1656, the scientific documentation of the species composition of this group in this vast and zoogeographically interesting region is relatively young and still far from complete. The first known scientific collection of Iranian spiders was made by Eugen von Keyserling and Theophil Bienert during 1859, but a scientific contribution was not published until a couple of decades later in 1874 by Eugène Simon; the first such publication by an Iranian researcher was published much later in 1958, and wasn't followed until mid-90's, when a few other local researchers began to investigate the spider fauna of the region. In the intervening period, several important taxonomic and faunistic papers were published by foreign researchers, and the most comprehensive collection of spiders of this country was made by Antoine Senglet in 1973–1975. Since the first checklist of Iranian spiders in 2001 which listed the occurrence of only 141 species, the number of species reported from

this region has almost sextupled thanks to dozens of taxonomic surveys and large-scale faunistic works. In my presentation, I will review the history of spider research in Iran, with a special focus on the data acquired the past seven years, and present a path toward the continuation of this field of study.