

## **Cretaceous Canadian amber spider and the palpimanoidean nature of lagonomegopids**

David Penney Acta Palaeontologica Polonica 49 (4), 2004: 579-584

The first formally described spider from mid-Campanian (76.5-79.5 Ma), Upper Cretaceous amber from Cedar Lake, Manitoba, Canada is named as *Grandoculus chemahawinensis* new genus and species. It belongs in the fossil family Lagonomegopidae, based on the large eyes situated anterolaterally on the carapace. The proposed systematic position of this family in Palpimanoidea was based on tenuous characters, such as spineless legs and a single metatarsal trichobothrium. The new fossil possesses dense scopulae prolaterally on the metatarsus and tarsus of the first pair of legs, confirming placement of the Lagonomegopidae in Palpimanoidea along with the only other known families to exhibit this character. However, the individual setae differ between the new specimen and the other families, in that they have a pointed, hooked-tip on the metatarsus and a straight, pointed tip on the tarsus, rather than a spatulate tip. Both hooked and spatulate setal types presumably evolved from a 'normal-type' seta and may represent two different lineages derived from a common ancestor.

Key words: Araneae, Palpimanoidea, Lagonomegopidae, Campanian, Cedar Lake, Manitoba, Canada.

David Penney [david.penney@man.ac.uk], Department of Earth Sciences, The University of Manchester, Manchester, M13 9PL, United Kingdom.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see <u>creativecommons.org</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

