

## RICINULEIDS – LIVING FOSSILS?

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Living ricinuleids are plump, squat animals which creep with a slow, ungainly gait under rotting vegetation in tropical forests or in caves, and sham death when disturbed. Three genera are alive today, and less than 20 undoubted fossil specimens belonging to three genera are known from Upper Carboniferous tropical forests of Britain and the U.S.A. Rediscovery of the "lost" holotype of *Curculioides ansticii*, together with the exponential increase in new data on extant ricinuleids during the last decade, prompted restudy of the fossils. Morphological details overlooked by previous workers, or discovered in the light of information from Recent ricinuleids, suggest little morphological change since the Carboniferous. Most of the characteristic morphological features of ricinuleids (e.g. tagmosis, cucullus, limb segmentation) are clearly recognizable in the fossils. In addition, the extinct genus *Curculioides* has a prominent dorsal median longitudinal furrow on the opisthosoma instead of sclerites, and may represent an extinct subgroup. Furthermore, the fossil forms bear two pairs of eyes where translucent patches occur on the carapace of the living animals, thus confirming the supposed nature of the latter as vestigial optical organs. Ricinuleids appear to have remained in the same adaptive zone throughout 300 M years. Whether the order fulfils STANLEY's criteria for living fossils is discussed.

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