



Conference Abstract

The most remarkable cave-specialized trechine beetles from China

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Abstract

Limestone areas of China host remarkable radiations of cave animals. The subterranean trechine beetles (Carabidae: Trechini), the most diverse and modified group of subterranean beetles in the world, are extremely diverse in southern China. The first aphaenopsian trechine beetle, *Sinaphaenops mirabilissimus* Uéno & Wang, 1991 was reported from a limestone cave in Guizhou province. Up to now, 146 species within 48 genera of aphaenopsian trechine have been described in China after almost three decades. Among them, the genera *Giraffaphaenops*, *Xuedytes*, *Dongodytes*, *Sinaphaenops* and *Pilosaphaenops* from northwest Guangxi and south Guizhou are the most modified troglotic trechine beetles known so far in the world. They are remarkable by their morphology combining extremely slender body and elongated appendages. Some of them are diversified or quite widespread, which is not the case of *Xuedytes* Tian & Huang, 2017, a remarkable monospecific genus known from a single locality so far. In addition to the surveys and collection of specimens, an integrative approach combining the study of systematics, phylogeny, diversification and biogeography patterns of the cave trechine beetles in China is on the way, in order to understand the origin of the remarkable biodiversity and evolutionary success of this group.

Keywords

subterranean, cavernicolous, aphaenopsian, ground beetles, Trechini, *Giraffaphaenops*, *Xuedytes*, *Dongodytes*, *Sinaphaenops*, *Pilosaphaenops*

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