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学位論文題目	Systematic revision of the Plectopylidae (Gastropoda: Pulmonata)
論文審査委員	主査 浅見崇比呂 教授 市野隆雄 教授 東城幸治 准教授 柴田直樹 准教授 福田宏 准教授

論文内容の要旨

Abstract

Plectopylidae is a land snail family which belongs to the order Stylommatophora, and distributed in large part of East Asia from Nepal to Okinawa. Most of the approximately 100 known species were described at the end of the 19th, and the beginning of the 20th centuries. Since then, nearly no publications were dealing with the family. I revised every taxa of the Plectopylidae based on type, non-type, and newly-collected materials. During the taxonomic revision I was focusing on the morphological characters of the shells, the reproductive anatomy and the radula. The revision resulted in the description of two new subfamilies, two new tribes, seven genera and subgenera, 32 species and subspecies. Twenty-six taxa are turned out to be synonyms. Approximately half of the known, valid taxa had to be moved to other genera. I also investigated some of the living and fossil land snail groups which were assigned to the family Plectopylidae by earlier taxonomic works. In two cases (genera *Zilchistrophia* and *Amphicoelina*) my data suggest that they do not belong to the Plectopylidae, but are the members of other families, namely Scolodontidae and Camaenidae, respectively. I confirmed the taxonomic position of the Chinese Eocene genus *Plectopyloides* inside the Plectopylidae. The other, European and Indian Cretaceous fossil groups which were previously assigned to the Plectopylidae, are probably not related to this family. The investigation of the anatomy of the Plectopylidae resulted in two main conclusions: (1) an organ of previously unknown homology proved to be a diverticulum, and (2) the

presence of disposable, usually hook-like calcareous granules inside the penis suggest that they are probably used during mating season only. This is the only known case of mating disposable hook-like structures inside the male reproductive organs of land snails.