GREGARINA POLYMORPHA (APICOMPLEXA: EUGREGARINIDA) IN THE BODY CAVITY OF OMMATOIULUS SABULOSUS L. (ARTHROPODA: DIPLOPODA)

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Gregarines are diverse group of protozoans that parasitize a wide range of invertebrate phyla, including annelids (Pižl, Acta Protozool., 29, 361, 1990) and arthropods (Lipa, Acta Protozool., 5, 97, 1967; Clopton et al., J. Protozool., 38, 472, 1991). So far, it is well known that gregarines are common parasites of tropical millipedes (Janardanan & Ramachandran, Zool. Anz., 203, 392,1979). Therefore, the efforts were made to clarify if gregarines may parasitize European millipede Ommatoiulus sabulosus.

Specimens of parasitic Gregarina polymorpha were found in the body cavity of adult O. sabulosus. Gregarines exist and developed normally in the body cavity of O. sabulosus because cellular encapsulation around G. polymorpha was not observed. To survive in the body cavity of the host G. polymorpha have involved in life cycle mechanisms of adaptations. The action of the counter defence of the parasite to millipede immunity is a partial escape of G. polymorpha from immunological control of the O. sabulosus. Gregarines cause little or no damage to the hosts they invade. Further studies clarifying the influence of parasitic gregarines on millipede immune system are necessary.