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The hypopus role in the indoor diffusion of *Glycyphagus domesticus* and *Lepidoglyphus destructor*

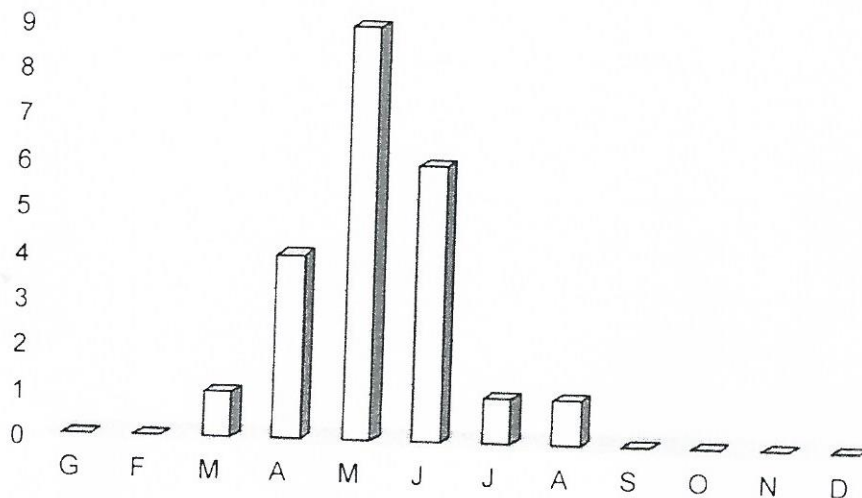
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The hypopus or hypopial deutonymph is the life stage by means of which some environmental mites manage to resist unfavourable climatic conditions. It represents an important means of the species diffusion and guarantees a possibility to the arthropods of surviving even under conditions of temperature and humidity which could result unfit for their life (Woolley TA, 1988 Acarology, Wiley-Interscience publication, New York, USA). *Glycyphagus domesticus* and *Lepidoglyphus destructor* are two mites highly pathogenic to man which can be taken into the dwellings at the stage of hypopial deutonymph by means of food of vegetal or animal origin, firewood, badly conserved cloth and other objects (Stingeni L 1997, Ann. It. Dermatol. Clin. Sper., 51: 91-95; Principato M 1999, Bull.Soc.Franç.Parasitol., 17: 50-58).

Our year's survey was carried out through 48 samplings of indoor dust in dwellings where dermatological problems characterized by itching and cutaneous lesions of strophuloid type were revealed. A study of the traces was performed to research pathogenic arthropods using a direct exam of indoor dusts by saturated liquid of sodium chloride and mounting the mites isolated in the Berlese solution (Principato M 1998, Ann. It. Dermatol. Clin. Sper., 52: 60-72).

Presence of hypopus stage of *G.domesticus* and *L.destructor* during the year



From March-April till July-August, as shown by the graph, both species tend to change into hypopial deutonymphs since the high temperatures and reduction of the RH of the spring-summer period is detrimental to their development. Inside the dwellings examined the mites spread not only in cloths and on humid and mouldy walls, which are known to be their preferable habitat, but also in food-stuffs, such as various types of hams, salami, cheese, flour, biscuits, bread. This fact leads us to consider the possibility of taking mites in the dwellings through food. If the RH exceeds 60% mites start reproducing, but if it is lower than 60% mites change into hypopial deutonymphs and remain quiescent until the environmental conditions turn favourable. This emphasizes sanitary and inspectorial problems, as it correlates the presence of these mites not only to the structural defects of the dwellings or to the introduction of mouldy firewood, but also to the origin and the state of conservation of foodstuffs.