
Pr. Background information:


4. Selected References:

Recent changes in the hygienic status of a reptilian pet stock can be ascertained efficiently by performing two simple, low-budget diagnostic procedures only. Vivaaria facilities on an exceeding high hygiene risk can definitively be identified – even if any evident explanation of the clustering observed is missing so far (see table "stock owner").

3. Insights: Recent changes in the human behaviour and the social structures especially in the urban environments open up new ecological niches and artificial habitats for synanthropic animals, some of them - like the Leopard gecko - on their way to domestication, and their parasites. Close gathering and frequent cohabitation of man and pet reptiles cause such habitat changes which increase the transmission rates of some pathogens, create new infection routes, and foster the emergence or uprising of zoonotic diseases.

Due to modern transportation and communication facilities pet reptile keepers are a close community and they group their pets, the Leopard geckos, into an animal pool and thereby configure an effectual reservoir for some highly specialised infectious microorganisms. Intestinal parasites are typically pathogens with a straightforward, highly effective transmission route, especially if it is combined with live stages that are resistant to most environmental impacts, like (Oxyura) eggs or (Cryptosporidium) oocysts. All parasites detected are ordinary, ubiquitous, and more or less opportunistic infectious microorganisms with a low pathogenicity and a high infectiousness, except the possibly protracted Entamoeba. The geckos have a moderate or low and species-parasite burden in the majority of cases, a status enforced by long-time pet keeping and farm breeding. Distinctive features of our findings are the high infection rate even of baby gekkos with Oxyura up to 40% - and the statistically significant but unexplainable difference in Monocercomonas-infections between male and female geckos.

With regard to a forthcoming establishment of a cost-effective prognostic monitoring procedure for reptilian pets – one of the final goals of the Conservation Medicine – we found that the hygienic status of a reptilian pet stock can be ascertained efficiently by performing two simple, low-budget diagnostic procedures only. Vivaaria facilities on an exceeding high hygiene risk can definitively be identified – even if any evident explanation of the clustering observed is missing so far (see table "stock owner").

- a genuine insect parasite. In a single case a probably protracted infection with Monocercomonas sp. (D), most probably Monocercomonas invadens (B), that is a ciliated protozoa with ambiguous parasitic features, some species (E) exists infecting pet Leopard geckos: An ubiquitous Oxyura (A), most probably Oxyura godon sp. gecko < 6 month n = 30

- a high infectivity and a low pathogenicity

- a host immune status depending opportunity

- a high pathogenicity and a low infectivity

4. Selected References:


