

Abstract

Previous studies of the relationship between egg size and the embryonic development time showed a positive correlation between the two variables at interspecies level, thus offering the idea that the evolution of the latter could be a limiting factor for enlarging the size of eggs during evolution. Some research into interspecies and intraspecific level of reptiles doesn't confirm this correlation. At the same time, the relationship between the development time and egg size is influenced by many factors, such as shifts in ontogenetic stages of the embryo at the time of ablation of eggs, due to temperature and humidity, the presence of embryonic diapause during embryogenesis or synchronization of hatching time, of which the authors of previous studies took no account or filtered out inaccurately. I think that most of these factors can be well controlled in intraspecific studies, but, variation in egg size within species also tends to be small, which prevents a reliable test for correlation. The solution can be to compare closely related species with high variability in the size of the eggs, in our case the geckos of the genus *Paroedura* and family Eublepharidae. I eliminated temperature effects by comparing the time of incubation in two equal constant temperatures. The results show that, in this narrower range, there is no correlation between egg size and development time. It seems, therefore, that the developmental time automatically does not increase the size of the eggs and therefore cannot be a strong factor limiting the size of eggs in closely related species.