Abstract

The extensive material of skeletal remains of mammals from a diet of barn owl in the eastern Mediterranean has been processed and evaluated with different techniques of chorological and morphometric analysis. At least 8400 individuals of 45 species of insectivores, rodents and bats were found in our total collection of samples, which represents a significant portion of fauna of the region.

We have evaluated a chorological composition of the taphocoenoses and the interregional differences, manifested primarily by differences in the representation of satellite and accessory elements. We found a highly significant impoverishment of the isolated island taphocenoses (Cyprus, Karpathos, partly on Crete), where Cricetidae, Arvicolidae, *C. leucodon* etc. are missing. On the other hand the essential part of the dominance structure takes up the *Rattus rattus*, which acts here as an invasive species, significantly more successful than in the ragged continental contexts. The species diversity of the examined samples is positively correlated with the geographic latitude (taphocenoses of the northern regions are significantly richer) and negatively with the island effect and the degree of aridization.

The morphometric analysis of the three most abundant species of Soricidae within the studied region showed substantial homogeneous distribution of metric characteristics of each species, at a local scale, however, this homogeneity decreases in some species. *C. leucodon* shows a evident aspect of clinal variability – a negative correlation of cranial dimensions with geographic latitude. *Suncus etruscus* displays extreme homogeneity of metric characteristics and the absence of elder categories. *C. suaveolens*, the most common species of the material demonstrates extensible breadth of the metric variability in almost all localities and throughout with nearly identical parameters. A certain exception is the subfossil sample of western Cyprus, which corresponds in metrical and morphological characteristics to the fossil taxon *C. s. praecypria*. The other samples from thermomediterranean zone of Cyprus exhibit substantial correspondence with other populations, except rather smaller dimensions. These results are in a very good congruence with the actual outputs of phyllogeographic molecular investigations (Dubey et al. 2007 a), which suggests that a key factor of the biogeography of mediterranean *C. suaveolons* is the ancient Phoenician dissemination from Levantine area.