Nivå Bay (Baltic Sea, The Sound): case study of the lasting evolution of amoebae fauna in a local habitat

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Nivå Bay is a place of zoologist's interest, where several faunistic works dedicated specifically to naked lobose amoebae have been made in the recent decades. It is located in the north of Denmark, near the city of Helsingør. The last of these studies is dated back to 2007. We have sampled the same location in 2017; the results of the present research show that biodiversity of amoebozoans in the bay remains not entirely recovered, and the amoebae fauna of this habitat gradually evolves. We identified several new species assigned to the genera *Stygamoeba, Thecamoeba* and a number of isolates, that cannot be assigned to any of existing amoebae genera and probably represent a new amoebae linages. In addition, the existence of cryptic diversity in the Nivå Bay sediment was confirmed again, for example *Trichosphaerium sp.* appeared in culture dishes only after one-month storage along with the increment of the salinity. In general, the range of common species found is congruent with the descriptions given in previous studies (*Mayorella kuwaitensis, Stygamoeba regulata*, several species of *Vannella, Thecamoeba, Korotnevella* and *Cochliopodium*). However, newly found species considerably increase the list of species known form this habitat and show the need of the up-to-date revision of Nivå Bay fauna with molecular methods. Supported with RSF 17-14-01391 grant.