

Diversity and phylogeny of the amoeba genus *Deuteramoeba* (Amoebozoa, Tubulinea)

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We continue to investigate the diversity and phylogeny of the amoeba genus *Deuteramoeba*. This genus belongs to the family Amoebidae, order Euamoebida within the class Tubulinea. This is one of the “core” amoebae genera, representing typical “proteus-like” organisms, most frequently associated with “an amoeba” for a general auditorium. In the same time, knowledge on the phylogeny and systematics of amoebae of the family Amoebidae remains at the surprisingly low level. Except for the genera *Amoeba* and *Chaos*, other members of the family are very poorly studied and known from few findings (or were never seen since initial description). We have obtained new 18S rRNA gene sequences from *Deuteramoeba mycophaga* CCAP 1586/1 and two new *Deuteramoeba* species isolated from the soil in the surroundings of Kislovodsk (Russia) and from soil samples originating from Spain. We performed LM and TEM studies of these strains. Molecular phylogeny confirmed the position of this genus as a neighbor of *Amoeba* + *Chaos* clade in phylogenetic trees, which corresponds to the relationships deduced from morphology. Supported with RFBR 16-04-01454 research grant.