

PST17 - Response to distance according to dispersal mode in temporary ponds

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Dispersal mode has a strong potential in shaping metacommunities, since organisms with different abilities may show a differential response to the environment characteristics. We studied the spatial patterns of three biotic groups with contrasting dispersal abilities (macroinvertebrate active dispersers, macroinvertebrate passive dispersers and plants) in two networks of Mediterranean temporary ponds. The two studied pond networks were located in Vila Nova de Milfontes (Portugal) and Giara di Gesturi (Sardinia, Italy). Each of them comprised eleven temporary ponds with a strong size gradient. Both sites were located on areas with some kind of protection policy.

Our aim was to check the existence of differences on the distance-decay patterns (DDP) of these organisms groups. Despite the evident differences on the community composition and the environment that exist between the studied areas, we expected that the biotic groups with the same dispersal mode would have the same kind of response to distance. Thus, we expected to find differences on their DDP, being stronger in the organisms with weaker dispersal ability.