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POST-FIRE REGENERATION OF PINUS HALEPENSIS MILL. FORESTS IN THE EAST MEDITERRANEAN: PATTERNS OF RESILIENCE

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Mediterranean pine forests cover 8.72% of the forest ecosystems of Greece. Of those, 371,984 ha correspond to Aleppo pine formations. Every year a big amount of these forests are subjected to fire. A great majority of the fire events are deliberate, as many of the Aleppo pine forests are located near big urban centers or they are under the pressure of a changing landuse. However, this does not cancel the fact that pine forests, as the other Mediterranean ecosystems of the World do, have evolved under the strong influence of fire as a natural perturbation. This evolution is demonstrated through the adaptive strategies that plant taxa constituting the vegetation of the Aleppo pine forest exhibit: formation of soil seed banks in the case of some herbaceous taxa (e.g. Leguminosae), formation of canopy seed banks in the case of pines and root carbohydrates in the case of evergreen sclerophyllous shrubs. The activation of these reserves is triggered by fire. The magnitude of the response as well as the resulting output is a function of fire regime and land use.