Project Database of ICP Forests
PROJECT DESCRIPTION

PROJECT INFORMATION

Project title:	Adaptative capacity of Croatian Mediterranean forests to environmental pressures
Project ID:	144
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Mediterranean forests in Croatia account for 24% of total forest area. Although they are of small direct economic value their social and ecological functions are very important (preservation of soil, air, water and biodiversity; carbon sequestration; impact on microclimate conditions; aesthetic and touristic function etc.).

Tree vitality or condition can be defined as the ability of a tree to assimilate, to survive stress and to react to changing conditions. Several factors have been recognized to influence tree vitality, and the reasons for the deterioration of tree condition can be found in specific interactions of stress factors. Since the knowledge on the condition of Mediterranean forest ecosystems in Croatia is insufficient, the goal is to determine the spatio-temporal variability in condition of forest ecosystems through the use of various indicators (increment; tree mineral nutrition; crown defoliation; damage to vegetation), taking into account soil characteristics, elevation, inclination, exposition and climate influences.

Our plan is to use UNECE-ICP Forests large-scale (Level 1) plot network to utilize existing data (crown condition) and to obtain new data on relevant indicators (tree nutrition, increment). The field data will be complemented by the analysis of data from various information sources such as E-OBS gridded dataset based on ECA&D information.

Spatial and temporal data from terrestrial research, remote sensing and external sources will be analysed in order to establish cause-effect relationships among various vitality indicators and climate properties. The overall objective of the project is to determine the current adaptive capacity of Croatian Mediterranean forests to climate change and to model the adaptation of those forests to different climate change scenarios.

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