1. Record Nr. UNINA9910729799603321

Titolo	Advances in Forest Ecophysiology / / Nenad Potocic, editor
Pubbl/distr/stampa	Basel : , : MDPI - Multidisciplinary Digital Publishing Institute, , 2023
Descrizione fisica	1 online resource (212 pages)
Disciplina	571.2
Soggetti	Ecophysiology Ecopsychiatry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Air pollution and the changing climate are some of the greatest threats to the health and functioning of forest ecosystems, strongly jeopardizing their ecological and economic functions as well as services. The impact of increasing temperatures and extreme weather events (droughts, storms, temperature and precipitation extremes) on the vitality of forest trees is often difficult to separate from the impact of pollution, such as nitrogen deposition and tropospheric ozone, as they can exhibit synergistic effects. The use of indicators is elementary in modern forest ecophysiological research, as they help us to disentangle complex interactions between trees and various stress-inducing factors as well as better estimate the level of damage to trees and forest ecosystems.Eleven papers are included in this Special Issue, with wide-ranging topics from various disciplines but centered around tree responses to environmental stress. The task of this Special Issue is twofold: one, to remind us that a better understanding of the physiological processes influencing tree vitality under the changing climate and air pollution pressures requires considerable research efforts and constant advancements in research methods and approaches; two, to highlight the fact that the environmental pressures instigating the use of tree stress response indicators are more present than ever, and will likely continue to affect tree vitality in the foreseeable future.