

Policy Brief

PREVENTING THE SPREAD OF THE PLANE TREE KILLER FUNGUS, *Ceratocystis platani*



COST Action CA20132
Safeguarding European
urban trees and forests
through improved biosecurity

The problem

Plane trees (*Platanus* spp.) are widely planted in European and Eurasian cities and important elements in the forests of the eastern Mediterranean countries. Unfortunately, the future of European plane tree populations and plantings is severely threatened by *Ceratocystis platani*, an introduced, invasive fungal pathogen that causes canker stain disease. The disease is currently established in France, Italy, Greece, Albania and Türkiye, but the risk of further spread to other countries is real. The fungus spreads easily through human activities involving trade and transport of plants for planting or wood, movement of machinery, e.g. for construction work, as well as on pruning/cutting tools. Only one propagule is needed to infect a new tree and an infection always leads to the death of the trees.



The continued and wider spread of *Ceratocystis platani* in Europe's cities and urban green areas would lead to economic costs that could sum up to 1500 to 4500 EUR (excl. VAT) per tree as direct costs related to felling and replanting. In addition, irreversible loss of biodiversity and valuable ecosystem services from plane trees would follow.

The best way to protect plane trees and to maintain the ecosystem services provided by them in cities and in the woodlands is:

Recommendations

New, multidisciplinary research is needed to fully understand the biology and ecology of the fungus, to assess the environmental impacts, and to develop efficient methods for early detection and sustainable management of diseased areas.

Science-based education and training is needed for relevant professionals, e.g., phytosanitary inspectors, customs officers, nursery managers, gardeners, arborists, landscape planners and architects, as well as construction workers to inform about pathways of spread and the proper implementation of phytosanitary measures.

Awareness-raising is needed, to illustrate the loss of ecosystem services and the environmental impact of the disease to decision-makers, funding agencies, and also the general public, and to ensure acceptance of control measures, e.g., felling of healthy trees around the infected trees which is needed to stop further spread to healthy trees via root contacts.

PREVENTION

Actions

National and EU level financing must be urgently directed to research programmes and projects addressing the problem.

Relevant educational programmes in universities and vocational schools must add courses in phytosanitary theory and practice into their curricula.

Professional science communicators must be contracted not only in universities, but also in public bodies and other relevant organizations.



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This publication is based upon work from COST Action UrbanTreeGuard, CA20132, supported by COST European Cooperation in Science and Technology.

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