

Strategies for Ambrosia artemisiifolia control (AMBROSIA)



Funding

Virtual Common Pot via a competitive call. Each funder only pays for the participation of their own national researchers. Total funding € 230,000

Contact information

Project Coordinator: Dr. Niels Holst niels.holst@agrsci.dk

Goals

To reduce impacts caused by Ambrosia artemisiifolia in Europe

Objectives

- Strengthen transnational collaboration on Ambrosia research and control.
- Delineate the probable scenarios for Ambrosia control according to habitat and possible control options.
- Quantify the control achieved by different herbicides (application timing and mode of action).
- Quantify the control achieved by different physical methods with or without herbicides.
- Increase knowledge on the management options for the Ambrosia seed bank.
- Formulate the best control strategies based on current knowledge and project results in different scenarios.
- Publish national guidelines for the control and prevention of Ambrosia in different scenarios

Research consortium

Denmark: Institute of Integrated Pest Management, Aarhus University; Forest & Landscape, University of Copenhagen; Germany: Julius Kühn Institute; Slovenia: Agricultural Institute of Slovenia, University of Maribor; Switzerland: Agroscope Changins-Wadenswil

Key outputs and results

The project resulted in scientifically-based guidelines on managing Ambrosia. These can be used by land managers. To summarise, different habitats give different opportunities for control:

- Agricultural fields. Herbicide treatments can be split for improved efficacy and enhanced by competitive crops and mechanical treatments (suitable for organic farmers).
- Building sites. Dense plant cover prevents mass invasion of Ambrosia and makes manual eradication of single invaders possible (plants destroyed before flowering).
- Roadsides. Heavily infested sites should be herbicide treated after mowing for the best control of plant re-growth.
- Gardens and parks. Avoid bare soil via dense plant cover. Eradicate single plant stands by hand.
- Natural habitats. Cover disturbed soil with a dense population of endemic plants if infestations are advanced. For early infestations, uproot and destroy single plants.