IPA Autumns School
Osijek, Croatia
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PLANT HEALTH SESSION INTRODUCTION AND OUTLINE

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EUROPEAN FOOD SAFETY AUTHORITY

INTRODUCTION

Vaia Storm, four years after...

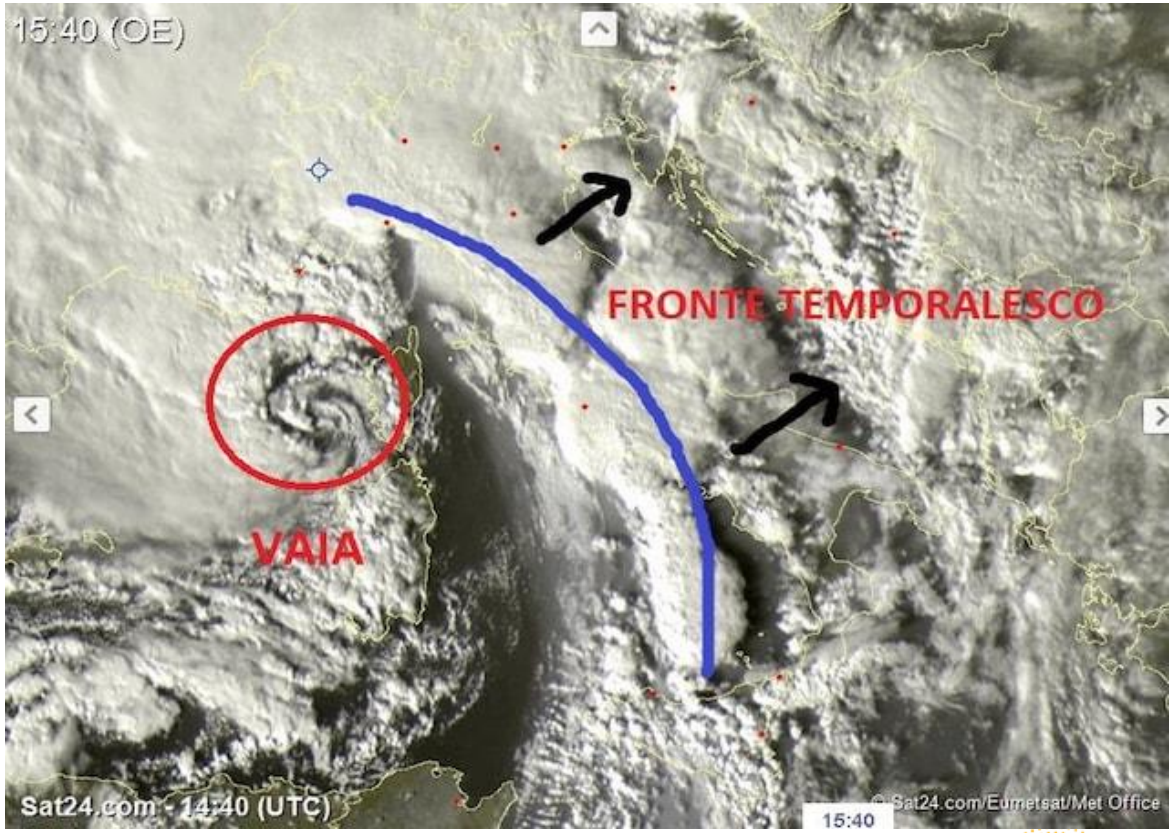
VAIA CASE STUDY

The destruction of forests following the Vaia storm in 2018 was driven by a combination of extreme climatic events, forest structural and management factors, and subsequent bark beetle (*Ips typographus*) outbreaks.

VAIA CASE - CLIMATE: FREQUENCY AND INTENSITY OF EXTREME EVENTS

VAIA in numbers

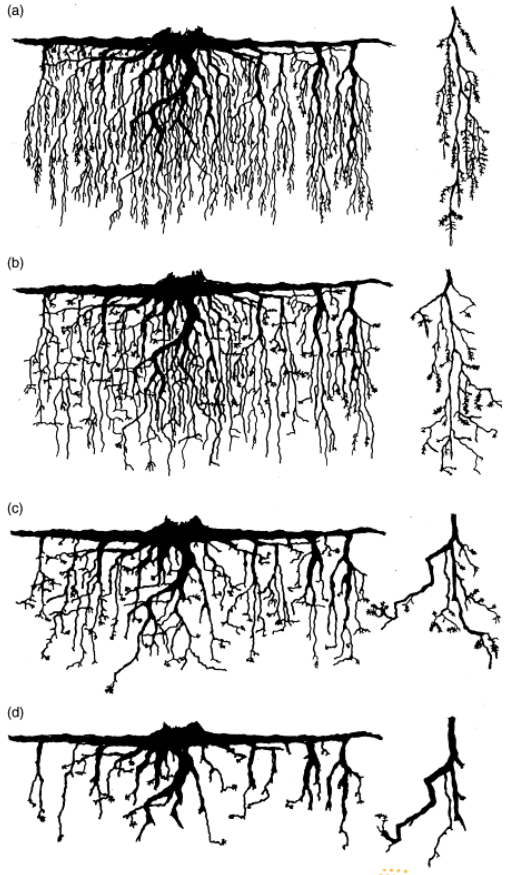
- 27 – 30 October 2028
- 600 mm rain in three days
- Wind up to 200 km/h
- 42 millions of trees destroyed
- 8 million cubic meters of timber to fall
- 41,000 ha the area heavily affected



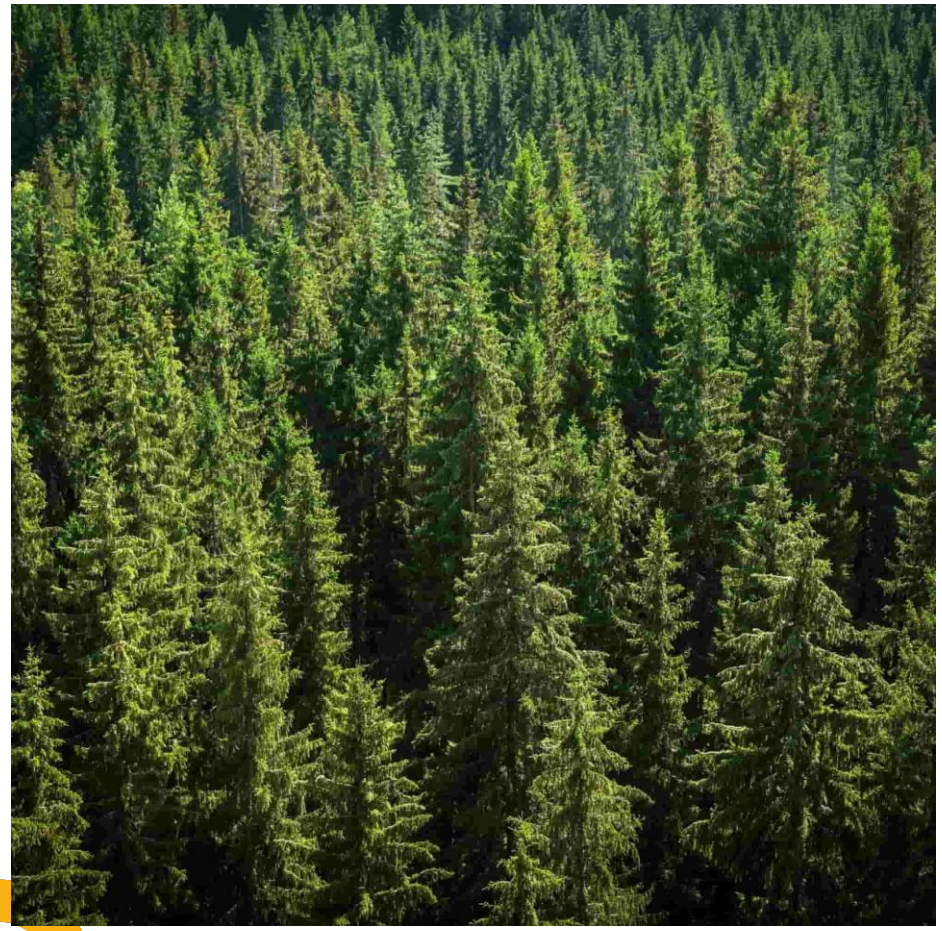
VAIA CASE - CLIMATE: DROUGHT

Feature	Norway Spruce	Silver Fir
Root System Type	Shallow and plate-like	Deeper and more compact
Root Distribution	Higher proportion of roots near the soil surface	Higher maximal root depth
Stability	Less resistant to overturning	More resistant to overturning, especially against wind
Root Response to Force	Roots are more likely to be held in tension when pulled downhill	Roots are more likely to be held in compression when pulled downhill

Norway spruce



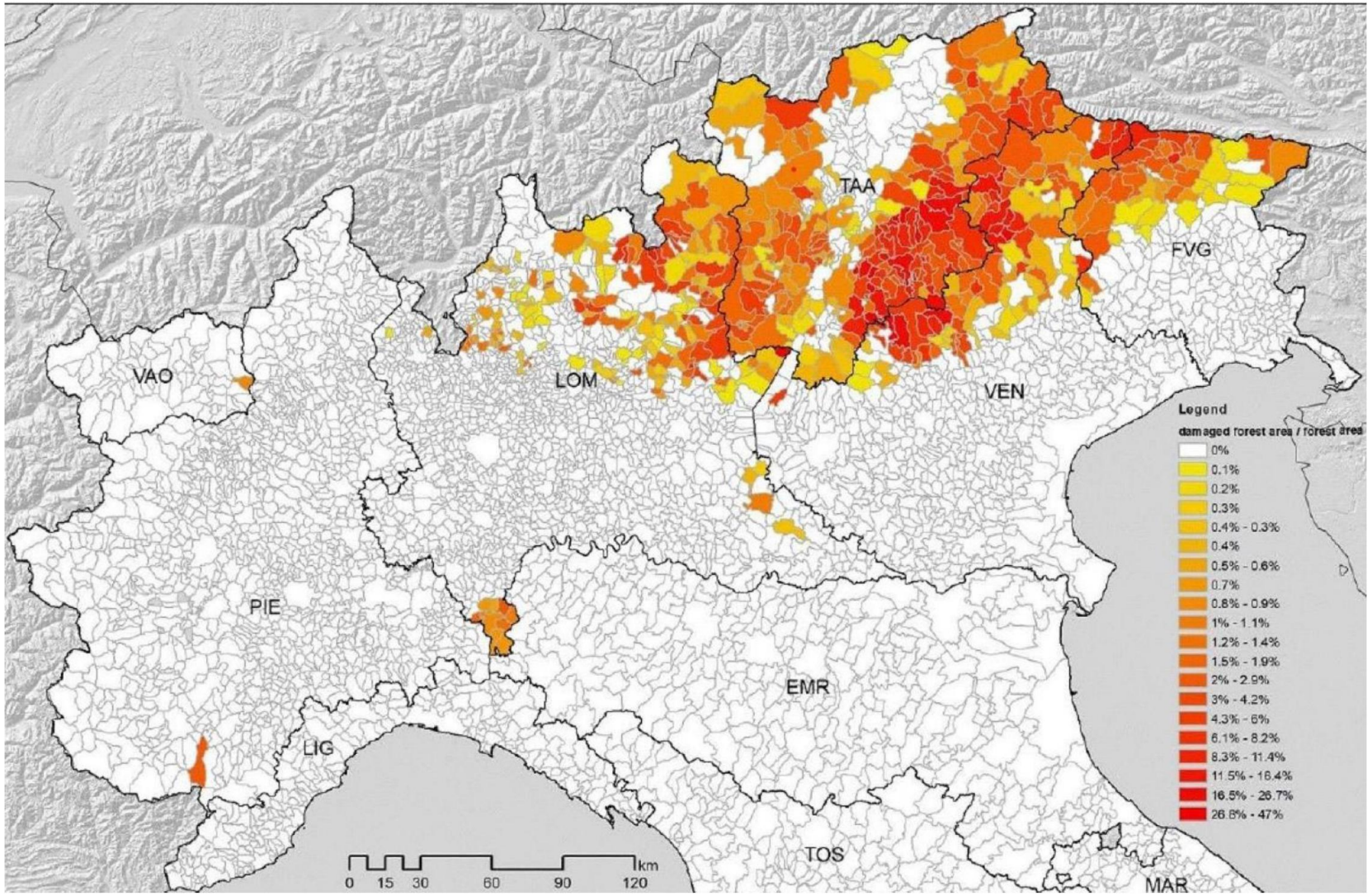
VAIA CASE: FOREST MANAGEMENT



Picea abies pure stand

Mixed coniferous (mainly) forest

VAIA CASE: FOREST MANAGEMENT

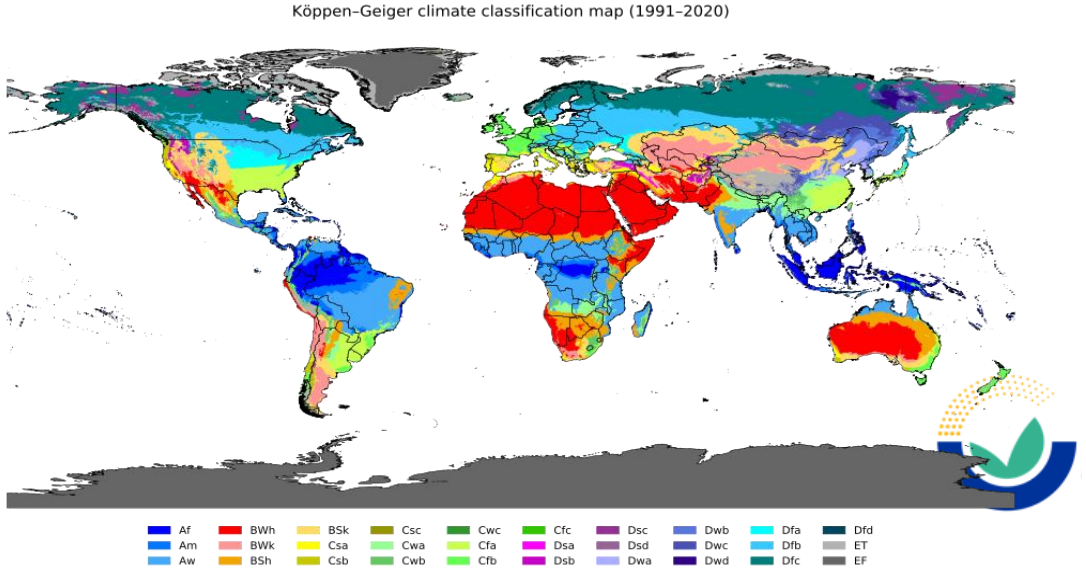


VAIA CASE: PESTS

Ips typographus

MODULE 1 - CLIMATE CHANGE AND PLANT HEALTH

- The effects of climate change on plant pests
- Emerging plant diseases and adaptation of insect pests in a changing climate – some recent Croatian experiences
- A framework for Climate Suitability in Plant Health Risk Assessment
- Methodological workflow from systematic literature search to pest distribution
- Koppen-Geiger climate classification tool (R4EU Platform
- Exercise on the evaluation of climate suitability



MODULE 2 – DATABASES SUPPORTING PLANT PEST RISK ASSESSME

- Introduction to the thematic databases as support of Plant Health RA
- Global Biodiversity Information Facility
- Xylella host plant database
- The use of geospatial and land registry databases in plant health surveys in Croatia
- Exercise on *Xylella* host plant database
- The Scolitynae database: platform
- The Scolitynae database: exercise

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