

OLBIE



OLBIE (Oak Lace Bug In Europe) is a new project, under the Euphresco initiative that aims to evaluate the impact that the invasive Hemipteran insect, the oak lace bug, may have on oak trees and forests in Europe. The insect has been introduced into Europe from its native range in N. America probably through the importation of infested plant material. Within Europe there is considerable variation in its reported impacts, hence there is a real need to understand what factors are influential in the development of this insect species and how it can become a damaging factor to oak. OLBIE will address key questions and gaps in the knowledge of *Corythucha arcuata*, particularly in relation to the biology, dispersal, survey, control and management options and the wider environmental impacts.

Objectives

To provide evidence to underpin contingency planning, policy development and communication through assessing the entry, establishment, spread, impact, control options and management of the oak lace bug (*Corythucha arcuata*).

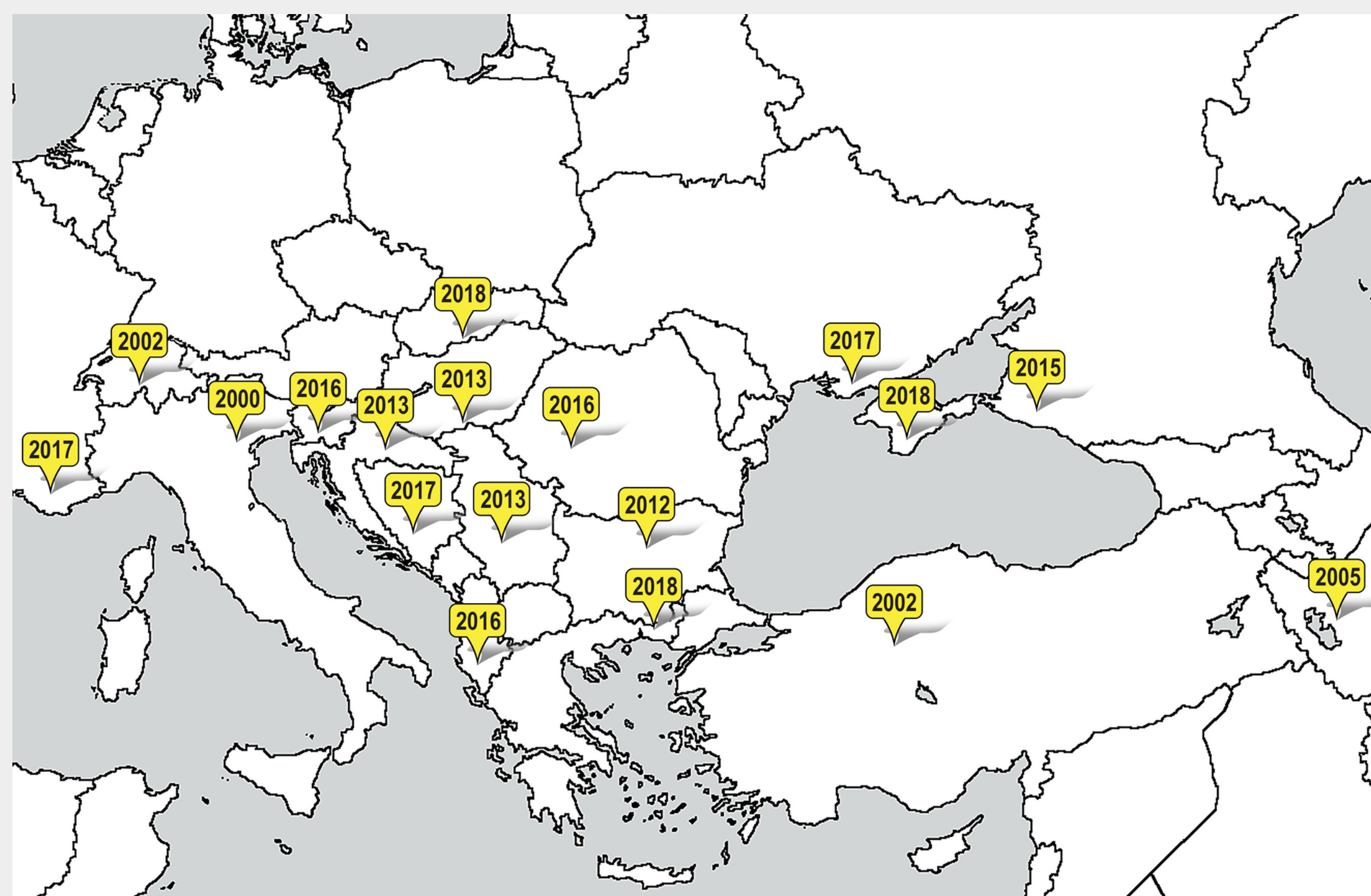


Fig 1: Current distribution of oak lace bug across Europe

Key research questions:

The specific questions that will be considered by the collaborators involved in OLBIE will include:

- What are the impacts of this insect pest on oak growth and fecundity, and why is there such variability in the insect's apparent impacts across Europe (i.e. high impacts in Croatia and Hungary, and seemingly low impacts in Italy and Switzerland?)
- What are the key pathways for movement of the insect pest and how can we better protect against the risk of further introductions and wider European spread?
- What are the rates of natural spread, and what are the key human mediated means of dispersal of the pest?
- What are the best survey strategies to try and detect the pest as early as possible?
- What control and management approaches are available, cost-effective and of use in dealing with this pest? Is there scope for biological control? And ultimately is there scope for preventing or limiting spread in the case of successful establishment.

Can you help?

Oak lace bug is a native North American insect, do you have any experience of dealing with this particular insect? What are the best biological/chemical control options in dealing with this insect pest?

If you can offer any advice or are interested in the project's development please contact David Williams at

david.williams@forestresearch.gov.uk

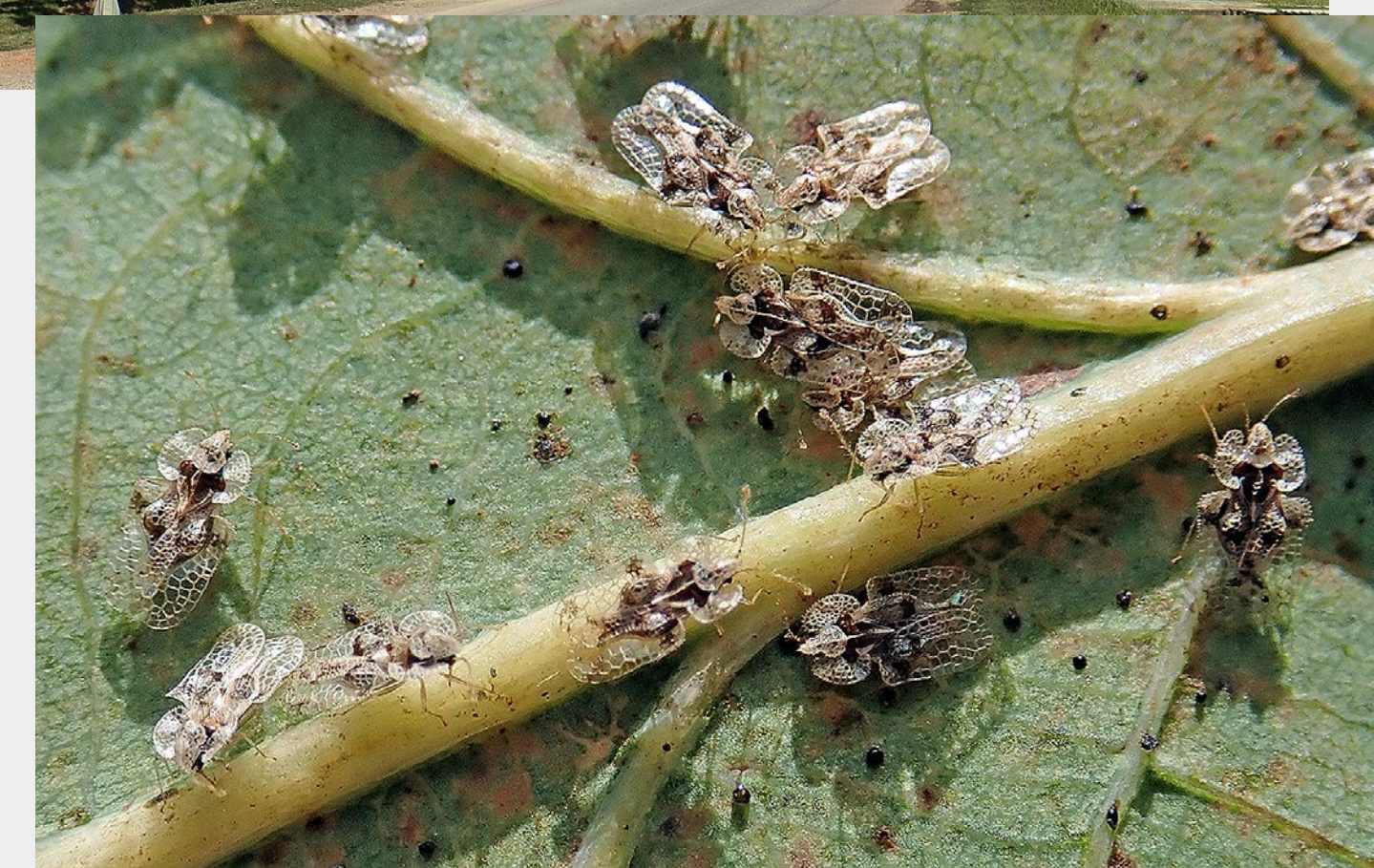
OLBIE is an international, multi-partner project under the Euphresco initiative :

- Forest Research (Co-ordinator) - UK
- NARIC Forest Research Institute - Hungary
- University of Zagreb - Croatia
- Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW) - Austria
- Central Institute for Supervising & Testing of Agriculture - The Czech Republic
- Slovenian Forestry Institute - Slovenia
- French National Institute for Agricultural Research (INRA) - France
- Research & Development Institute for Plant Protection - Romania

Premature browning of leaves of oak caused by the oak lace bug



Symptoms on leaf of *Quercus robur*



Adult oak lace bugs

Duration of the project

The project will run from 1st April 2019 until 31st March 2021 .

The Euphresco Research Initiative

OLBIE is funded through the international EUPHRESKO network, with funding provided by each participating country. Euphresco's main objective is to coordinate national programmes on phytosanitary research. The liaison with other national, European and international initiatives ensures a coherent strategy for setting priorities and avoiding overlaps among projects funded under different mechanisms.