

The Montesclaros Declaration

Prepared by a group of forest pathologists that attended an international IUFRO 7.02.02 (Foliage, shoot and stem diseases of forest trees) meeting held at the Montesclaros Monastery in Spain during May 23th - 27th, 2011.

Introduction by **Keiko Kuroda**
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Summary of the declaration

The international trade of plant material is increasing the risks to forest health worldwide. The evidence for this view is based on the recent, unprecedented rise in numbers of alien pathogens and pests emerging in natural and planted forest ecosystems in all parts of the globe. We thus propose a phasing out of all trade in plants and plant products determined to be of high risk to forested ecosystems but low overall economic benefit.

Supplement: Examples of severely damaging alien pathogens and pests of trees introduced by trade (see right column).

List of signers: More than 70 forest pathologists (17 nations)

Examples of alien pathogens and pests

Pathogens

- ◆ *Phytophthora lateralis*, *P. ramorum* and other species
- ◆ *Puccinia psidii*
- ◆ Pine wood nematode
- ◆ *Mycosphaerella dearnessii*
- ◆ Pitch Canker of pines
- ◆ *Ceratocystis platani*
- ◆ Butternut canker
- ◆ Dutch elm disease
- ◆ White pine blister rust
- ◆ Chestnut blight

Pests

- ◆ *Thaumastocoris peregrinus*
- ◆ Emerald Ash Borer
- ◆ The citrus longhorn beetle, the Asian longhorn beetle
- ◆ *Leptocybe invasa*
- ◆ Hemlock Woolly Adelgid
- ◆ *Sirex noctilio*
- ◆ Gypsy Moth

Phytophthora ramorum in North America

by Matteo Garbelotto

Two unlinked events at the beginning of Sudden Oak Death (SOD).

- In the 1990s, a novel species of *Phytophthora* was isolated from diseased *Rhododendron* and *Viburnum* plants in German and Belgian nurseries. Inexplicable death of tanoaks started on the coast of California.



- The genetic diversity of the pathogen in California is extremely limited, and showed that **nursery genotypes were ancestral to the entire pathogen population in the wild**, providing evidence that the SOD pathogen had been introduced from an unknown location through the nursery trade.

P. ramorum in UK

by Sarah Green

Mortality of Japanese larch in England due to lethal stem infections by *Phytophthora ramorum*. Its introduction into Britain is strongly associated with the international trade in ornamental shrubs.

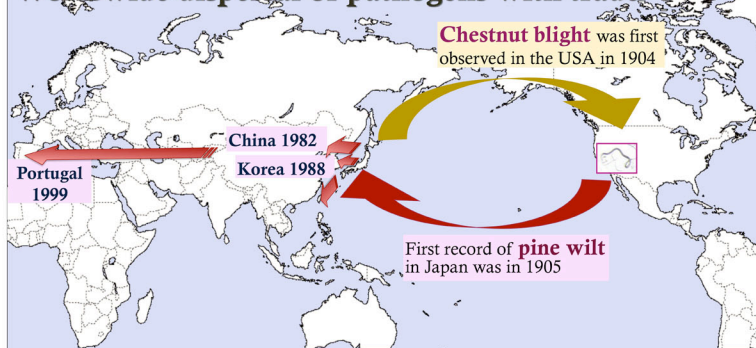


Chestnut blight

by Rona Sturrock
Chestnut blight is caused by *Cryphonectria parasitica*. Introduced into North America from Asia in the early 1800s, it is thought that *C. parasitica* arrived on nursery stock. Chestnut blight was first observed in 1904 on American chestnut trees (*Castanea dentata*) in New York City. The economic impacts of chestnut blight add up to losses of billion of dollars as a source of lumber, nuts, and tannic acid.



Worldwide dispersal of pathogens with trade



Pine wood nematode

by Paula Zamora

The Pine wood nematode (PWN), *Bursaphelenchus xylophilus*, parasitizes live pine trees. The PWN is native to North America. **World trade of timber, pallets wooden crates, etc is an important way for the dissemination of the PWN.** In Spain the first detection of PWN was in 2008

Pine wilt in Japan

2011, Izumo City, Japan



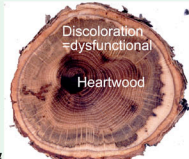
Extensive increase of dead trees three years after the suspension of pest management

- This disease was induced into Japan a century ago from the US.
- Japanese pine species are highly susceptible to the pathogen.
- The control of this disease is difficult and the severe damage is still continuing.



Vector: *Monochamus alternatus* (Japanese pine sawyer)

Japanese oak wilt may become an invasive disease in future



We thus propose a phasing out of trade in plants and plant products of high risk to forest but low economic benefit.

You can download a pdf file of "the declaration" including supplement from <http://www2.kobe-u.ac.jp/~kurodak/Top-e.html>