



Ministry of Agriculture  
and Forestry of Finland



FINNISH FOOD  
AUTHORITY  
Ruskanvirasto • Livemedelverket



Luke  
NATURAL RESOURCES



INTERNATIONAL YEAR OF  
**PLANT HEALTH**

2020



**PROTECTING PLANTS,  
PROTECTING LIFE**

# 2020 IS THE INTERNATIONAL YEAR OF PLANT HEALTH

Based on a Finnish initiative, the Food and Agriculture Organization of the United Nations (FAO) has declared 2020 the International Year of Plant Health. It is important to raise awareness on how all citizens can prevent plant diseases and pests from spreading into Finland.

Plant diseases and pests spread from one country to another through plants, plant products and wooden packaging materials transported in the international trade. Plant pests can cause unforeseen damage to forestry, cultivated areas and the nature.

Due to global warming, plant pests can spread to new areas or thrive better in their current ones. Plant diseases benefit from the increased warmth and humidity. Compared to many other countries, the plant health situation in Finland is good. Many plant diseases and pests that are common further south in Europe are not yet found in Finland.



## HEALTHY PLANTS FORM THE BASIS FOR FOOD PRODUCTION

Food production is based on healthy plants that produce crops of good quality. Plant pests are a serious threat to food production, because according to FAO's estimate, 20–40 % of the crops in the world are destroyed every year due to plant diseases and pests.

As the global population grows, it is important to stop plant pests from spreading into new areas. In less developed countries, plant pests may even cause famine. A European example of a serious plant pest problem is the bacterium *Xylella fastidiosa* that has destroyed olive groves in Southern Italy; it was discovered in Italy in 2013. Plant health is also important for the environment. Foreign plant diseases and pests cause serious forest damage all over the world.

So far, Finnish forests have been spared from damage caused by foreign plant pests. One particularly harmful plant pest for Finland would be the pine wood nematode, because its discovery would make the export of sawn timber more difficult.



# IDENTIFY AT LEAST THE QUARANTINE PESTS



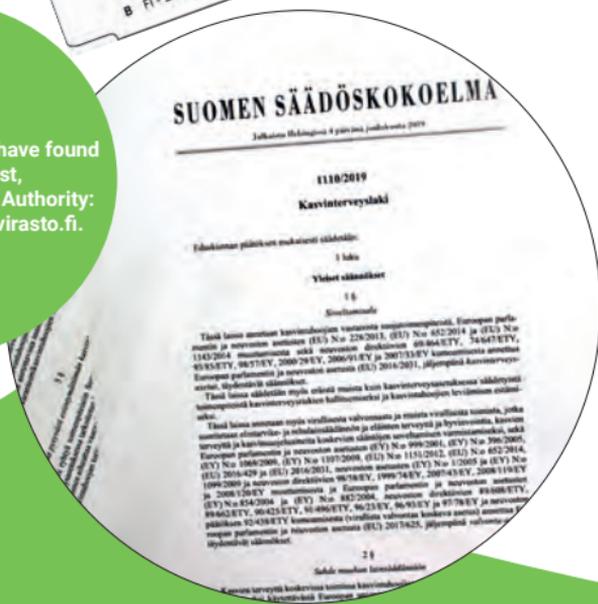
Plant pests that are especially harmful to plant production and forests are called quarantine pests. The aim is to prevent them from entering Finland by monitoring the import and production of plants and plant products.

## QUARANTINE PESTS INCLUDE, FOR EXAMPLE:

**Asian long-horned beetle,  
Colorado beetle,  
fireblight and  
pine wood nematode.**



If you suspect that you have found a quarantine pest, notify the Finnish Food Authority: [kasvinterveys@ruokavirasto.fi](mailto:kasvinterveys@ruokavirasto.fi).



## LEARN MORE ABOUT PESTS



**THE ASIAN LONG-HORNED BEETLE** is a large beetle with antennae that are striped and longer than its body. The larvae of an Asian long-horned beetle damage many deciduous trees by boring into the trunk. The larvae live in birches, aspens, alders and maples, for example.



**THE COLORADO BEETLE** eats potato leaves. Beetles may travel into Finland during the summer in air currents. The worst damage is caused by the plump, orange-red larvae. An adult Colorado beetle is about one centimetre long.



**FIREBLIGHT** is a bacterial disease that first wilts and browns the branches of its host plants. As the disease progresses, necrotic spots form on the branches and the trunk. In the end, the plant looks like it was scorched by fire. Fireblight infects for instance apple and pear trees as well as rowan, juneberry, hawthorn and cotoneaster.



**THE PINE WOOD NEMATODE** är is a small nematode that spreads through wooden packaging material and pine sawyer beetles. Pine wood nematodes live inside coniferous trees. As the nematodes reproduce, they prevent fluid circulation in the tree, and in warmer climates, trees die as a result. In Finland, symptoms may not necessarily occur.

## THE SPREAD OF PLANT PESTS CAN BE PREVENTED

Finland complies with the EU plant health legislation in regulating the production of and trade in plants. It is important that companies and citizens identify key quarantine pests and notify the Finnish Food Authority if they find something suspicious. The spread of harmful plant diseases and pests can be prevented by following the instructions on importing and ordering plants.

Importers and exporters promote plant health by complying with the requirements on international trade. Import bans and requirements for treatments have been set on plants and plant products imported from countries outside the EU. Shipments containing plants and plant products are inspected both before they are sent and when they arrive within the EU.

There are separate requirements for growers and sellers of plants. At farms and other places of cultivation, plants are checked in case of plant diseases and pests both during production and before sale. Compliance with the requirements is demonstrated with a plant passport in the internal trade within the EU.



# CONTROLLED NEGLECT IN A GARDEN INCREASES BIODIVERSITY

Biodiversity refers to the full spectrum of life: the genetic variation within a species, the richness of species and the diversity of their habitats. Everyone can promote it through small acts in their own yard or garden.

by not mowing a part of the lawn because hedgehogs and insects, for instance, like controlled neglect.



leaving a tree to decay or by creating a decaying wood garden – this gives you a chance to watch the life in the garden, admire polypores or even see a great spotted woodpecker feeding its young.



removing invasive alien species from the immediate surroundings.



planting healthy, inspected plants.



building a green roof or wall.



setting up a bug hotel.



More information: [www.sll.fi](http://www.sll.fi), [www.vieraslaajit.fi](http://www.vieraslaajit.fi)



# GIVE POLLINATORS A HOME

Flowering wild and cultivated plants as well as garden fruit and berries need good pollinators. Because their nesting places have been decreasing, pollinators that nest in holes need bug hotels, that is artificial nests (straw nests, birch blocks, combination nesting boxes).

| TYPE OF HOUSING  | EQUIPMENT  | PREPARATIONS   |
|--|--|--|
| <b>Straw nest</b> = straws in a jar  | milk cartons, cow parsley, reeds, carpet knife, cable ties, wood glue  | in late summer or early autumn, gather reeds and cow parsley to dry in a place protected from the rain.  |
| <b>Birch log nest</b> = nesting holes drilled into the log                                   | sawn birch logs, wood glue, drill and drill bits (diameters: 4, 6 and 8 mm), mounting hooks, cable ties                          | in late summer, saw a fresh birch trunk with a diameter of roughly 20 cm into logs with a length of 20 cm and paint wood glue on both ends of each log. Leave the bark in place. Let dry slowly. |
| <b>Combination nesting box</b> = nesting holes drilled into wood downstairs, straws upstairs | sawn planks, beams, cow parsley, reeds, plastic-coated cardboard (such as empty cake boxes), cable ties, carpet knife, wood glue | in late summer or early autumn, gather reeds and cow parsley to dry in a place protected from the rain.  |

