

Forest Service Information Note

CHALARA FRAXINEA

ASH DIEBACK

DISEASE



Department of
**Agriculture,
Food and the Marine**

An Roinn
**Talmhaíochta,
Bia agus Mara**



Forest Service

**December
2012**

Chalara ash dieback disease

BACKGROUND

Chalara ash dieback disease is a relatively new serious disease of ash caused by the fungal pathogen *Chalara fraxinea* (*Hymenoscyphus pseudoalbidus*). It has spread rapidly across much of Europe, with the majority of European countries where ash is present now reporting dieback. The organism has relatively recently been identified, but its origin remains uncertain and its biology is not yet fully understood.

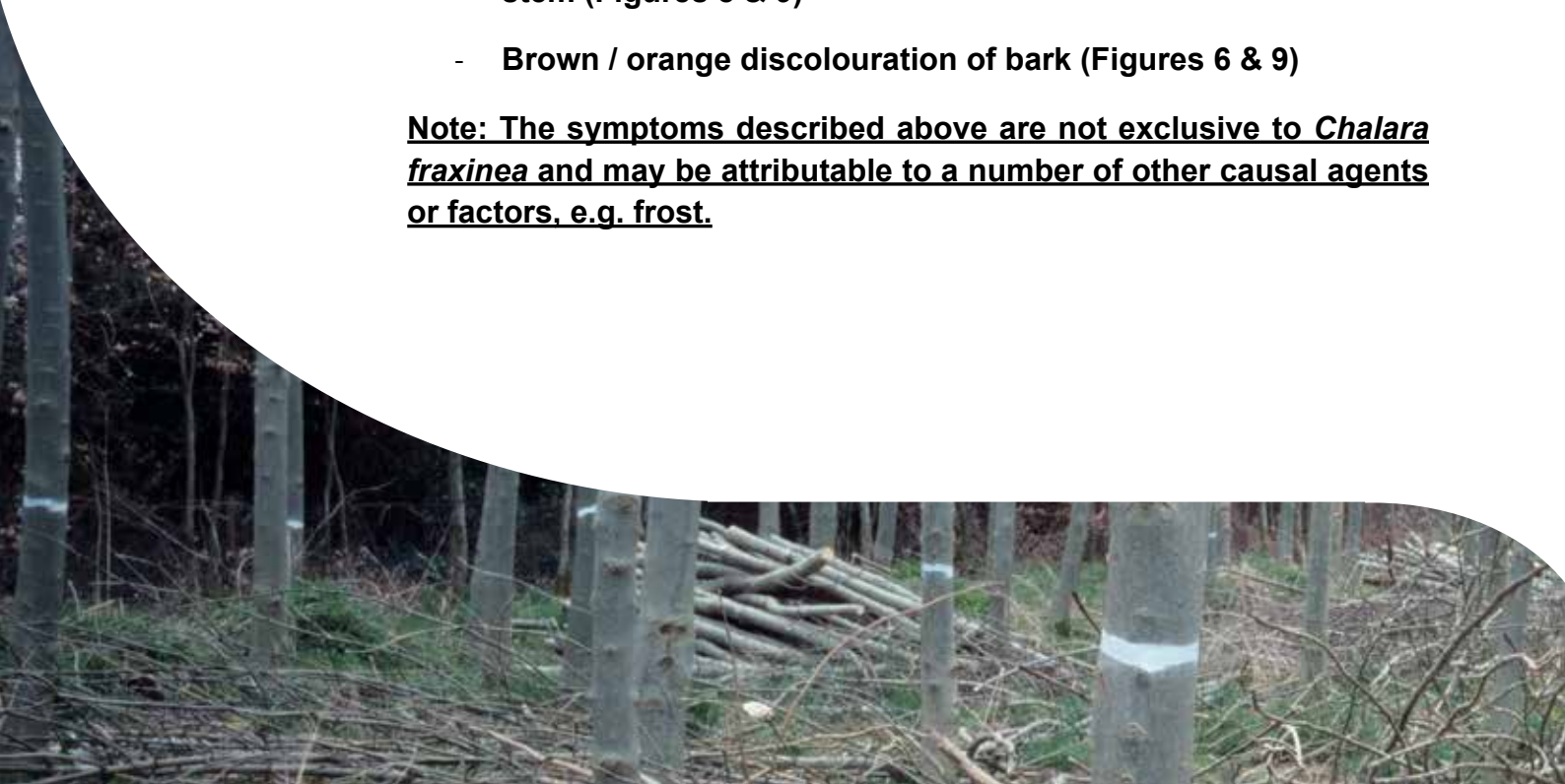
SYMPTOMS

Common ash (*Fraxinus excelsior*) is susceptible to Chalara ash dieback disease, as are a number of other species of ash. The disease can affect ash trees of any age and in any setting. Mortalities can occur, with younger trees (less than 10 years old) succumbing more rapidly.

The wide range of symptoms associated with Chalara ash dieback disease includes:

- **Necrotic lesions and cankers along the bark of branches or main stem (Figures 1, 2 & 3)**
- **Foliage wilt (Figure 4)**
- **Foliage discolouration (brown / black discolouration at the base and midrib of leaves) (Figure 5)**
- **Dieback of shoots, twigs or main stem resulting in crown dieback (Figures 6 & 7)**
- **Epicormic branching or excessive side shoots along the main stem (Figures 8 & 9)**
- **Brown / orange discolouration of bark (Figures 6 & 9)**

Note: The symptoms described above are not exclusive to *Chalara fraxinea* and may be attributable to a number of other causal agents or factors, e.g. frost.



Necrotic lesions / cankers associated with shoot dieback. In **Figures 1 & 2**, note the diamond/angular shaped lesion developing outward along the stem from the point-of-entry normally provided by a shoot. **Figure 3** shows an older lesion.



Figure 1



Figure 2

Figure 3

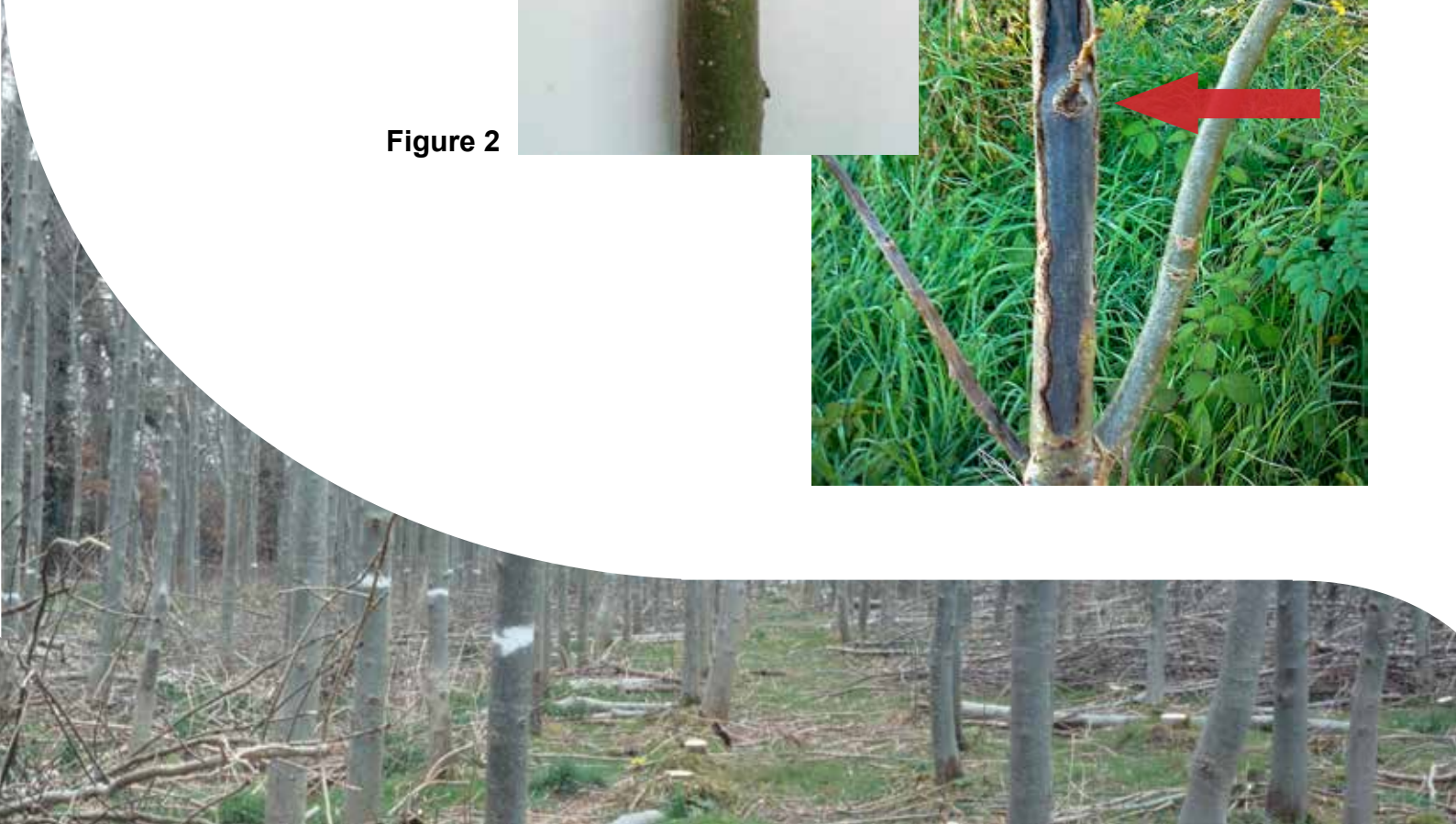




Figure 4



Figure 5

Figures 4 & 5 showing foliage wilt and discolouration. Black / brown wilted or dead leaves may be retained on trees.





Figure 6

Figure 6 Shoot dieback with brown / orange discolouration. **Figure 7** Crown dieback.



Figure 7



Figures 8 & 9 showing abnormal epicormic shoot growth. Note brown / orange bark discolouration in Figure 9 (circled).



Figure 8



Figure 9



DISEASE PATHWAYS

Many details associated with the biology of *Chalara fraxinea* still remain unclear. However, it is likely that plants for planting that are imported from other European countries are the highest risk pathway for spread into Ireland. Wood, including firewood, is also likely to be a pathway.

WHAT TO DO

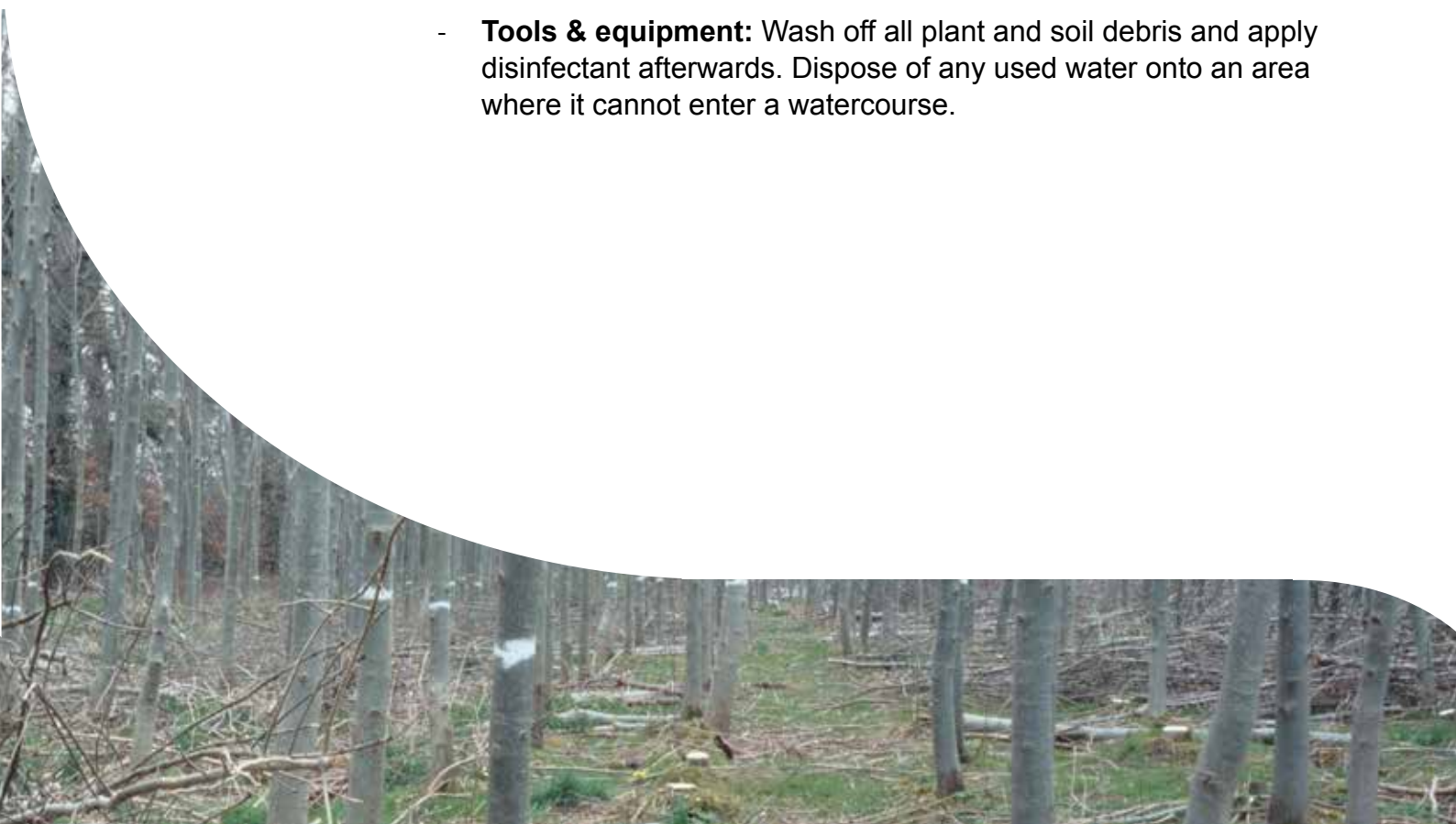
Forest owners, forest nursery staff and members of the public are asked to be vigilant for the disease and report (with photographs, if possible) any sites where there are concerns about **unusual** ill health in ash, to the **Forest Service, Department of Agriculture, Food & the Marine**, by e-mail forestprotection@agriculture.gov.ie or by phoning 01-607 2651. Your report will be followed up by a Forestry Inspector.

In addition, nursery stock producers should direct queries to your local Plant Health Inspector immediately. Alternatively, queries can be sent by e-mail to plantandpests@agriculture.gov.ie, by fax to 01-627 5994 or by contacting the Department's Offices on 01-505 8885.

When leaving a site where ash is present, please remove all plant debris such as leaves etc. from clothing and footwear before leaving the forest. Do not remove any plant material from the site.

Please also observe the following hygiene measures on sites where the disease is suspected, to help avoid any potential further spread of the disease.

- **Footwear:** Wash off all plant and soil debris from boots. Spray your boots with disinfectant and dispose of any used water onto an area where the water will not run into a watercourse.
- **Clothing:** Check all clothing for any plant material.
- **Tools & equipment:** Wash off all plant and soil debris and apply disinfectant afterwards. Dispose of any used water onto an area where it cannot enter a watercourse.





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