Ash Dieback
(Chalara fraxinea)
Purpose of the Meeting

1. Background to ash and recognising ash trees
2. Background to the *Chalara* disease and symptoms
3. Outline of action being taken
4. Current situation in Ireland
5. What do I do if I spot it ...
   a) in my forestry plantation
   b) in my REPS/AEOS planting
   c) somewhere else
6. Further information, contacts
7. Q & A
Background to ash and recognising ash trees
Ash in Ireland

- Ash: a native fast growing commercial broadleaf with multiple high value end-uses, from on-farm firewood to hurley butts to furniture making

- Ash represented 10% of afforestation in Ireland → we need to protect *existing* ash plantations
  - Nearly 20,000 hectares of ash

- Ash occupies an important place in Irish culture

- Biodiversity value: One of our most important and widespread native trees, supporting a vast array of wildlife and flora. Found in 91% of our native woodlands

- A key part of the Irish rural landscape – a major component of hedgerows throughout the country
Recognising ash

Ash leaves are made up of a number of leaflets (9-13) aligned opposite each other on a leaf stalk. (Not to be confused with Rowan/Mountain ash).

Important: Don’t confuse Rowan (Mountain Ash) with ash. Rowan is not affected by Chalara ash dieback.
The buds are black and are found in opposite pairs.

Bark on younger trees and shoots is often a grey-green colour.
Background to the Chalara disease and symptoms
Background to the disease

- A relatively new serious fungal pathogen of ash (Important to note the disease only affects ash species)
- The species *Chalara fraxinea* was first described in 2006, with the harmful stage *Hymenoscyphus pseudoalbidus* identified in 2010.
- Scientific understanding of the biology is growing.
- Airborne spores are released in June – Sept. from previous year’s fallen leaves
- Leaves of healthy trees become infected, causing a dieback of the shoot
- Disease causes death, particularly younger trees
Common ash distribution (in blue) and spread of the fungus in the wild (years)

Compiled by Thomas Kirisits and FORTHREATS collaborators as part of the EU project 'FORTHREATS'.

The blue shaded area shows the distribution range of common ash (Fraxinus excelsior). (Source: EUFORGEN)

Subsequently found in the wild in Britain 2012
Images of Symptoms

Foliage wilt and blackened leaves
Foliage wilt and blackened leaves
Branch dieback
Areas if dead bark, lesions or cankers, often diamond shaped or angular
Areas of dead bark, lesions or cankers, often diamond shaped or angular
Lesions at an advanced stage
Multiple shoots
Leader death
Stem discolouration and leader dieback. Note also multiple shoots
IMPORTANT: Ash is susceptible to many commonly occurring diseases as well as frost and browsing damage.

The following **ARE NOT** Chalara ash dieback:

These ash cankers are not Chalara ash dieback, and **are not similar** in appearance to the disease.
IMPORTANT: Ash is susceptible to many commonly occurring diseases as well as frost and browsing damage.

The following **ARE NOT** Chalara ash dieback:

Leaf blackening and wilt caused by late spring frosts. These symptoms **are similar** to wilt caused by ash dieback. If these symptoms are observed in July-Sept you should contact DAFM.
Raising Awareness of the disease

Watch out for Ash Dieback (Chalara fraxinea)

What is it?
Ash Dieback is a serious disease of ash trees caused by the fungal pathogen Chalara fraxinea (Hymenoscyphus pseudoalbidus). It has spread rapidly across much of Europe. The disease can affect ash trees of any age and in any setting. The disease can be fatal, particularly among younger trees.

SOME SYMPTOMS TO LOOK OUT FOR*

*Symptoms similar to the above may be caused by other factors, e.g. frost.

What to do?
Forest and land owners are asked to be vigilant for the disease and to report (with photographs, if possible) any sites where they have concerns about unusual ill health in ash, to the

Forest Service, Department of Agriculture, Food and the Marine,
by e-mail (forestprotection@agriculture.gov.ie) or phone (01-607 2651).

Please do not remove any plant material from a site containing suspect trees. Also, please observe appropriate hygiene measures on sites where the disease is suspected, to help avoid its potential spread.

For further information, visit: www.teagasc.ie/forestry and www.agriculture.gov.ie or scan the QR code. Follow us on Twitter @teagascforestry for Chalara updates.
Raising Awareness

- Teagasc and Department websites
- Poster and leaflets developed
- Media
  - National and local adverts, press releases, journalists, etc.
- Department of Agriculture, Food and the Marine
  - SMS message to 90,000 farmers, Information Note
- 45,000 Teagasc clients
  - Today's Farm magazine, forestry and agri-environment newsletters
- Regular updates via Teagasc’s Twitter, Facebook and e-News
- Highlighted at the Forestry Show in Stradbally
- This series of 22 information meetings
Outline of action being taken
Action taken

- Ill-health in ash has been observed in surveys over the last number of years, but there were no positive results for *Chalara fraxinea* until October 2012

- 12 October 2012 – First finding of *Chalara fraxinea* confirmed at an afforestation site in Co. Leitrim

- Material was traced as Danish provenance, shipped from The Netherlands

- Plants associated with the infected batch traced to 10 other sites. Eradication measures at all 11 sites – plants destroyed by burning, completed 24 October
Restricting Imports

- EU is a common market allowing free movement of goods and services
- Ireland exports more agricultural produce than we import
- Under the EU Plant Health Directive many commodities are restricted from movement into Ireland
  - E.g. Conifer logs with bark attached are free to move on the continent but may not land on the Island of Ireland
- The onus is on a Member State to prove its case before restrictions can be introduced
Action taken to restrict imports of ash

- Introduction of measures under national legislation restricting movement of ash plants and wood – in coordination with DARD NI – all-island Plant Health status
- At EU level, ‘Standing Committee on Plant Health’ is evaluating the evidence that supports Ireland’s measures
- In order to maintain legislative measures, Ireland must have a scientific basis – detailed ‘Pest Risk Analysis’ is an essential element
- Must have credible survey data to demonstrate our disease-free status
Restriction on importation of ash plants

A person shall not land an ash plant into the State unless it is accompanied by a Plant Passport or an official statement stating that it originates from an area known to be free from *Chalara fraxinea*.
Restriction on importation of ash wood - firewood

Ash wood may be imported into the State if it originates from an officially certified disease-free area or is kiln dried or has its bark sawn off before entry.
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Restriction on importation of ash wood – ash hurley blanks in plank form

Ash wood may be imported into the State if it originates from an officially certified disease-free area or is kiln dried or has its bark sawn off before entry.
Ongoing actions (forestry)

- Over 100 foresters from both State and private sector trained in the recognition of symptoms
- Winter survey carried out on over 300 afforestation sites planted between 2008 and 2012, where imported plants have been used
- Survey has been extended to ash sites of all ages and settings, regardless of the origin of the plants
- Follow-up carried out where ill-health reported
- Disease control measures are being applied
- Introduction of funding for ash forest clearance and replanting under Reconstitution (Chalara Ash Dieback) Scheme
- Forest Service grant aid for the planting of ash currently suspended.
Ongoing actions (non-forestry)

- All horticultural nurseries surveyed
- Ongoing survey of parks, public and private green areas, motorways, town roads, industrial estates and farming schemes
- Over 1000 samples submitted for laboratory analysis
- Ash has also been suspended from new AEOS schemes and is no longer approved by the NRA for planting
Current and future actions

- All-Ireland Control Strategy being developed with Northern Ireland following public consultation
  1. Eradication
  2. Research
  3. Engaging with public
  4. Advice to ash woodland owners

- Assisting UK with EU required update on Pest Risk Analysis

- Publicity campaign planned for the summer months, as well as this series of 22 information meetings

- To date, there have been no findings in the wider environment and all confirmed findings are linked to imported plants. Survey of ash growing in all situations is ongoing.

- We are expecting to learn more about the situation in Ireland during the coming growing season
Current situation in Ireland
## Confirmed findings, as of 17 May 2013

<table>
<thead>
<tr>
<th>Location Type</th>
<th>No of Confirmed Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry Plantations</td>
<td>36 (Carlow, Cavan, Clare, Galway, Kildare, Kilkenny, Leitrim, Longford, Meath, Tipperary, Waterford)</td>
</tr>
<tr>
<td>Horticultural Nurseries</td>
<td>15</td>
</tr>
<tr>
<td>Garden Centres</td>
<td>3</td>
</tr>
<tr>
<td>Private Garden</td>
<td>2</td>
</tr>
<tr>
<td>Farm Planting/REPS/AEOS</td>
<td>13</td>
</tr>
<tr>
<td>Roadside Planting</td>
<td>13</td>
</tr>
</tbody>
</table>
Map of confirmed findings, as of 17 May 2013

Note, horticultural nursery and garden centre findings not shown.
What to do?

- Afforestation sites
What to do if you suspect *Chalara* within your ash forest?

- If you spot suspect trees within your forest, contact the Forest Protection Section of the Forest Service (**01-607 2651** or **e-mail forestprotection@agriculture.gov.ie**)
- If possible, send photos, including close-ups of the leaves and shoots.
- Please **do not** send samples in the post.
- A Forestry Inspector will follow up your report, and if necessary, will collect samples.
- As a precaution, please remove all plant debris such as leaves, etc. from clothing and footwear before leaving your ash forest. Do not remove any plant material from the site.
What are the next steps if clearance of ash from your plantation is required?

- Owner & Registered Forester informed by phone and letter of:
  - the need to remove the ash and
  - The Reconstitution (*Chalara*) Scheme, to fund site clearance & replanting using alternative species

- Owner & Registered Forester develop the scheme application and a Sanitation Action Plan (SAP) detailing the site clearance works...

- ...with the assistance of the Forest Service where required (District Inspector & Forest Protection Section)

- General approach: uprooting of ash, collection of trees / leaf litter, onsite burial. Other approaches acceptable, if appropriate.
What are the next steps if clearance of ash from your plantation is required? (contd.)

- Forest Service issues a Disposal Notice, based on the agreed SAP
- Site clearance commences, following SAP.
- Work assessed and Site Clearance Grant paid
- After that, the normal Recon. Scheme cycle commences, comprising separate Replanting and 4-Year Maintenance Grants
- Site Clearance Grant 1,500 euro / ha
- Replanting & 4-year Maintenance Grants as per Afforestation Scheme grant rates, without the fencing allowance
- Premiums unchanged for 2013, adjusted after replanting, depending on species
Site Hygiene

All ash sites

- Remove all plant debris such as leaves etc. from clothing and footwear before leaving the site

Sites where ash dieback is suspected. *In addition:*

- Footwear:
  - Wash off all soil and plant debris from boots
  - Spray your boots with disinfectant
- Clothing:
  - Check all clothing and remove any plant material
- Tools and equipment:
  - Wash off all soil and plant debris
  - Apply disinfectant afterwards
What to do?

- AEOS / REPS sites
Trees planted under Agri-Environment Schemes

REPS 3

- Option 4A Tree Planting: 280,000 trees
- Option 8A Landscaping around the Farmyard: 68,000 trees

REPS 4

- Option 4B Broadleaved Tree Planting: 1,440,000 trees
Trees planted under Agri-Environment Schemes

AEOS 1
- Standard Trees: 125,100
- Whips: 159,614

AEOS 2
- Standard Trees: 34,957
- Whips: 25,564
Chalara (Ash Dieback)

- is an important issue for farmers

- *Over 2 million* trees planted under Agri-Environment schemes since 2004
- Farmers also plant individual trees outside schemes
- Ash is a favourite choice of tree for farmers
- Ash is common in hedgerows
<table>
<thead>
<tr>
<th>Ash in hedgerows</th>
<th>Frequency of occurrence in sampled 30m strips of hedgerow (%)</th>
<th>Abundance Level or Degree of cover %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kildare</td>
<td>57</td>
<td>4 - 10</td>
</tr>
<tr>
<td>Leitrim</td>
<td>68</td>
<td>11 - 25</td>
</tr>
<tr>
<td>Longford</td>
<td>35</td>
<td>4 - 10</td>
</tr>
<tr>
<td>Mayo</td>
<td>27</td>
<td>4 - 10</td>
</tr>
<tr>
<td>Monaghan</td>
<td>52</td>
<td>4 - 10</td>
</tr>
<tr>
<td>Sligo</td>
<td>49</td>
<td>4 - 10</td>
</tr>
<tr>
<td>Galway - East</td>
<td>15</td>
<td>11 - 25</td>
</tr>
<tr>
<td>Galway West</td>
<td>23</td>
<td>11 - 25</td>
</tr>
<tr>
<td>Kerry - North</td>
<td>28</td>
<td>11 - 25</td>
</tr>
<tr>
<td>Kerry - West</td>
<td>22</td>
<td>4 - 10</td>
</tr>
<tr>
<td>Offaly</td>
<td>10</td>
<td>4 - 10</td>
</tr>
</tbody>
</table>
Farmers planting trees

- 2000 farmers who commenced REPS 4 in 2010 – to plant all by end 2013
- Farmers in AEOS and REPS replacing trees which have failed
- Farmers accepted into AEOS 3
- Farmers outside Agri-Environment Schemes

- Do not plant Ash
AEOS/REPS and Force Majeure

- REPS/AEOS farmers with ash plants showing symptoms of ash dieback can apply to the DAFM to remove these plants under *force majeure*.
- No action should be taken by the applicant until the application for *force majeure* is considered and granted by DAFM.
- AES staff will look at the trees to confirm there are symptoms of ash dieback.
- If granted, these trees can be cleared without affecting the participant’s REPS/AEOS payments.
- No compensation for the clearance of any plants under *force majeure*.
- No obligation to replant.
Closing advice

Examine the ash that you have planted

Contact us if you are suspicious
Who do I contact if I suspect *Chalara* ash dieback?

<table>
<thead>
<tr>
<th>If you are...</th>
<th>Telephone: 053-916 5593 or 053-917 0365</th>
<th>E-mail: <a href="mailto:AEOS@agriculture.gov.ie">AEOS@agriculture.gov.ie</a> or <a href="mailto:REPS@agriculture.gov.ie">REPS@agriculture.gov.ie</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>...a current AEOS/REPS applicant making an application for <em>force majeure</em></td>
<td>Telephone: 01-505 8885</td>
<td>E-mail: <a href="mailto:plantandpests@agriculture.gov.ie">plantandpests@agriculture.gov.ie</a></td>
</tr>
<tr>
<td>...a former AEOS/REPS participant, landowner who has planted ash trees for landscaping, a nursery stock producer or a local authority official</td>
<td>Telephone: 01-607 2651</td>
<td>E-mail: <a href="mailto:forestprotection@agriculture.gov.ie">forestprotection@agriculture.gov.ie</a></td>
</tr>
<tr>
<td>...a forest owner and others</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Further information

Websites

www.teagasc.ie/forestry
www.agriculture.gov.ie/forestservice

Remember:
Do NOT take samples