Ardoch of Gallery
Integrated control of grass weeds

This was the ninth meeting of the Ardoch of Gallery focus farm discussion group, considering practical and profitable ideas to improve the farm business.

Ardoch of Gallery update

Host Willie Officer outlined progress at Ardoch of Gallery
Willie updated the group on what’s been happening at Ardoch; key points included:

- Bulbs were completed on 19th July (later than usual due to weather). The quality was good and all made the grade for export.
- Laureate Spring barley performed better than Concerto at 3.2t/ac against 2.6t/ac. Skinning levels were comparable on each variety.
- Finished lifting on 31st October having lifted 580 acres.
- Salad potatoes were average yields with the challenge being getting the timing of burn down right.
- Seed potatoes have yielded well but with too many larger ware sized and the market is poor.
- Second lorry on the road having seen a good demand for haulage work potatoes and fertiliser.

Grass Weed Control

David Ross from SAC Consulting; using an integrated approach!
David detailed the principles of grass weed control and how an integrated approach is required for success. The main points are detailed below:

- An integrated approach means; understanding the target weed, crop choice and rotation, cultivation method, method of establishment and then chemical control
- Weed biology is critical to control, knowing when it germinates, how competitive it is, how persistent it is in the seed bank. The table above shows how long seeds can survive in the seedbank.
- Brome control can be achieved through; good ploughing, spring cropping/break crops, delayed drilling and glyphosate pre-drilling, clean machinery, shallow cultivation encourages chit, appropriate herbicide use.

<table>
<thead>
<tr>
<th>Weed</th>
<th>% Decline</th>
<th>Longevity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brome</td>
<td>90</td>
<td>&lt; 5 years</td>
</tr>
<tr>
<td>Blackgrass</td>
<td>75</td>
<td>&lt; 5 years</td>
</tr>
<tr>
<td>Annual Meadow Grass</td>
<td>X</td>
<td>&gt; 5 years</td>
</tr>
<tr>
<td>Italian Rye grass</td>
<td>X</td>
<td>&gt; 5 years</td>
</tr>
<tr>
<td>Wild Oats</td>
<td>X</td>
<td>&gt; 5 years</td>
</tr>
</tbody>
</table>
Weed Control—Lessons from the South

Be vigilant and know your enemy!

Paul Gosling, Research Manager from AHDB, passed on his expertise and experience from the work he has done in England on blackgrass to inform the group. His key points are detailed below:

• Herbicide resistance is widespread and spreading throughout England.
• There are very few new herbicides coming onto the market which is not sustainable.
• Brome and Blackgrass are very good at becoming resistant.
• Blackgrass is a problem mainly in SE England as it prefers heavier soils and thrives in milder winters.
• First case of resistance in England was seen in 1984 on 2 farms in 2013 this was estimated to be 20,000 farms.
• Main control measures; stale seedbeds, delayed drilling, spring cropping (only 10% of Blackgrass germinates in spring), use of fallow and grass leys (decline in seedbank 70-80%/year)
• Is it Blackgrass inevitable in Scotland? - No, more spring cropping, more ploughing, better soil moisture which improves pre-emergence herbicide application, more diverse rotations.
• Brome is probably the bigger threat in Scotland, due to earlier sowing of winter crops, use of min till, fewer spring crops in some areas.
• Herbicide options are limited to control brome especially in winter barley.
• For soft, rye and meadow brome leave the seed on the top of the soil for a month to allow germination and then bury.
• For chemical control Autumn applied Broadway Star gives good control.
• Other factors which can have a big influence are; rotation (having a mix of Autumn and spring sown crops and cereals and legumes/brassicas) poor drainage from neglected field drains and ditches leaving soils wet.
• Understand your enemy! - which species are you controlling, if poor control ask why?, keep good field records of problem areas.

There are nine climate change focus farms in Scotland. Keep up to date with their activities at

www.farmingforabetterclimate.org

Meetings are free to attend and all farmers are welcome.
For Ardoch of Gallery, contact farm facilitator David Ross in the SAC Stonehaven Office on 01569 762 305 or david.ross@sac.co.uk

Farming for a Better Climate is funded by the Scottish Government as part of the Farm Advisory Service (FAS). The Climate Change Focus Farm programme is supported as part of its Veterinary and Advisory Services (VAS) legacy activities.