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Teagasc Oak Park

Meadow grass & wild oats control

National Tillage Conference 2025

Wednesday, 29th January | Lyrath Hotel, Kilkenny

www.teagasc.ie/tillagecon25

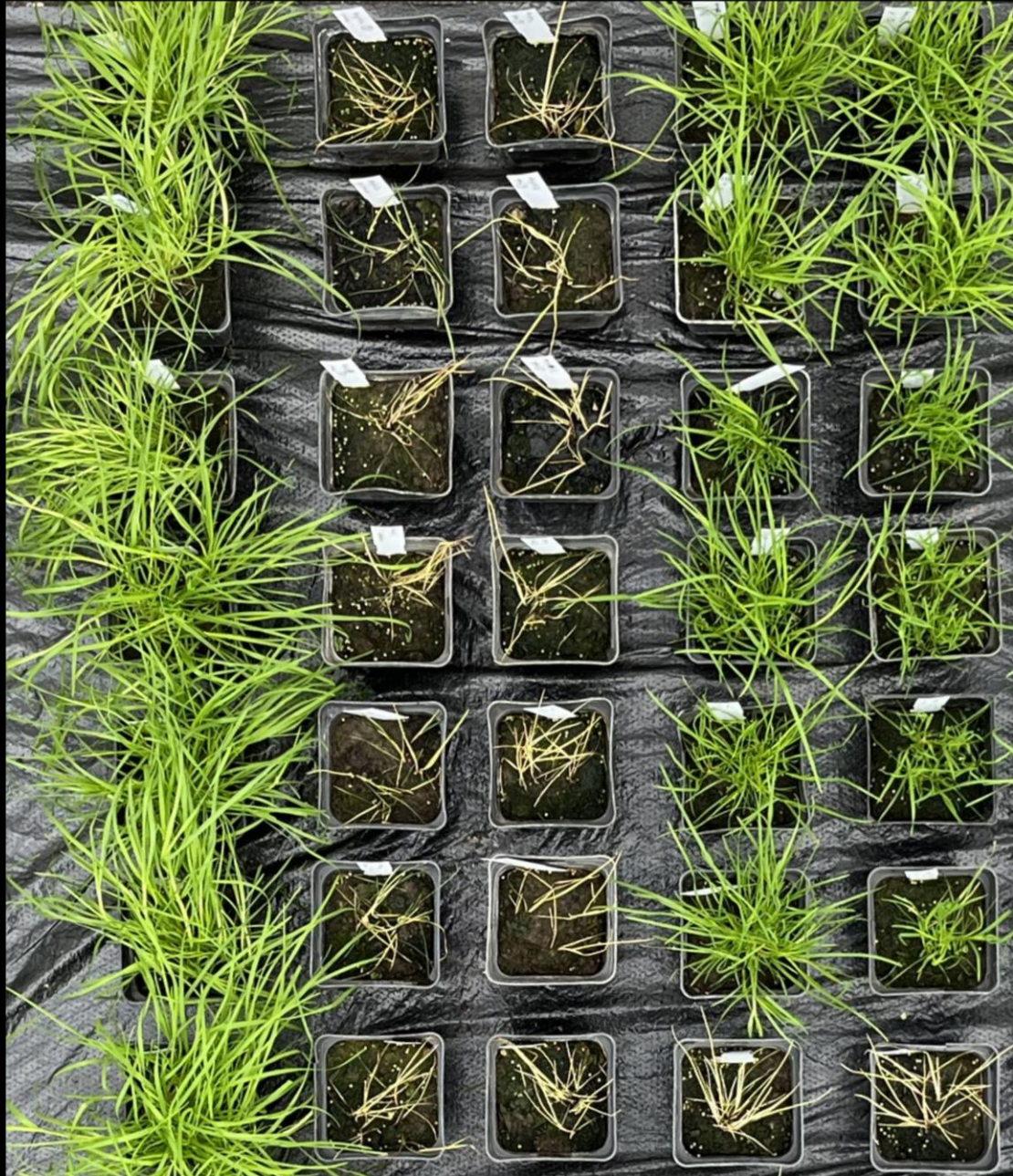
What is causing the increase in resistance?

- **Annual meadow grass:**
 - 14 out of 16 suspect samples were ALS-resistant
 - More use of spring herbicide ALS-Pacifica
- **Spring wild oats:**
 - 57 out of 168 suspect samples were ACCase-resistant
 - Continuous use of one product ACCase-Axial

Untreated Centurion Glyphosate Pacifica Pacifica
 1 L/ha 1.5 L/ha 250 g/ha 500 g/ha

Resistance in meadow grass (harvest 2024)

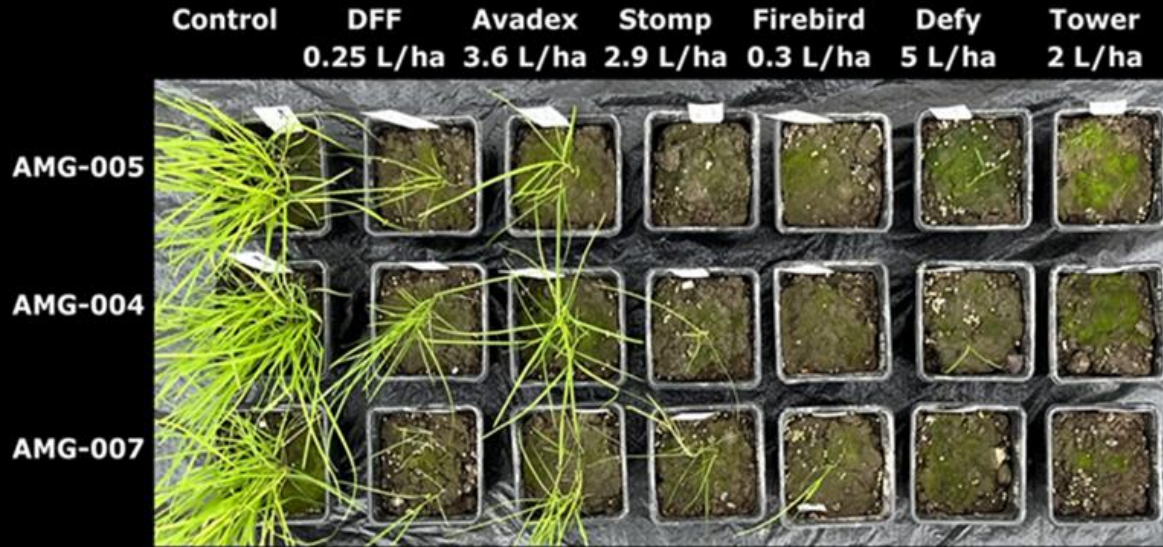
Cork
Meath-1
Meath-2
Dublin
Louth-1
Louth-2
Sensitive



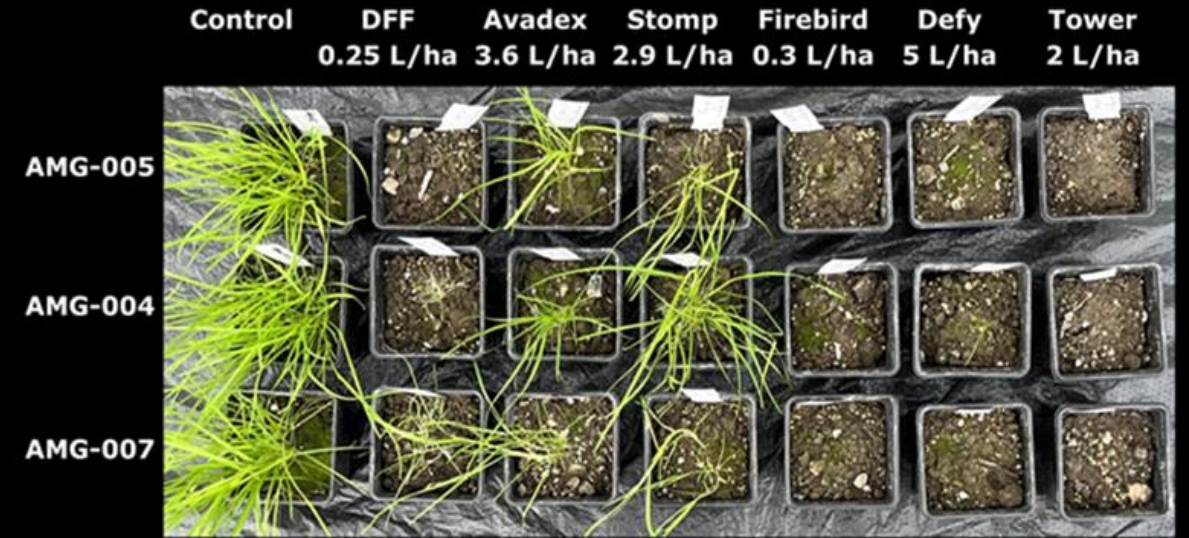
County used as population ID

Efficacy of autumn residual herbicides on meadow grass

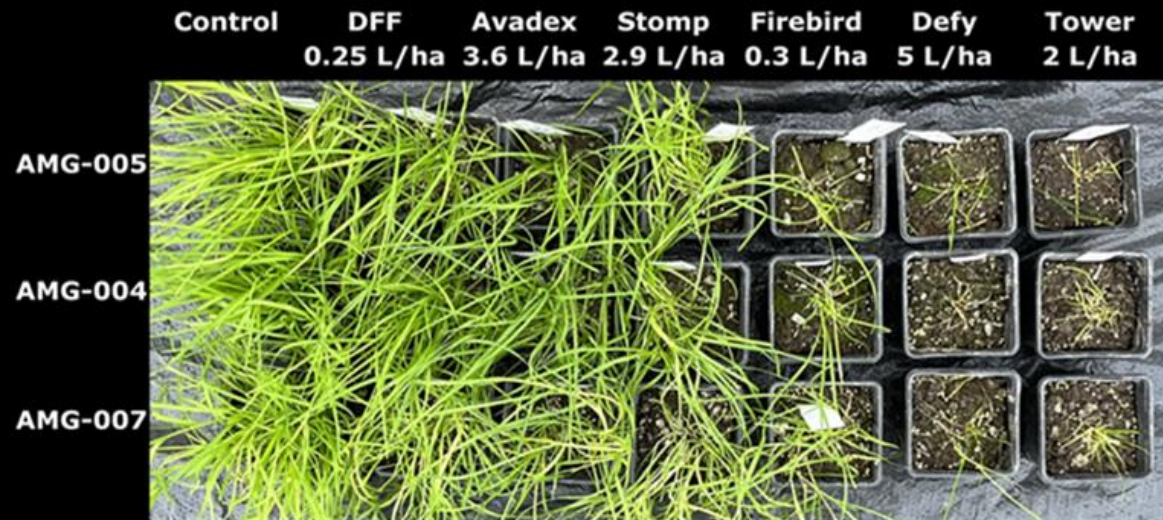
A. Sprayed at the pre-emergence



B. Sprayed at the 1-leaf stage



C. Sprayed at the 2-4 leaf stage



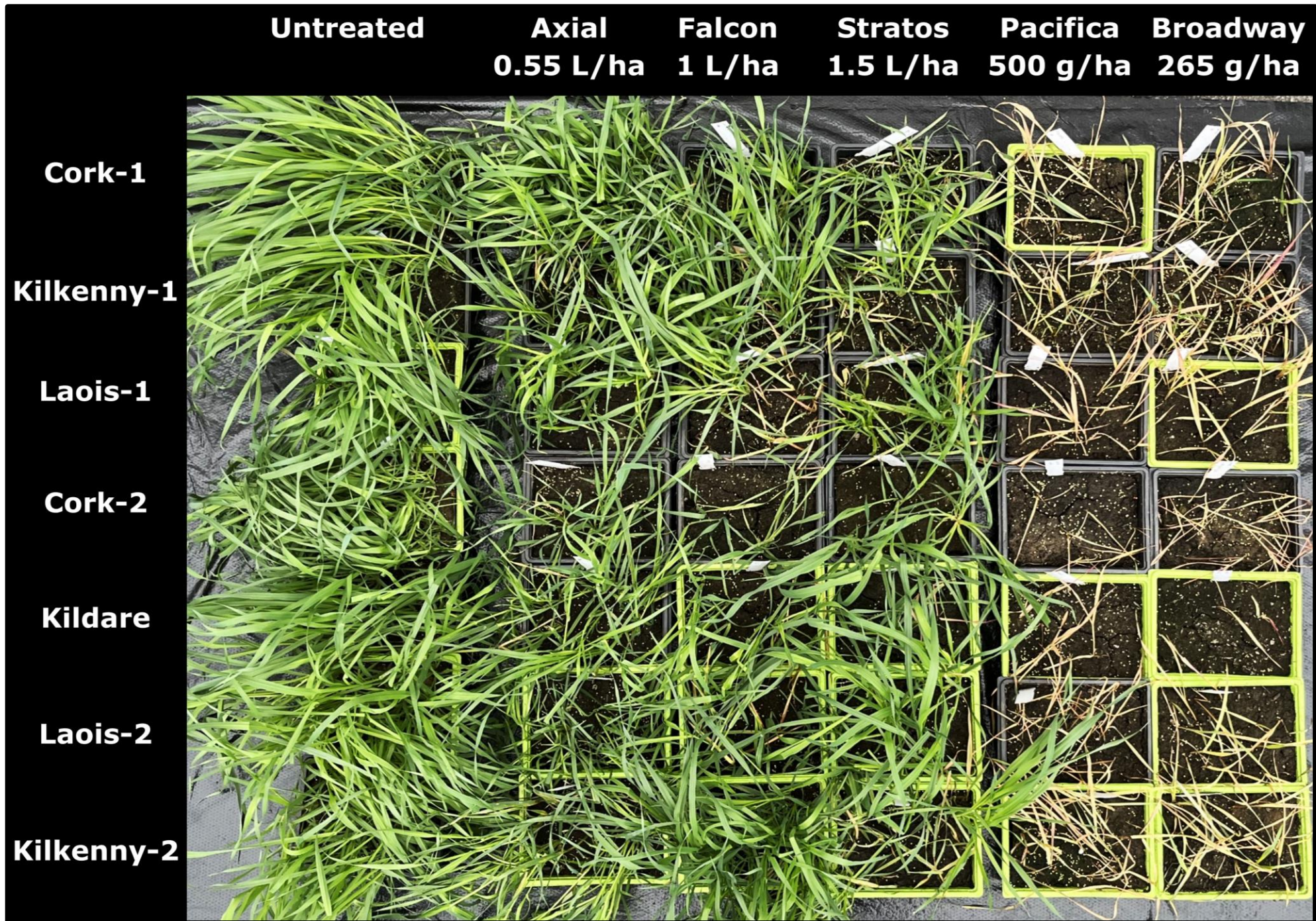
D. Sprayed at the early tillering stage



Results are specific to annual meadow grass

Resistance in wild oats (harvest 2024)

County used as population ID



Key resistant weeds and emerging threats

- **ACCase/ALS-resistant grass weeds:**
 - **Black-grass / Italian ryegrass:** some populations are also glyphosate-tolerant (@ 1.5 L ha⁻¹)
- **ALS-resistant broadleaf weeds**
 - **Poppy / Chickweed / Corn marigold / Speedwell**
- **Emerging threats**
 - Rat's tail fescue
 - Willow herb

Take home message ...

- Autumn-applied residuals are critical to avoid resistance in meadow grass
- Farms with ACCase-resistant wild oats have only one herbicide option available (ALS-Pacifica in wheat)
- There is an urgent need to develop IWM practices
- **Avail of free resistance testing for your suspect (grass or broadleaf) population as a part of the DAFM-EVOLVE grass-weed research project**