

Barley Seed Health & IPM



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Teagasc Oak Park



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National Tillage Conference 2024

Wednesday, 31st January | Lyrath Hotel, Kilkenny

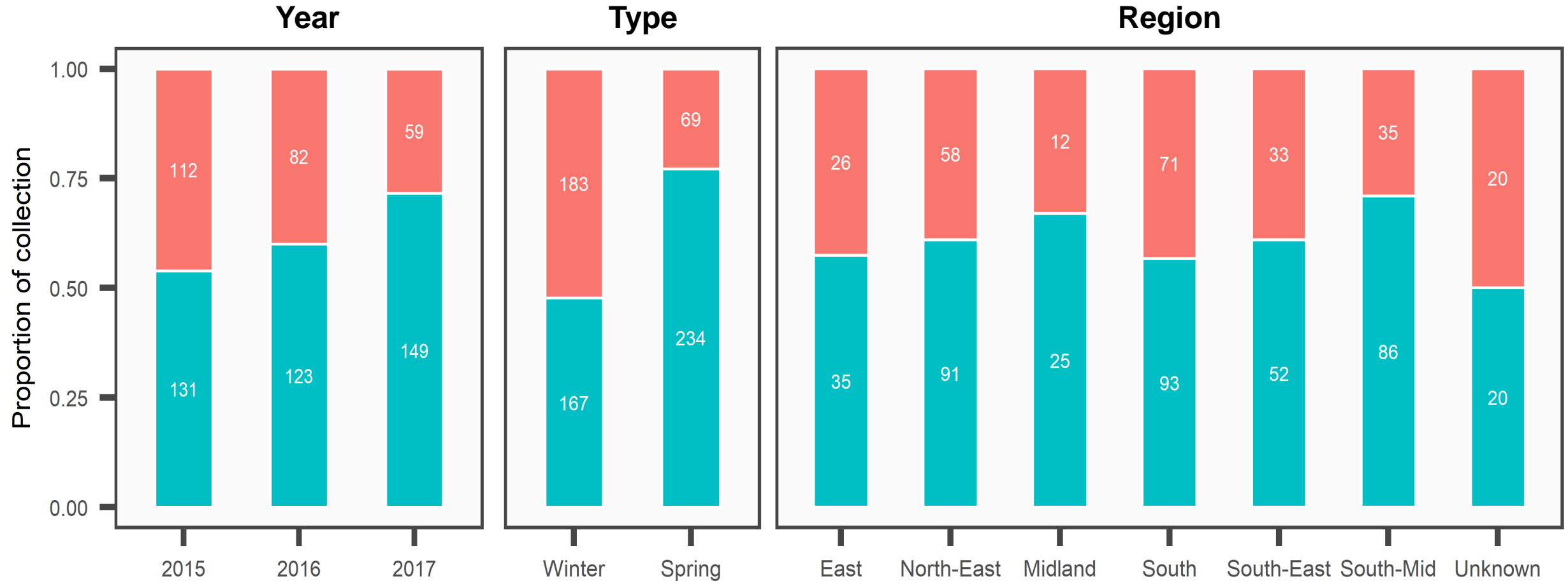
www.teagasc.ie/tillagecon24

What are the key barley diseases?



Can be seed borne

Ramularia present in Irish seed



 Negative
 Positive



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Food and the Marine

Now possible to detect multiple pathogens in seed



Digital PCR

Increased sensitivity & robustness



- Ramularia
- Rhynchosporium
- Net Blotch (net / spot)

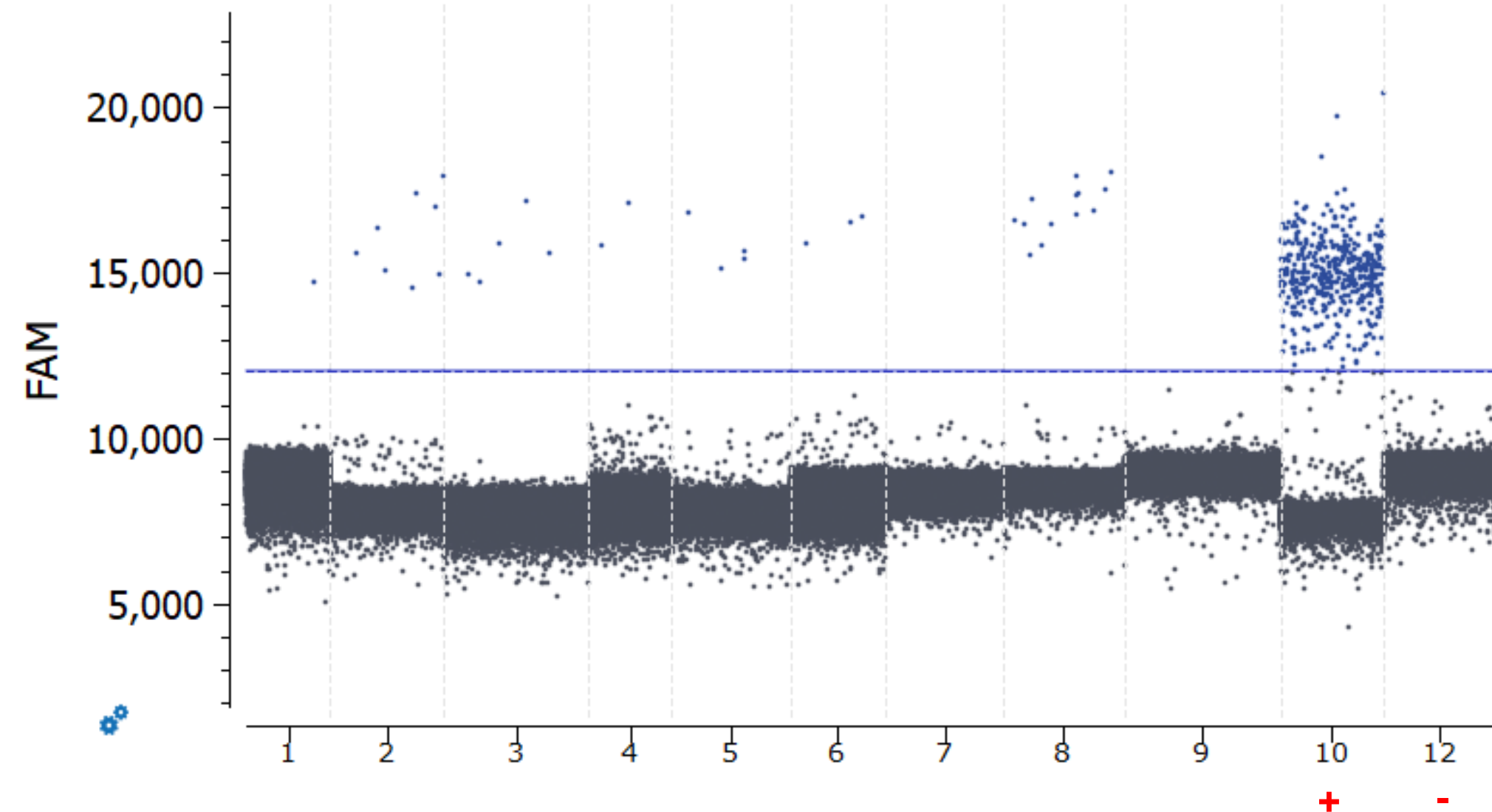


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Detection of both spot and net form in winter barley

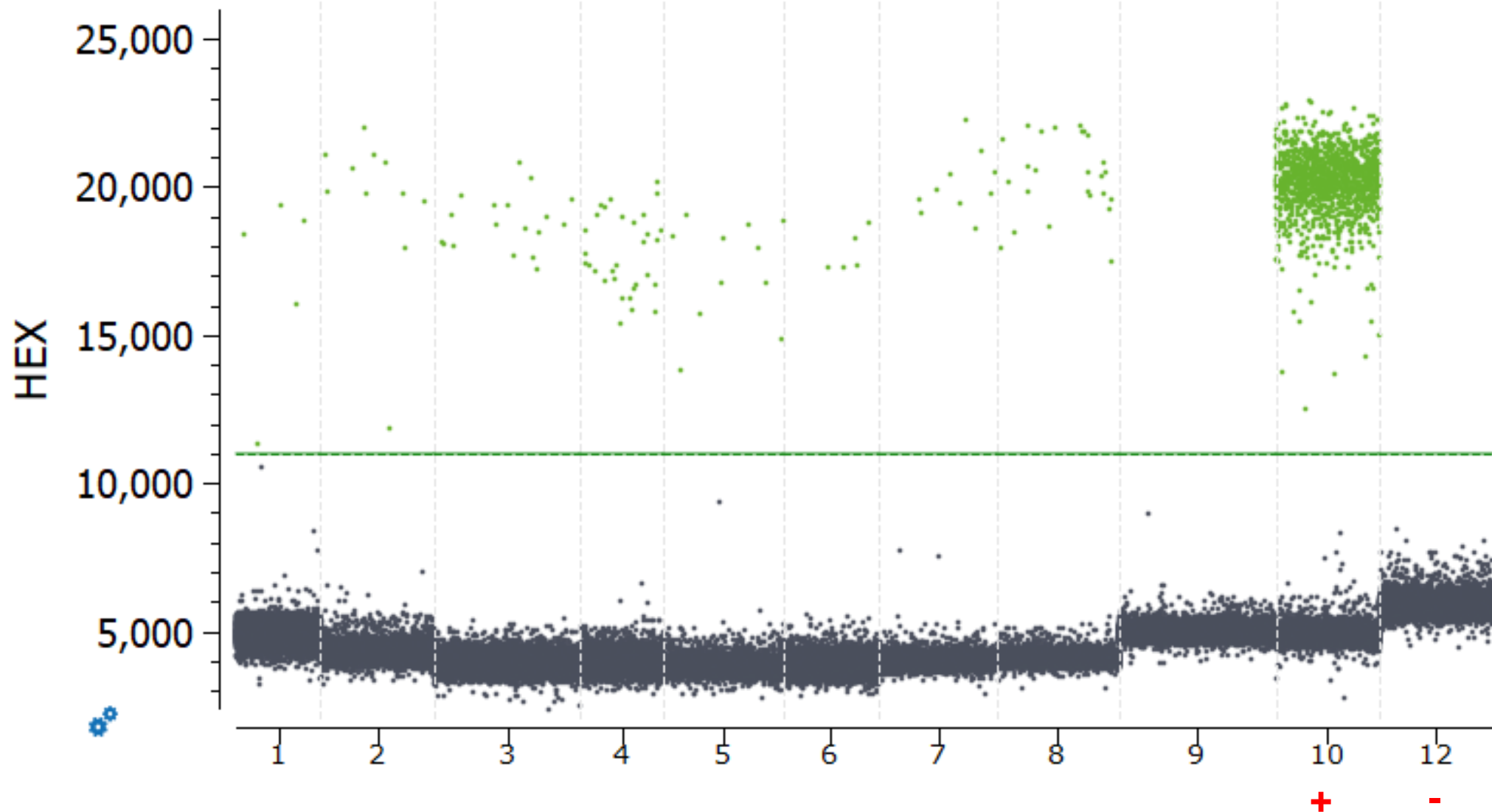
Net form: *P. teres* f *teres* (from historic seed sample, 2015)



cv KWS Tower

Detection of both spot and net form in winter barley

Spot form: *P. teres* f *maculans* (from historic seed sample, 2015)



cv KWS Tower

Seed health – a part of disease control

- Seed is only one source of inoculum
- Know disease susceptibility of variety
- Where and when it will be sown will also impact disease levels
- 1st step in IPM programme
- Prevention & suppression are key



Dr. Joe Mulhare



Dr. Henry Creissen



OLLSCOIL NA GAILLIMHE
UNIVERSITY OF GALWAY



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IPM2030 – Potential Impacts of Pesticides Regulations

Using a targeted survey to predict potential yield changes associated with changed pesticide usage

Q1. Impact of pesticide reduction <u>without</u> changes in non-chemical pest management	Change
A. How would you expect yield of wheat (% change in tons per Ha) to change if farmers were required to reduce use of the listed cereal fungicides by a total of 50%, assuming no other changes in farmer management practices?	
Please provide the reasoning behind your prediction:	



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