



PRESS RELEASE

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Verticillium wilt – diagnosis and variety susceptibility

Dr Jane Thomas of NIAB's plant pathology department has been researching Verticillium wilt in rape – its diagnosis and varietal susceptibility★. She is of the view that there is still much to learn about the impact of this disease, but there is a range of resistance that can be found in varieties. "Where Verticillium has been a problem, the selection of more resistant varieties could be beneficial. There is now evidence of some consistent results on varietal susceptibility," she says.

Selecting two oilseed rape varieties with known susceptibility to Verticillium, Castille and Excalibur, and two with resistance, Alienor (more resistant) and Trinity (claimed partial resistance), Dr Thomas planted some seeds in soil which was inoculated with the disease and the rest were planted in non-inoculated soil. The incidence and severity of symptoms i.e. presence of microsclerotia in shredded epidermal stem tissue was looked at and categorised as an Index on a scale of 0 to 100.

Variety	Expected reaction	Mean severity index - inoculated	Mean severity index - non-inoculated
Excalibur	very susceptible	52.3	36.8
Castille	very susceptible	51.1	26.8
Alienor	more resistant	28.9	13.4
Trinity	claimed partial resistance	27.9	12.3

The known susceptibilities appear to be reflected in the severity indices shown. Grainseed's variety Alienor had a much lower disease index than the known susceptible varieties, Excalibur and Castille. Dr. Thomas is repeating this experiment for Harvest 2015 using three inoculum levels – very high, moderate and zero.

Neil Groom, Technical Director for Grainseeds says that they have extensive anecdotal evidence of Alienor's ability to resist Verticillium in the field as well as independent UK trials from ADAS.

“Another of our varieties Alegria is also in the same category of being able to resist this disease. With no protection from current fungicides, the only practical solution for growers to reducing Verticillium is by choosing the right variety; we can at least offer growers a choice.”

“These two varieties, Alienor and Alegria, also offer superb autumn vigour, essential now we know the neonicotinoids won’t be here this year, and earliness of harvest, (7 to 10 days earlier than Charger) to fit in with the complexity of harvest and easing workload,” says Neil.

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Word count 368



Verticillium wilt symptoms

For further information on the oilseed rape varieties Es Alienor, Es Alegria, Es Astrid, Es Cubic and Es Mambo, please contact Neil Groom, Technical Director of Grainseed Ltd on 01379 871073 or 07774 720240.

★Taken from “Verticillium wilt in winter oilseed rape- diagnosis and cultivar susceptibility” by JE Thomas and TA Wood, Pathology Department. NIAB, Huntingdon Road, Cambridge, CB3 0LE – Aspects of Applied Biology Proceedings, 127, Crop Production in Southern Britain, Precision Decision for Profitable Cropping pp97-102.