Avon - An oat variety resistant to manganese deficiency

W. J. Toms

Follow this and additional works at: https://researchlibrary.agric.wa.gov.au/journal_agriculture3

Recommended Citation
Available at: https://researchlibrary.agric.wa.gov.au/journal_agriculture3/vol8/iss5/4

This article is brought to you for free and open access by Research Library. It has been accepted for inclusion in Journal of the Department of Agriculture, Western Australia, Series 3 by an authorized administrator of Research Library. For more information, please contact jennifer.heathcote@agric.wa.gov.au, sandra.papenfus@agric.wa.gov.au, paul.orange@dpird.wa.gov.au.
AVON-An Oat Variety Resistant to Manganese Deficiency

By W. J. TOMS, B.Sc. (Agric.), Research Officer, Plant Research Division

In previous issues of "The Journal of Agriculture" (May-June, 1958, and September-October, 1958) attention has been drawn to the apparent resistance of the oat variety Avon to manganese deficiency. A glasshouse experiment carried out in 1958 showed that when manganese deficiency is severe, the variety Avon outyields the varieties Algerian, Fulghum, Ballidu and Dale.

All varieties contained similar total amounts of manganese in their tops and it is therefore probable that Avon shows some internal resistance to the deficiency.

Of the varieties tested, Dale was the most susceptible to manganese deficiency. It would be unwise therefore to sow this oat on land suspected of manganese deficiency.

Manganese deficiency generally occurs unevenly throughout affected paddocks so that although an application of manganese sulphate at 14 lb./ac.* gives large increases in yield on manganese-deficient land, deficiency symptoms are not completely cured on the acutely deficient patches. It could be expected therefore that the use of Avon would give an increase in yield on acutely deficient land that has been treated with manganese fertiliser. Avon should also be of benefit on land that grows a deficient crop only in certain seasons, and is not deficient enough to warrant application of manganese when cropped.

It is stressed that for land on which manganese fertiliser is normally used, the manganese should still be applied when the variety Avon is sown. In 1958 an experiment with rates of manganese sulphate on Avon oats at Moulyinning showed an increase of 6 bush/ac. with the highest rate (42 lb./ac.). This is an appreciable increase considering that the wet season tended to lessen the severity of the deficiency.

*Half a bag of manganese super contains 14 lb. of manganese sulphate.
Save on every tankful of fuel with the **EXTRA PULLING POWER** of the "Wedge-in" grip

Save money on every tractor operation with the **extra pulling power** of Super Sure-Grip tractor tyres. The famous and exclusive "wedge-in" grip conserves fuel by allowing no slip-deviation from powerful, straightline pulling under even the toughest conditions. With Super Sure-Grips you work faster, more economically. See your Goodyear Dealer for Super Sure-Grip tractor tyres with the famous "wedge-in" action.

**For the greatest pull on earth**

**SUPER SURE-GRIP TRACTOR TYRES BY GOODYEAR**

Please mention the "Journal of Agriculture of W.A.," when writing to advertisers.