The use of seed inoculum for subterranean clover in the Jerramungup, Gairdner River areas

William John Toms
IMPORTANT DISCLAIMER

This document has been obtained from DAFWA's research library website (researchlibrary.agric.wa.gov.au) which hosts DAFWA's archival research publications. Although reasonable care was taken to make the information in the document accurate at the time it was first published, DAFWA does not make any representations or warranties about its accuracy, reliability, currency, completeness or suitability for any particular purpose. It may be out of date, inaccurate or misleading or conflict with current laws, polices or practices. DAFWA has not reviewed or revised the information before making the document available from its research library website. Before using the information, you should carefully evaluate its accuracy, currency, completeness and relevance for your purposes. We recommend you also search for more recent information on DAFWA's research library website, DAFWA's main website (https://www.agric.wa.gov.au) and other appropriate websites and sources.

Information in, or referred to in, documents on DAFWA's research library website is not tailored to the circumstances of individual farms, people or businesses, and does not constitute legal, business, scientific, agricultural or farm management advice. We recommend before making any significant decisions, you obtain advice from appropriate professionals who have taken into account your individual circumstances and objectives.

The Chief Executive Officer of the Department of Agriculture and Food and the State of Western Australia and their employees and agents (collectively and individually referred to below as DAFWA) accept no liability whatsoever, by reason of negligence or otherwise, arising from any use or release of information in, or referred to in, this document, or any error, inaccuracy or omission in the information.
The use of...

SEED INOCULUM FOR SUBTERRANEAN CLOVER

in the

Jerramungup, Gairdner River Areas

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

It is unlikely that benefits will be obtained from inoculating Dwalganup or Bacchus Marsh subterranean clover seed sown in the Jerramungup or Gairdner River districts other than on the fine sands of different geological origin (Miocene) occurring in some southern areas of the Gairdner River District.

In Western Australia it is common practice to inoculate the seed of subterranean clover prior to seeding. In many cases it is known that response to inoculation is very unlikely, yet it is felt that it is insurance against a complete failure. Sometimes farmers inoculate seed used to reseed cropped paddocks that had previously grown good subterranean clover stands. Seed inoculation is not necessary in these cases.

If it is necessary to inoculate seed, evidence suggests that lime pelleting (1) is also an advantage, especially if dry conditions follow seeding (Fitzpatrick, Cass Smith, private communication).

The cost of labour and materials for pelleting and inoculating sub. clover seed is roughly 2s. 6d. an acre. In terms of total cost of establishing sub. clover on new land this cost is not great. However it has been demonstrated in some areas that this expenditure is of no benefit.

Results, both from experiments and from War Service Land Settlement bulk sowings, so far indicate that it is not necessary to inoculate seed to be sown on the majority of soils in the Jerramungup, Gairdner River areas.

However, in the southern portion of the Gairdner River project, there are areas of fine sand of Miocene origin varying in depth from a few inches to many feet. In general, these areas occur south of Swamp Road. Experimental work has shown that seed inoculation is essential when planting sub. clover on this type of soil.

On the deep sand ridges, satisfactory establishment of sub. clover has not been obtained—regardless of treatment. It is recommended that this plant should not be sown on such areas.

Off the sand ridges, in areas where fine white sand up to a depth of 3 ft. overlies clay or consolidated ironstone, good stands of sub. clover are obtained with inoculated seed. The clay or ironstone holds up the water in these soils and their higher moisture level is probably the reason for the better clover growth on them compared with that obtained on the ridges. Yields from first year stands on these soils are trebled by the use of inoculum.

If no inoculum is used, good stands of sub. clover are not obtained until the third season.

SUMMARY

(1) Seed planted on fine-textured sandy soils, mainly occurring south of Swamp Road, must be inoculated.
(2) Sub. clover should not be planted on the deep sand ridges.
(3) It appears unlikely that responses to seed inoculum will be obtained in the Jerramungup or Gairdner River areas other than on the soils mentioned in 1 above.
(4) After cropping, it is not necessary to inoculate seed used to reseed paddocks that had previously grown good stands of clover.

REFERENCE

SULPHATE OF AMMONIA
The World's Most Popular Nitrogenous Fertilizer — is IDEAL for use "straight," or in well-balanced mixed fertilizers for all crops. It is entirely safe and its continued and increasing use over a long period in Australia, has made

SULPHATE OF AMMONIA
a powerful influence towards MORE PROFITABLE primary production.

SULPHATE OF AMMONIA
is made in Australia, and is distributed by all major fertilizer companies or their agents.
Use “straight” SULPHATE OF AMMONIA with confidence, and see that all mixed fertilizers you buy contain adequate nitrogen as Sulphate of Ammonia.

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