

THE INTRODUCTION OF CANOLA AND OTHER PROTEIN AND OIL CROPS INTO THE ROTATIONAL SYSTEMS OF THE WESTERN CAPE.

EXECUTIVE SUMMARY

OBJECTIVE

To establish Canola and other oil and protein crops in the W.Cape to provide local requirements of these products and to offer viable crops to help farmers to diversify and rotate.

METHODS

A series of field trials have been conducted over the last few years to establish the most adapted species and varieties, the area in which they are adapted and their management.

An extension document and considerable effort has been made to persuade farmers to grow canola.

RESEARCH RESULTS

Our main effort this last year has been directed at obtaining a greater understanding of the major disease of canola, known as Blackleg and also to try and clarify the crops high requirement for sulphur.

1. 2 variety trials on Blackleg infested land showed a large variation from completely susceptible to highly tolerant. The disease should not be a problem if farmers use the tolerant varieties we recommend and have a minimum of 3 years break between crops.
2. 2 trials with fungicide treatments were not completed because of staff losses but early evaluations showed no treatment effects.
3. The variety trial in a dry season in the Ruens allowed us to detect some tolerance to drought.
4. Adaptation trials with other oil and protein crops (linseed, sunflower, safflower, mustard) in 8 places continue to confirm the superiority of Canola.
5. Some varieties of lentils and peas are now looking promising for very dry areas with rainfall of about 200mm in the growing season.
6. After 2 trials in which canola failed to respond to applied S at 4 N levels, a survey was conducted to see if the element was deficient in certain areas only. Initial leaf analyses suggest that the problem is not important yet but low soil levels in several areas indicate that S could become limiting in the near future. This survey will be continued.
7. As the research of N Raath on cultivation and the Star wheel planter bought with PRT money was apparently not evaluated last year, I include this again. Canola grew very well under minimum tillage but the trial results were severely affected by high wind damage. The Star wheel seems to be successful for direct drilling on non stony land. However care is required to use it on cultivated soils as moisture content is critical in avoiding deep planting or plugging. A density trial is now in the field using this planter to obtain very low (1kg/ha) seed rates.

CURRENT SITUATION

1. The area of canola grown increased exponentially to 16000ha by 1995. It has stagnated since then because of a combination of two late seasons, poor prices and storage (teething) problems (see annexed report). It is hoped that prices will improve once the main buyer, Cape Oil, returns to the market and production can then rise rapidly to satisfy the local market needs in excess of 100000t.
2. Our results are disseminated by a series of presentations to farmers, extensionists and coops and by the publication of our results in Departmental reports and scientific journals. However we are very conscious of the poor ability of the extension service to take our research to the farmer and by our lack of expertise and time to do their work. A good start could be made if someone was to organize farm brochures perhaps by reviving the Farming in S.Africa series. Such an obvious requirement seems to have low priority in the Department. Can the PRT not intervene?