

## Restructuring of Winter Rape Variety Testing in the United Kingdom

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In the United Kingdom the Home Grown Cereals Authority has taken on the responsibility of funding Recommended List trials of oilseed rape varieties. A number of changes to the trials series and protocols have been introduced as a consequence. These include a major investigation of disease pressure with fungicide treated and untreated trials, revised harvest procedures and the publication of regional yield advice.

The 1991/92 growing season has seen a complete overhaul of the testing system for winter oilseed rape in the United Kingdom which has had, traditionally, two components : the National List and the Recommended List. As with other EC member states National List testing is carried out over a two year period with DUS and VCU tests running in parallel. Fifty percent of the trials (4 per year) have been financed by the Ministry of Agriculture, Fisheries and Food (MAFF) with the remaining trials funded by the Breeders through the British Society of Plant Breeders.

The Official Trials are conducted by the National Institute of Agricultural Botany (NIAB) in England and Wales and by the Scottish Agricultural Colleges (SAC) in Scotland.

In the second year of trials the most promising varieties have been included in additional Recommended List trials. Recommended Lists have been published separately for England and Wales and for Scotland.

Funding for this work has come as separate non-statutory grants from the MAFF for England and Wales and the Department of Agriculture Fisheries and Food for Scotland (DAFFS) in Scotland. These grants have been progressively reduced and are now withdrawn altogether as part of the Government's policy of no longer funding 'near-market research', preferring to concentrate resources on more fundamental types of research. It has thus been necessary to seek out new sponsors for Recommended List work.

This role has been taken on by the Home Grown Cereals Authority (HGCA) who raise a levy from growers of both cereal and oilseed crops. The HGCA place the very highest importance on the role of varieties, and their new involvement has led to an expansion of the testing system.

Five major changes have been made:

### United Kingdom Recommended List

A single Recommended List covering the whole country will be produced and issued as a Summary Guide to varieties to all oilseed levy payers. NIAB and SAC will continue to produce their own advisory leaflets for farmers. These will contain much more detailed variety descriptions and regional advice.

### Additional 1st Year trials

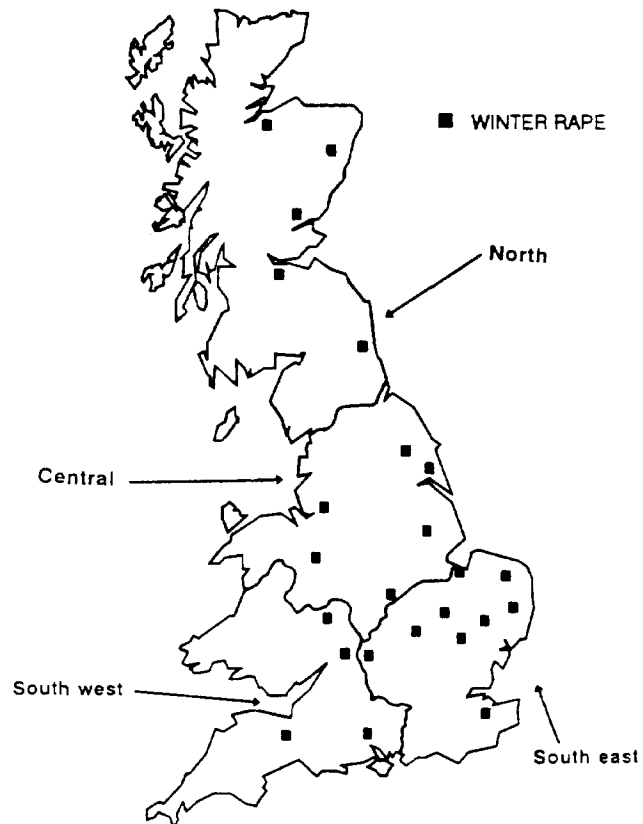
An additional four trials are now grown for year-one varieties to complement the 8 official VCU trials. This will enable selection of varieties for inclusion in Recommended List trials to be made more reliably. To allow this increase the number of year-two Recommended List trials has been decreased from ten to six.

Regional data To provide a more valuable service to growers yield data will be provided for four regions: North, Central, South East and South West, (see map).

This will be the principal rationale for the distribution of Recommended List trials sites. Although the main criterion for Recommendation will be UK suitability, there will be scope for Regional Recommendations of varieties when appropriate.

Although Provisional Recommendation's are made at the end of Year 2, regional recommendations will not normally be made until the end of Year 3 because of the comparatively small number of trials within any one region.

### TRIALS LOCATIONS



### Fungicide Programme

In Scotland Recommended List trials have been grown with fungicide treated/untreated split plot treatments. In England and Wales all trials have been grown with 'best local practice' to control disease. This has usually meant relatively low-input of fungicides. The disease database on varieties has been supplemented by unsprayed disease observation plots at 5 sites and two observation trials inoculated for light leaf spot and stem canker. Now, at 12 'core sites' varieties will be grown in separate treated/untreated trials. Treated plots will receive a comprehensive programme of compulsory sprays in the autumn, at stem extension in spring and post flowering. There is also provision for additional sprays if required to eliminate disease. Supplementary Recommended List trials will be fungicide treated only, using the same spray programme.

Results of the first year of this programme are presented in the 1993 UK Recommended List as an untreated yield figure for varieties expressed as a percent of the control variety yields, and a fungicide response figure. No great significance will be placed on this response until at least a further years data have been collected.

#### Additional Year 3 trials

To further strengthen regional data on varieties which have completed National List and Plant Breeders Rights, trials with private organisations such as breeders, merchants and agronomy groups have been introduced. These trials will be grown principally for yield information with a smaller range of agronomic recording than in other trials.

Table (1) summarises the changes:

Table 1

	Old System	New System
Year 1	DUS tests VCU trials (8)	DUS tests VCU trials (8) Recommended List trials (4)
Year 2	DUS tests VCU trials (8) Recommended List trials (10)	DUS tests VCU trials (8)* Recommended List trials (4)* Supplementary trials (7)
Year 3	Recommended List trials (18)	Recommended List trials (12)* Supplementary trials (12)

\* Trials treated/untreated

#### Harvest technique

Varieties currently in test show a considerable maturity range at harvest. With unpredictable summer weather trials cannot be left to ripen naturally because of seed shedding in early varieties before late varieties are ready for harvest. Two alternatives are available. These are dessication or swathing, both of which accelerate ripening and compress the maturity range.

Of these swathing has been chosen as the preferred option for the Recommended List programme. It is felt that the swathed plants dry more naturally than with desiccation whilst being given more protection from wind damage than standing plants. Haldrup plot swathers have been purchased with the intention of swathing the trials at all twelve core sites and as many of the supplementary sites as possible.

The swathers are proving highly successful and provide a major man-power saving as they remove the need for plots to be separated manually before harvest.

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The introduction of area payment subsidies, as part of the recent reforms to the Common Agricultural Policy, has greatly heightened the interest in oilseed rape variety selection in the United Kingdom. The changes are widely seen as calling for less emphasis on seed yield and more on harvestability, disease resistance and quality, allowing farmers to reduce inputs. With variety numbers entering trials at an all time high and more and more breeders contributing to the flow, it is felt that the new Recommended List programme provides for the most comprehensive series of tests which can respond quickly to the changing demands of the farming industry.