

TESTING OF HERBICIDES FOR REGISTRATION

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Legislation covering herbicide registration requires, or implies, evidence of efficacy. Registration authorities responsible for administration of this legislation at the State level rely on technical referees to guide them on matters concerning efficacy.

Arguments against the need for local research for registration have not received significant support. The difference in performance of new herbicides in this country from that in others, solidly supports this view.

We can therefore accept that significant Australian research is a prerequisite to registration of herbicides.

Technical referees advising registration authorities must make a value judgement on the suitability of research results for reflecting likely commercial performance of the herbicide. These results are a sample of all the environments, situations and conditions in which the herbicide will be used. That so few herbicides behave in unpredicted ways is a vindication of the judgements of referees on research material presented.

A set of guidelines, which are available to company personnel, and include a number of important aspects for consideration in producing data, are used in New South Wales. These do not attempt to provide recipes for testing, but rather recognize that company workers are competent to interpret the issues involved, so allowing desirable flexibility in research design. The guidelines recognize the widely different conditions and herbicide performance throughout Australia (and within the State). The guidelines include such obvious aspects as crop tolerance, efficacy of weed control and method of application, but also cover other important aspects.

Climate. The great variation in climate requires that testing should be in enough situations to represent the range in which the herbicide will be used. Rationale in this is based on the premise that wide screening throughout the State is likely to reflect many climatic variations.

Soil. Conditions to be satisfied in this regard include soil persistence, adsorption characteristics, soil movement, cultural practices normally used for the crop, effect on following crops and, of course, soil type. Obviously this is most important in the use of pre-emergence herbicides.