THE WEED SOCIETY / OF NEW SOUTH WALES

c/o Department of Agriculture, Box 36, G.P.O., Sydney

No. 67/3 JUNE, 1967



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NOTICE OF GENERAL MEETING

The next General Meeting of the Society will be held in the Conference Room, Department of Technical Education, Farrer Place, Sydney, at 7.15 p.m. on

TUESDAY, 4TH JULY, 1967

NOTE: This is the usual meeting room.

The meeting will be preceded by the usual buffet tea in the adjoining Cafeteria, commencing at 6 p.m.

<u>SUBJECT</u>: The meeting will take the form of a series of short talks, supported in several cases by films, on new herbicides.

SPEAKERS: All corporate body members concerned with the manufacture or distribution of herbicides, have been invited to participate. The following have indicated their intention to contribute:

CIBA CO., (P. Wright)
ELANCO PRODUCTS CO., (J. Barrie)
A.C. HATRICK PTY. LTD. (H. Lander)
MONSANTO CHEMICALS, (T.R. Perry)
I.C.I.A.N.Z., (B.C. Fox)
MAY & BAKER, (M. van der Loo)

This meeting will provide an interesting insight into recent and forthcoming herbicide developments.

VISITORS WELCOME

CATERING: We have to advise the caterers of the numbers attending the buffet tea on Friday morning 30th June. Cost of tea, including refreshments will be \$1.50.

Please contact the President (Kelvin Green) or the Treasurer (Alan Mears) at the Department of Agriculture, 'Phone 27 7931, Extension 338, or c/- Department of Agriculture, State Office Block, Sydney, by 10 a.m. Friday 30th June, for buffet tea bookings.

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VICTORIA'S BLACKBERRIES

At the meeting on 17th May, 1967, 28 members and 15 visitors, including' members of the Australian Weeds Committee, heard a stimulating address by Mr. W.T. Parsons of the Vermin and Noxious Weeds Destruction Board on "Problems in the Control of Blackberries in Victoria".

Mr. Parsons disputed the view that the blackberry was only a roadside weed on which too much money was spent. A weed's importance can be measured by what it does to primary production, the area of land it covers and the cost to control it.

There was no doubt that the blackberry was an important weed in Victoria; more money is spent on its control than on any single other weed, it is aesthetically unacceptable along creeks, roadsides and waterways and it is a strong competitor with pastures. So much good grazing land had been overrun that the dairy industry had offered \$8,000 per year to study blackberry control. Because of this offer, it had been possible to appoint a research office to the Vermin and Noxious Weeds Destruction Board to study blackberries alone.

The first big advance in blackberry control was in the early 1950's when 2,4,5-T became available. Experiments then showed that rates of ½1b a.e. per 100 gal (1 part of 80 per cent concentrate in 1600 parts of water) or more gave excellent kills. At rates below 1 in 1600 much less kill was obtained. In all Victorian work the kill has been expressed as percentage reductions in live cane numbers. So that there would be a practical safety margin, a field recommendation of 1 in 1200 was made. These first experiments also showed that addition of 2,4-D gave slightly less effective results overall.

In 1960 areas were found in which good top growth kill had regrown completely 12 months later. A survey showed these areas were quite widespread. Application of higher rates of 2,4,5-T gave longer knockdown but there was still subsequent regrowth. Testing other herbicides on the apparently resistant strains gave variable results.

A seven point research programme has been developed to investigate herbicide resistance in blackberries:

- 1. <u>Taxonomy</u>. Already, eight microspecies which are readily distinguishable by physical appearance have been collected. Points used to differentiate the microspecies include number of segments in the berries, the spacing, size and shape of the spines, the leaf shape, and colour of the leaf undersurface.
- 2. <u>Evaluation of new herbicides</u>. Of those tested, picloram and amitrole were the most promising, but 2,3,6-TBA and Zobar had also given some good results.

- Formulation of chemicals. Granules were particularly interesting since they seemed to give a wider range of time in which they could be used. This was very convenient for the farmer. Picloram granules seemed especially good when applied after slashing the blackberry.
- 4. <u>Timing of applications</u>. This is critical to get the best results from herbicides and Mr. Parsons gave examples later in his address.
- 5. <u>Application techniques</u>. Two points had been found in this work. The stems must be wet, and when the herbicide could be sprayed right into the crown of the plant, best results were obtained.
- 6. Effects of cultivation and cutting in combination with chemical treatments are studied.
- 7. Basic investigations were being made to try and find the resistance mechanisms in the resistant strains.

Results in the past have indicated the variability of reaction of blackberries to various herbicides. Thus, 12 sites, selected for varying degrees of resistance to 2,4,5-T were sprayed each two months for 14 months. Treatments included 2,4,5-T, amitrole and picloram. Evaluations were made 10,16 and 24 months after treatment. The last evaluation was the only one which gave a true representation of plant kill.

The Society's Address

Following the move of most of the Department of Agriculture to the new State Office Block, our postal address is now:-

c/- Department of Agriculture,
 State Office Block,
 Phillip Street,
 SYDNEY.

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However, the Division of Plant Industry, including the Society's "office" is still at Farrer Place, and our temporary 'phone number is 27 7931.

From about mid-July we will be on the Education Department switch (2 0549).

WEED SOCIETY MOTIF

The Executive Committee believes that an appropriate motif, probably symbolising weeds and the various forms of their control, would be a desirable addition to our present letterhead.

The President would welcome any sketches for a motif you can offer.

NEW HERBICIDES

Geigy Australia Pty. Ltd., has provided the following description of Brominil (R), the active ingredient of which is bromoxynil.

Bromoxynil (3,5-dibromo-4-hydroxybenzonitrile) is a selective herbicide of particular interest for weed control in cereal crops. It has good contact activity against several dicotyledonous species, several of which are hormone resistant. It has been extensively tested in Australia in cereals with good control of Polygonum convolvulus (black bindweed), Arctotheca calendula (capeweed) and Amsinckia sp. (yellow burr-weed), as well as some cruciferous and other polygonaceous species.

Bromoxynil is a contact herbicide with little or no systemic activity and soil residual effect. It is a very safe herbicide in cereals and pasture grasses generally, which tolerate much higher rates than those required for weed control. Combinations with other herbicides such as hormones or triazines may also be used to extend the spectrum of activity and/or permit lower dosage rates.

Application can be made at the 2 - 3 leaf stage of cereals. However, timing is not critical and application may be delayed until tillering. Brominil is marketed by Agserv, cost of 1 pt./acre being approximately \$2.40.

EDITOR'S NOTE: May and Baker have also recently registered Buctril M A (R), which contains bromoxynil and MCPA.

PERSONAL NOTES

Mr. Jim Barrie has been appointed Agricultural Adviser for the Crop Chemicals section of Elanco Products Company, Sydney.

Mr. Bruce Auld has been appointed Weeds Research Agronomist at Wollongbar Agricultural Research Station. Amongst other interests, he will be making ecological study of the major weed species of the far north coast.

Mr. Richard Locke, a graduate of the University of Arkansas and the Universidad Rural do Estado de Minas Gerias do Brazil, has joined Du Pont Far East, Sydney, as a Technical Sales Representative.

Weed Society of N.S.W. c/- Department of Agriculture, Sydney. Newsletter No. 67/3, June, 1967.



