

THE WEED SOCIETY/ OF NEW SOUTH WALES

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NEWSLETTER
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"NEW HERBICIDES"

A Meeting of the Society will be held in the Theatrette,
I.C.I. House, 9 Macquarie Street, Sydney, at 6.45 p.m.
on THURSDAY, 18th JULY, 1974.

Invited speakers from several companies will be discussing
new herbicides that are under development.

It has been some time since a meeting specifically devoted
to new herbicides has been held by the Society. If this
meeting proves a success, it is hoped to make similar meetings
a regular feature of Society activities.

W E E D S.

Revision of the widely used N.S.W. Dept. of Agriculture Hand-
book, "Weeds" is under way. The Department has broken with
tradition in utilising expertise from outside the Department
to assist in preparation of the new book. Nelson Johnston
has undertaken the onerous job of co-ordinating the contribu-
tions of some twenty authors.

The new book will differ completely from previous editions,
both in presentation and subject matter.

SYMPOSIUM

Planning is well under way for the Symposium on "THE ENVIRON-
MENTAL IMPACT of WEED CONTROL" to be held at SYDNEY UNIVERSITY
ON 19th and 20th NOVEMBER, 1974. - Future details later.

PERSONAL NOTES

Peter Michael is currently overseas chasing specimens of Amaranthus spp. and Erigeron spp. He intends visiting France, and expects to return by September.

Ken Watson has taken the job of Head, Research & Development Unit, Agricultural Chemicals, with Dow Chemical. Ken will be based in Sydney until the end of the year and then will transfer to the company's laboratories at Altona in Victoria.

George McMaster attended a very interesting meeting of the Victorian Weeds Science Society recently.

REMINDER

Have you paid your Annual Subscription yet?

If not, please forward it at your earliest convenience.

Corporate members - \$10.00

Ordinary members - \$ 5.00

WEEDS IN TURF

A General Meeting of the Society was held at the Shell Theatre at 6.30 p.m. on Thursday, 23rd May, 1974. The meeting was addressed by Mr. Peter McMaugh, Senior Research Officer of The Australian Turf Grass Research Institute on the subject of "Weeds in Turf". About 30 members and visitors attended the meeting.

Mr. McMaugh introduced his subject by emphasising that a good dense sward of turf produced by good cultural practices and management is unlikely to have severe weed problems.

The talk was restricted to the field of fine sports turf as distinct from lawns or other grass areas such as roadside verges, although some comments on these aspects arose during the subsequent discussion.

Mr. McMaugh used three specific weed situations to highlight his talk.

Winter grass (Poa annua) is the major turf weed throughout the world. The main problems produced by Poa annua are an uneven spraying surface caused by presence of the grass and subsequently the bare areas left by its natural or artificial removal.

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The weed has adapted to sports turf situation extremely well and has the ability to set seed even when cut very closely. Both annual erect and prostrate perennial forms are found.

Autumn renovation of bent greens provides an ideal situation for winter grass development and should be avoided.

Pre-emergence herbicides have been evaluated for Poa control in bent and of these the most promising is bensulide, which has been shown to be the least damaging to the turf. A rate of about 27 kg a.i./ha gives excellent control of Poa but 13 kg a.i./ha is the maximum safe rate for bent. A bensulide treatment programme has to be carried out over three years to obtain good Poa control.

Mr. McMaugh favoured use of desiccants and evaluated aqua ammonia, diquat and endothal and of these the latter proved most promising. Low volume applications of endothal gave excellent control but when applied by greenkeepers in the conventional high volume fertispray equipment results were poor. Volume needs to be kept down to 100 - 121 litres/ha to obtain satisfactory results with endothal. It was found that endothal gave good control of upright Poa but repeat applications were required for the prostrate type.

Mr. McMaugh now considers that use of a low rate of bensulide in the autumn followed by endothal in the spring represents the best approach to control of Poa in bent and also permits re-seeding of the bent.

In couch pronamide provides excellent pre and post-emergence control of Poa with only very limited root damage to the couch at recommended rates.

Invasion of bent greens by couch, kikuyu and blue couch from surrounding fairways could only be corrected by fumigating greens with methyl bromide and reforming and replanting the green at considerable expense and inconvenience. Methyl bromide also encourages subsequent development of Ophiobolus in the turf. Siduron was developed in the U.S.A. for control of crabgrass (Digitaria spp.) in bent turf. Trials by Mr. McMaugh showed that bent should tolerate up to 110 kg/ha of Siduron which gave excellent control of the summer perennial grasses. In practise 44 - 66 kg/ha are applied in the autumn which produces a gradual but effective control of the unwanted grasses. Higher rates are required for spring treatments.

Broadleaved weed problems have been largely solved by the growth-regulator herbicides such as 2, 4-D and MCPA but some problem weeds remain such as creeping oxalis (Oxalis corniculata), bindii (Soliva pterosperma). Mixture of 2, 4-5-T amine + dicamba + DSMA has proved very effective against creeping oxalis. Bindii is well controlled by dicamba but bromoxynil is more effective still. Combinations of growth regulator herbicides such as 2,4-D + mecoprop and dicamba + mecoprop produce better control than the components used individually. Mixtures of the organic arsenicals + growth regulators are more active than the components.

Mr. McMaugh concluded by stating that a thorough understanding of the physiology of turf and weed species is required if turf weed control techniques are to be improved.
