## THE WEED SOCIETY OF NEW SOUTH WALES - NEWSLETTER

P.O.Box K237, HAYMARKET, N.S.W, 2000.

President:

Mr. M.J. Hood

August, 1986

Hon. Secretary:

Mr. M. Barrett

Ed. Newsletter:

Dr. R.W. Medd

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### 8TH AUSTRALIAN WEEDS CONFERENCE

The 8th Australian Weeds Conference will be held at the Manly International Hotel, Manly, N.S.W. from Sunday, 20th September to Friday, 25th September, 1987. It is now time to start planning your paper and poster contributions. Further details are provided in the enclosed circular. Papers on any aspect relating to weeds are welcome - the programme outline is only a guide. Enquiries may be sent c/- The Secretary, 8th Australian Weeds Conference, Box K287, Haymarket, N.S.W., 2000.

### WEEDS WALKABOUT

This will be held in the central west during the noxious plants awareness week (see below). We plan a two day meeting to inspect weed control trials in forestry, cereal and pasture production, vegetation control on railways, a general meeting of the Society and an address from Bruce Auld on the EWRS Symposium on the Economics of Weeds. Final details will be posted in September.

# NOXIOUS PLANTS AWARENESS WEEK October 13 to 19th, 1986

In order to promote their work and generally alert the public about noxious plants, the Shires Association of N.S.W. have obtained Ministerial approval for a Noxious Plants Awareness Week in October.

Activities during the week will include displays in Council Chambers, press releases and promotions, a secondary school logo competition, and talkback radio and seminar programmes.

Your interest and support would help make the week a success - contact your local noxious plants officer for details of activities planned in your region.

### SYDNEY GARDEN FAIR

The N.S.W. Weed Society will be participating in the Sydney Garden Fair to be held at Rosehill Racecourse on September 25 to 28, 1986.

HELP and HELPERS ARE REQUIRED

Contributions of pictures or potted plants for display at our exhibition, which will focus on identification and control of urban weeds, would be much appreciated.

Sixteen people (minimum) are needed to look after the display and to answer enquiries on weed identification and to give advice on control.

Please contact Dr. Peter Michael direct (02) 692 3214 or leave messages by contacting (02) 692 2529 or 692 3367 if you can assist with this activity.

### URBAN WEED CONTROL WORKSHOP

The Weed Society of Queensland will be conducting a workshop on Urban Weed Control in Brisbane from Tuesday 7th to Thursday 9th October, 1986. Registration fee \$75.00.

Application forms available from C.H. Wells, Forestry Department, G.P.O. Box 944, Brisbane 4001 or Phone (07) 224 8363

REPORT ON ONE DAY SCHOOL ON OCCUPATIONAL AND ENVIRONMENTAL HEALTH IN THE USE OF PESTICIDES.

This function held by the Society in conjunction with the NSW branch of the Australian Institute of Agricultural Science was held as planned on July 10, 1986, at Macquarie University, Eastwood, Sydney. With over 200 people in attendance it was a most successful function. An excellent series of talks were given by the speakers and several safety equipment manufacturers arranged interesting displays. Attendance would have been greater had about 10-15 registrants from the Central Tablelands and Central West not been prevented from attending by heavy snow storms on the Tablelands the day and night before.

People from a wide diversity of organisations attended. These included many from local government, government departments, industry, nurserymen, farmers, consultants, University staff, and interested individuals. Unfortunately, conspicuous by their absence, were representatives of consumer groups and environmental groups, who are frequently critical about and frequently ignorant of matters relating to pesticides, despite having being specifically invited.

The day was opened by the Minister for Agriculture, Forests, and Lands, Mr. Jack Hallam. Other speakers included Dr. A. Browning, Head of Toxicology Evaluation Unit, Department of Health, Canberra; Mrs. Judith West, Pharmacist-in-Charge, Poisons Information Centre, Sydney; Mr. Don Matthews, Agricultural Standards Officer, Victorian Department of Agriculture and Rural Affairs; Mr. K. Watson, Regulatory Affairs, Dow Chemical Company, Sydney; Mr. Laurie Greenup, Director, Pesticides and Environmental Studies, NSW Department of Agriculture, Dr. Keir Howard, Epidemiologist and Medical Adviser to the Accident Compensation Corporation, Wellington, New Zealand; Mr. F. Fattal, Department of Industrial Relations, Sydney; and three speakers from equipment manufacturers.

Proceedings of the day will be published in the near future. These will be sent free of charge to all registrants and will be available for a small fee to others. Availability will be reported in the next newsletter.

Reasonable publicity was obtained before the day, but as with most objective non controversial approaches the media did not not show much interest. Radio tapes were recorded and played on a Sydney commercial station by Nelson Johnston, and I did a tape for the ABC radio national morning current affairs programme which was broadcast on the morning of the school. The Land Newspaper and several local Sydney papers carried notices of the school.

With the good attendance a good financial profit for both organisations should result. So now we have to think of other worthwhile projects on which to spend it and promote the cause of weed science and weed control. Any ideas?

I would like to thank the members of the organising committee (Jack Burke, Ken Watson, Nelson Johnston, and Don Pollock from the Weed Society, and Gordon King and Gordon Brown from the AIAS), as well as every one else who assisted in some way, for their help in organising the school.

### Michael Hood

### CAWSS NEWS

Leon Smith and Jim Swain were elected as N.S.W. delegates to CAWSS following the step-down of Alan Mears. Alan's contribution to CAWSS as a N.S.W. delegate was warmly acknowledged by the Executive.

There was some comment and discussion at our last meeting concerning the ineffectiveness of CAWSS in recent years. So apart from offering our congratulations to Leon Smith, who was elected President of CAWSS in their July 1986 meeting, we wish him well with the challenge to improve the image and functioning of CAWSS.

## CAWSS REPORT FOR 1985-86

The year under review lies midway between the 7th National Conference in Perth and the next in Sydney. As such it has been a quiet period for CAWSS affairs with the main centre of activity being the organising committee for the 8th Conference under the chairmanship of Alex McClennon in New South Wales.

The financial affairs of CAWSS for 1985-86 reflect the period. An audited financial statement is attached to this report and from this it can be seen that the only major expenditure has been the 'float' of \$2,000 to the N.S.W. Conference Committee authorised at the last CAWSS meeting. The balance of CAWSS funds, including the \$6,000 profit generated by the 7th conference, were placed on term deposit as authorised at the last meeting and following consultation with the Commonwealth Bank at Sherwood, Queensland where a residual account dating back to the 6th conference was still in existence. The consolidated funds became available for reinvestment and management by the new CAWSS officers in July (1986). Receipts from societies have lagged. With one exception 1984-85 is now up to date, but for the current financial year (1985-86) only two States have so far contributed and an initial task for the new Secretary will be to regularise this situation.

The debate by correspondence on the content and format of conference proceedings that was foreshadowed at the last CAWSS meeting took place with enthusiasm during the year. The eventual reality clearly rests with the State organising the particular conference - this is the nature of CAWSS and its constitution as it now exists. At least in the discussion CAWSS has achieved one of its prime aims - the encouragement of communication and intellectual exchange.

The disposal of unsold copies of the proceedings of past conferences has still not finally been settled. Although authority was received to negotiate an agreement with the firm R. Hill and Son, it seems that the Victorian Society have an established outlet through the A.I.A.S. The Victorians have been invited to present the case for utilising this means of disposal at this CAWSS meeting. Estimated current stock amounts to perhaps 100 copies of the 6th Conference, an unknown quantity of the 7th Conference held in W.A. and sundry copies of the Asian Pacific Conference scattered round the States. An audit of available numbers is needed before final negotiations.

CAWSS has been approached during the year by a number of widely disparate organisations with advice of upcoming conferences and pleas for financial support. These have ranged from the Sulphur Institute who have a conference in the south of France in 1987 to the Australian Academy of Science who are suffering a funds squeeze in their grant support. Contact with the European Weed Research Society and the International Weed Science Society should be maintained.

At the last CAWSS meeting, the subject of the general paucity of weed science training in Australia was discussed along with the suggestion that the organisation develop an initiative in encouraging more. A little progress has been made.

In Queensland at a more "grass roots" level, the Society has continued to run appropriate courses in co-operation with T.A.F.E. for those concerned with weed control - usually Local and State Government employees. Three have been run so far in 1986 and it is recommended that interested Societies contact the Queensland Society for details.

The Constitution of CAWSS requires the retirement of a serving President at the end of two years and this action should obviously coincide with the nearest meeting to this time. Unfortunately it will not be possible for me to attend the 1986 meeting and I am asking Bill Hazard, the alternative CAWSS delegate for Queensland to deputise for me.

May I thank you for your support over the past two years and finish by wishing the New South Wales committee good fortune in their preparations for the 8th National Weeds Conference. I have every confidence it will match and build on the experience gained in the past.

John Whitehead 4/7/86

# COUNCIL OF AUSTRALIAN WEED SCIENCE SOCIETIES STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDING 30/6/1986

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PAYMENTS		RECEIPTS		
1987 Conference	\$2000.00	7/85 1984 Conference Profits	ACOOO 00	******
John Whitehead -			\$6000.00	<b>\$6000.0</b> 0
secretarial expenses	40.00	State Society Subscriptions		
Taxes	0.70	7/85 South Australia W.S.S. 84/85 subscriptions 8/85 W.S.S. Victoria 84/85 subscriptions	90.00	
TOTAL PAYMENTS	\$2040.70	10/85 Weed Society W.A. 84/85 subscriptions	90.00 72.00	
	<del></del>	11/85 Weed Society Qld 84/85 subscriptions	90.00	
		2/86 W.S.S. Victoria 85/86 subscriptions	120.00	
		5/86 South Australia W.S.S. 85/86 subscriptions	90.00	
ASSETS		6/86 W.S. N.S.W. 84/85 subscriptions	80.00	632.00
Term Deposit -		Anna 17 m a		
(matures August '86)	\$6,064.10	Australian Weeds Levy, Victoria	\$1350.00	\$1350.00
Account No. 902112	1,580.02			
·		Bank Interest		\$ 507.13
	\$7,644.12	TOTAL RECEIPTS		<del></del>
	<del></del>	TOTAL RECEIPTS		\$8489.13
Payments	\$2040.70			
Assets	7644.12			
	<u></u>			
	\$9684.82			
less carried forward			÷ .	
84/85	1195.79			
	\$8489.03	~111		

ecretary/Treasurer

8/7/86

# IN-SITU MULCHES FOR VEGETABLE PRODUCTION

Richard Stirzaker's address to the Society in June provided an interesting insight into sustainable systems for vegetable production. Experiments undertaken for his Master of Agricultural Science degree at Sydney University have demonstrated a number of advantages of using subterranean clover as a mulch. He provided the following outline of his work.

Experiments are being carried out at the University of Sydney Farms, Camden, using in-situ mulches to protect the soil and control weeds in the production of vegetables. The project aims to monitor soil changes under four different production systems. These are:

- 1) Control: After ploughing and bed forming plots are chemically fallowed from autumn to spring. A tomato crop is grown during the summer months.
- 2) Intensive production, conventional: One autumn and one spring lettuce crops and one summer tomato crop are grown per year. Plots are rotary hoed and beds reformed between crops.
- 3) Intensive production, zero till: Same as above but with no cultivation between crops.
- 4) In-situ mulch: Subterranean clover (cv Nungarin) is sown in autumn. After senescence in October a tomato crop is transplanted into the resultant mulch with no soil cultivation.

After senescence the sub clover produced an even mulch over the beds averaging 7t ha dry weight. The mulch protected the soil surface from rain splash and prevented erosion of the raised beds. Temperatures (5cm depth) in December averaged 7°C cooler at 3 pm and 4°C warmer at 7 am under the mulch compared to rotary hoed plots.

The effectiveness of the in-situ mulch to control weeds in the tomato crop was also investigated. Before transplanting all plots were sprayed with paraquat (Gramoxone). One row in each plot had no further weed control. The other two rows in each plot were weeded at six weeks after transplanting.

Treatment		Yields t $ha^{-1}$		Yield	
1)	Contra	Weeded	Unweed	Decline	
3)	Control Rotary hoed Zero till In-Situ Mulch	62.9 65.8 64.3 68.2	50.3 51.2 54.4 64.3	20.0 22.2 15.4 5.6	

The yields in the weeded rows were n.a. significantly different between treatments, but the mulch plots yielded significantly higher in the unweeded plots.

Soil physical and chemical parameters are monitored periodically with some measurable differences between treatments already apparent.

Whereas the tomato crop did not respond significantly to the four soil treatments the lettuce yields are declining over time under zero tillage compared to the rotary hoed treatment.

Autumn 1986 41.6	Autumn 1985	Zero till
49.8 36.6	Spring 1985	34.4
40.5	Autumn 1986	36.6

Richard Stirzaker

# PESTICIDES DISAPPEAR FROM OUR FOODS

Australian food is becoming increasingly free of pesticide residues.

This was the most recent finding from surveys carried out by both the Commonwealth Department of Health and the N.S.W. Department of Agriculture.

The studies confirm pesticide residues are falling across the board and are now mostly well below permitted safety levels.

As reported in "National Farmer" last year, the National Health and Medical Research Council (NHMRC) has been sampling 45 different foodstuffs four times a year since 1970. The NHMRC is the body responsible for the quality of Australian food.

The 1983 'Australian Market Basket Survey' carried out by the NHMRC showed that, with the exception of one minor product used in the control of weevils in wheat and flour, the levels of all chemicals in food products had declined significantly from the previous survey or continued to be undetectable.

Even the exception 'fenitrothion' only increased marginally and was well within safety limits.

Reprinted from Chemicals Today, June 1986 - where more details are given.

# AUSTRALIAN ACADEMY OF SCIENCE EXCHANGE PROGRAMMES

Applications for visits to China and Japan during 1987/88 financial year have been called. Visits may be 3-6 week lecture tours or fact-finding visits or long-term for research purposes. Details and application forms are available from:

International Exchange Offices, Australian Academy of Science, G.P.O. Box 783, Canberra, A.C.T. 2601 (062) 473966

Deadline for applications: 1 February 1987.

# BOOKS IN PRINT

"Major Woody Weeds of Western Queensland and their Control" by J.C. Scanlan and A.J. Pressland.

This book is an up-to-date guide on recognizing and controlling 25 important woody weeds in western Queensland.

Available from Queensland Department of Primary Industries, Information Centre, G.P.O. Box 46, Brisbane. 4001. Cost \$5.20 post paid. 70 pages, soft cover.

#### "CROP WEEDS"

A book by J.L. Wilding, A.G. Barnett and R.L. Amore Inkata Press Pty. Ltd. 4 Longbourne Ave., N. Clayton Vic. 3168 \$35 plus \$4 postage

Identification of weed seedlings in crops has never been easy, but to get the maximum benefit from herbicides it is increasingly important to make an accurate identification at the early development stage. This book, CROP WEEDS, will go a long way in assisting farmers, contractors and advisors to make an accurate assessment of the type and extent of their weed problems.

All the main weeds of dryland agriculture in southern Australia--which occur in crops, stubbles or on fallow--are covered, some 117 species in all. The book logically divides weeds with similar characteristics into botanical families. These are further divided into broad leaved (dicotyledons) and narrow leaved (monocotyledons) weed species. To assist in identification, and I suspect, resolve many a long argument, the common and scientific names of all the weeds are given.

The book gives the distinguishing features of the narrow and broad leafed weed species and describes the most useful characters which can be used to narrow down the identification of the plant at the seedling stage.

The body of the book contains a brief description of each weed, its common names, family and scientific name. The type of life cycle is described, followed by a description of its early distinguishing features and those of the mature plant.

The strength of this book, however, is in the comprehensive pictorial representation of each weed. There are line drawings and photographs of mature and immature weeds, their seeds and other distinguishing features which assist identification, and hence, sound control methods.

The authors and Inkata Press are to be congratulated for attempting to cover this difficult topic and succeeding to produce an invaluable and practical aid to farmers and scientists alike. I thoroughly recommend it.

Reviewed by J.B. Griffiths, Mallee Research Station, Walpeup.

Reprinted from W.S.S. Vic July 1986 Newsletter.

# "IDENTIFICATION OF WEEDS IN CEREAL AND LEGUME CROPS"

This book consists of full colour plates of weeds, their seeds and seedlings and is aimed at helping W.A. farmers identify the major weeds of crops. It is available from the Western Australian Department of Agriculture --- no charge.

"A guide to Agricultural Spray Adjuvants Used in the United States" by L.A. Thomson is the first of its kind. The guide lists and describes the formulation and application rates of the majority of spray adjuvants marketed.

Available from Thomson Publications, P.O. Box 9335, Fresno California, 93791 US Cost US \$14.50 plus tax and postage; 186 pages.

## CONFERENCE CALENDAR 1986/7

August 19-20

Efficient Herbicide Application. A two day workshop for herbicide users at the Murrumbidgee College of Agriculture, Yanco.

Contact:

David White, M.C. of Ag., Yanco.

(069) 530236 or 530296

November 17-20

British Crop Protection Conference - Pests and Diseases, Brighton.

Contact:

Mrs. R.A. Bishop, 1986 B.C.P.C. Pests & Diseases

20 Bridport Road, THORNTON HEATH

7QG U.K. Surrey CR4

Closing date for registration, 3rd October, 1986.

December 2-3

Workshop - The Economic Impact of Weeds, Canberra.

Dr. Leon Smith, Department of Agriculture, McKell Contact:

Building, Rawson Place, Sydney. 2000

(02) 217 5050

May 11-14 1987.

Australasian Plant Pathology Society Biennial Conference, Adelaide.

Contact:

Dr. Barrie Thistlethwayte,

Roseworthy Agricultural College.

Roseworthy. S.A. 5371

July 1987

N.S.W. Noxious Plants Conference.

Details to be advised.

September 16-17

Workshop of Weed Seed Biology, Orange.

Dr. R. Medd, Agricultural Research & Veterinary Centre, Contact:

Forest Road, Orange. N.S.W. 2800

September 21-25

8th Australian Weeds Conference, Manly.

The Secretary, Contact:

8th Australian Weeds Conference,

Box K287, P.O.

Haymarket, N.S.W. 2000