

THE WEED SOCIETY OF NEW SOUTH WALES - NEWSLETTER

P.O.Box K287, HAYMARKET. N.S.W. 2000

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President: Mr. J.M. Swain  
Hon. Secretary: Mr. W.J. Burke

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NOTICE OF ANNUAL GENERAL MEETING

This year the Annual General Meeting is being held in the recently opened herbarium in the grounds of the Royal Botanic Gardens on Friday 25 February 1983.

This is an opportunity for members and friends to inspect the gardens and see and hear of the operations and behind the scene activities of the new herbarium.

The herbarium is the official repository of all botanical species collected in N.S.W. since the establishment of the colony in 1788.

A Smorgasbord/buffet lunch for which there will be a charge of \$12.00 will be served in the courtyard of the herbarium building.

The Days Programme

- 10.15 a.m. Assemble in front of the Gardens Information Office located in the gardens/herbarium complex adjacent to Mrs. Macquaries Road.  
Inspection of Gardens and Herbarium.
- 12.30 p.m. Lunch - in the courtyard behind the herbarium.
- 1.50 p.m. Assemble in the Maiden Theatre.
- 2.00 p.m. Address by Dr. Barbara Briggs, Senior Assistant Director.  
"The operations and behind the scenes activities of the Herbarium."
- 3.00 p.m. Annual General Meeting.

RSVP. Because we have to advise the caterers of numbers attending, could you indicate whether you will be attending to Jim Swain, CIBA-GEIGY (02) 428 0431 or Jack Burke, CIBA-GEIGY (03) 428 0436 by Tuesday 22nd February 1983.

## RESTRICTIONS ON USE OF 2,4,5-T IN N.S.W.

The Minister for Agriculture and Fisheries, Mr. Jack Hallam, announced on the 16th December that N.S.W. Cabinet has approved of wide ranging controls over the pesticide spray 2,4,5-T.

Mr. Hallam has also released the report of the New South Wales Government Committee of Inquiry into the Use and Safety of 2,4,5-T. (Copies are available free from the Pesticides Registration Section, N.S.W. Department of Agriculture, Sydney).

The Committee, which was chaired by Mr. Walter Lewer, former Deputy Chief Stipendiary Magistrate, received 109 submissions. Its recommendations have been substantially adopted by Cabinet.

Cabinet has decided that:

1. The legal limit of TCDD (dioxin) contaminant in 2,4,5-T will be reduced from the present limit of 0.1 parts per million to 0.01 parts per million.  
  
"The level has been lowered on the universally accepted principle that concentrations of toxic substances should be reduced to the minimum achievable." The New South Wales standard is now equal to that applying in Victoria and the U.K.
2. The higher volatile ester formulations of 2,4,5-T will be withdrawn. "This will reduce spray drift by only allowing use of the lower volatile amine and ester formulations," Mr. Hallam said.
3. Use would be prevented in home gardens. Availability will be restricted for sale in supermarkets, home garden stores, nurseries, hardware stores and similar retailers.
4. All application of 2,4,5-T from aircraft or misting machines will be prohibited. "A specific permit would be required to be issued under the Pesticides Act, 1978, for such use," Mr. Hallam said.
5. Application of 2,4,5-T within a distance of 50 metres of any inhabited dwelling, public building, dam, river, water channel, or stream would also require a permit.
6. To prevent the possibility of consumption, all application of 2,4,5-T to blackberries bearing ripe fruit will be prohibited.
7. All applicants for registration of 2,4,5-T will be required to keep records, and make returns, of the amount sold or supplied in N.S.W.
8. To protect employees, all workers including Government and Local Government, will be required to wear protective clothing when mixing or using 2,4,5-T. Employees will be required to wear a boiler type suit with sleeves and buttoned at the wrists and throat, gauntlet gloves, washable hat and impervious boots of shoes. When mixing, a face shield is to be worn; and when working in any spray drift, a respirator.

"Employers will be required to provide the protective clothing to employees," Mr. Hallam said.

9. Government and Local Government employees exposed to 2,4,5-T will be required to undergo regular medical examinations to measure occupational exposure.
10. Employers will be required to give appropriate training to employees on the correct use of 2,4,5-T.
11. "Defective equipment in respect to leakages, spillages and spray output will not be allowed," Mr. Hallam said.

"The Government has taken account of the A.C.T.U. Executive recommendations on this chemical.

"An Advisory Committee on pesticides has been established. The Committee is to consist of senior officers representing various Government Departments together with a Trade Union representative and a representative of environmental groups.

The broad terms of reference of the Committee are to:

- \* Keep certain pesticides under review; including the uses to be allowed for such pesticides;
- \* Examine new proposed uses of pesticides, where it is considered special circumstances exist; and
- \* Receive representations, in person and in writing, from trade unions, environmental and other organisations; and consider the evidence presented.

In addition the Pesticides Act, 1978, will be amended to require the licensing of aircraft applicators and pilots.

"Pilots will be required to demonstrate they are aware of the problem associated with pesticides, and use of these chemicals from aircraft," Mr. Hallam said.

"Licenses could be suspended or even cancelled if infringements occur."

Proprietors of agricultural aircraft operations will be required to hold an appropriate insurance policy to cover loss or damage.

"Aircraft will be required to be approved beforehand and records of all spraying operations must be kept. These records will be available to Inspectors at any time, or to other persons upon reasonable request," Mr. Hallam said.

MACSPREAD® TRACK-PACK

On the 21st September 1982 the "Macspread®" was launched.

The "Macspread®" is a new on-off-rail granular herbicide spreader designed by:

- State Rail Authority
- Dupont (Aust) Ltd
- A. & G. Industires - Griffith

The name is no coincidence. Alex McLennan and Stan MacFadyen have been predominant figures in the concept and design etc.

The unit consists of a 7 tonne truck, with hydraulic-controlled, on-off-rail truck wheel systems.

The granular spreader is a very tidy and sophisticated stainless steel and electronically controlled affair.

Not too much thunder will be stolen from the "Macspreader" as it will be proudly demonstrated by Alex McLennan and "Nifty" Cowled of the S.R.A. at Armidale Weeds Conference in April, 1983.

\* PATERSON'S CURSE SAGA\*

Paterson's Curse Biological Control Inquiry Progress Report

# NIL PROGRESS

The outcome of the South Australian Supreme Court hearing in early June, 1982, was that both parties resolved that an independent inquiry (tribunal) would be established to look into all aspects of the controversy. The members to be appointed by both parties, would conclude the inquiry in February, 1983.

To date the tribunal has yet to be formed and it appears that the deadline will pass without anything being resolved. No agreement can be reached on the members of the tribunal.

Negotiations are proceeding between the two parties concerned and the outcome is still in doubt.

AGRICULTURAL CHEMICALS APPLICATION RESEARCH UNIT

An Agricultural Chemicals Application Research Unit (ACARU) has been formed in Victoria as a joint venture of the Plant Research Institute of the Department of Agriculture and the Keith Turnbull Research Institute of the Department of Crown Lands and Survey. The Pesticides Research Section from Plant Research Institute has been relocated to the Keith Turnbull Research Institute. The amalgamation has resulted in sharing of facilities and resources. The address of the unit is as follows:

Keith Turnbull Research Institute,  
P.O. Box 48  
FRANKSTON, Vic. 3199  
Telephone: (03) 786 3555.

The unit now looks at application of all agricultural chemicals with Harry Combellack leading work on herbicides and Malcolm Campbell leading work on insecticides and fungicides.

An engineer position to work in the group was recently advertised and an appointment will be made in the near future.

## SURVEY ON SPRAYING EQUIPMENT FOR AGRICULTURAL CHEMICALS

Application of agricultural chemicals poses a serious challenge to the community. The use of chemicals in agriculture is increasing as spraying assumes a major role in farming operations. As a consequence, increases in the efficiency of spraying have the potential to yield significant cost savings, reduction in time involved, improved pest control, increased productivity, improved product quality, and reduced environmental impact. The co-operation of farmers, scientists, engineers and manufacturers will be necessary to overcome many of the problems involved in improving the efficiency and efficacy of the spraying operation.

On machinery and equipment aspects, the Agricultural Engineering Centre (AEC) at Werribee is working closely with the Agricultural Chemicals Application Research Unit (ACARU) Frankston. To assist in this work the AEC is conducting the present survey of research and development activities on equipment for spray application of agricultural chemicals. The scope of the survey is limited to ground operated, vehicle drawn or self-propelled equipment only and covers spray, mist and granule applicators but excludes fogging and wiping equipment. Within this scope, we are interested in work done in the past 10 years, work currently underway and future work related to:

- field and laboratory trials on spray equipment performance;
- work studies;
- equipment reliability;
- nozzle tests;
- droplet production, trajectory, impaction and retention;
- new/improved equipment or methods.

We would be grateful for your co-operation in this exercise. The survey will assist with planning of our research and development activities and enable establishment of communications between ourselves and other mutually interested groups. The information will also be utilised at a workshop on spray application research being organised by the ACARU for April 1983.

We ask you to participate in the survey by providing, on copies of the attached pro-forma, descriptions of relevant projects in which your group or organisation have been involved. Short, but concise descriptions will suffice as these can be followed up at a later date if considered necessary.

Replies should be submitted before end of February 1983 to:

Mr. Barry Wills  
Agricultural Engineer  
Agricultural Engineering Centre  
Princes Highway  
WERRIBEE 3030.

## Fireweed (Senecio Lautus)

A recent survey completed by veterinary officers and inspectors of the N.S.W. Department of Agriculture from Port Macquarie to Tweed Heads identified Fireweed as a toxic plant that can produce adverse affects in liverstock.

Ratings given to various plants showed that Fireweed is the second most serious toxic plant after Bracken Fern.

Stock mortalities and chronic ill thrift have been attributed to ingestion of Fireweed in recent years.

Now that the toxicity of Fireweed has been confirmed, it places greater importance on the species and strong justification can be found to apply control measures.

In brief, Fireweed is an undesirable plant. Stock mortality and ill thrift will reduce animal production, which is further compounded by pasture wastage that develops where infestations occur.

The pest is found throughout the district and infestations range from light to heavy.

Development of infestations is largely attributed to declining competition from pasture plants which can be related to a number of factors. The most common contributing factor is considered to be overgrazing during autumn and winter.

Fireweed can be eliminated from pastures either by mowing or herbicide application. Good results are being obtained in trials with bromoxynil and glyphosate applied with a ropewick applicator. Its control however will not be permanent unless pastures are managed to product and retain a heavy bulk of forage during the Fireweed growth season.

### NEW DEVELOPMENTS IN LOW VOLUME SPOT SPRAYING

In recent years there have been concerted efforts to develop techniques to apply low volumes of herbicides. Some examples have been C.D.A. applicators, ropewick applicators and the Velpar "Spot Gun".

There have been several instances of people investigating the use of drench guns for low volume spot spraying.

John Toth of the New South Wales Department of Agricultur's Horticulture Research unit at Richmond has recently been investigating low volume spraying of blackberries. In one trial John used a 10 mL Dupont spot gun fitted with a hollow cone nozzle to apply Roundup® and Krenite® at various concentrations ranging between 1:1 to 1:30 with the size of the bush determining the number of shots. The results of this trial, which was treated in December 1981, looked very promising when it was assessed six months later.

A major problem experienced was, however, the amount of hand pressure required to produce a relatively fine spray. John considered that this pressure was such as to make it unpractical for field use.

Subsequently, Alan Murphy, Agricultural Mechanisation Officer, Department of Agriculture, Dubbo developed a gas operated, 50 mL cattle drench gun to overcome the problem of excessive hand pressure. In this gun, gas pressure from a belt carried 1 kg L.P. gas cylinder is used to activate the plunger. This permits a 50 mL shot in the form of a relatively fine spray to be applied over a ten second interval which allows the gun to be waved during spraying so giving a more extensive coverage of the bush. It is expected that this gun will be demonstrated at the forthcoming Biennial Noxious Plants Conference at Armidale in April 1983.

Jack Whitley the Scone Shire Weeds Officer has used a 10 mL Phillips drench gun to which he has fitted a nozzle from a garden spray to treat blackberries. This nozzle gives much larger droplet sizes than that required by John Toth and so alleviates the problem of excessive hand pressure. Jack has used this gun on a blackberry trial in the Scone district and the results look promising at this stage. Jack has also treated some bushes at the Moonbi trial site as a demonstration for the next Biennial Conference. Monsanto are developing a 10 mL drench gun or "splatter gun" with the main investigations at this stage being directed towards the treatment of eucalypt seedlings.

(Thanks to Peter Gray for this article).

The 9th Asian-Pacific Weed Science Society Conference will be held from November 28 to December 2, 1983. The Weed Science Society of the Philippines, Inc. (WSSP) and the Philippine Council for Agriculture Resources Research Development (PCARRD) are co-sponsoring this important conference to be held at the Philippine Plaza Hote, Manila, Philippines.

The Philippine Plaza Hotel is situated at the edge of Manila Bay in the historical capital city, Manila. One can go for excellent concerts and ballet performances to the nearby prestigious theaters. Elegant restaurants in the area serve exotic food of Spanish, American, Malay and Chinese influences. Manila abounds with "little" treasures. The best buys around are rattan furniture, wood carvings, guitars, clothing material and bags made of native fiber.

- \* The conference program will consist of papers on relevant aspects of weed science during the plenary and concurrent sessions. There may also be poster presentations.
- \* Invited speakers will present papers during the plenary sessions on topics such as herbicide regulation, plant quarantine, biological control, etc.
- \* There will be a symposium on "Weed Control on Farming Systems" on the last day.
- \* For papers to be presented during the concurrent sessions, preparation of the manuscript should follow the style of Tropical Pest Management (formerly PANS), Weed Science, Weed Research or the Philippine Journal of Weed Science. Tentatively 20 minutes will be allotted to each oral presentation. Only papers received before the deadline will be included in the Proceedings.



- \* Chemical companies and publishing houses will be invited to put up exhibits featuring the latest information and technology development in weed science.
- \* Exhibit materials for the poster session should NOT BE LESS than 25 x 30 cm.
- \* A field trip on November 30, 1983 will include visits to experiment stations and farms.
- \* Post-conference tours may be arranged with due notice. Cost will depend on the place desired to be visited.
- \* Best paper Award - The society will select the best paper among the papers in the concurrent sessions, and a cash award to be donated by Monsanto Chemical Company and a plaque will be given to the author/s.

Contact:           The Planning Committee  
                   C/- Dr. Beatriz I. Mercado  
                   Bioscience Building  
                   University of the Philippines  
                   at Los Banos College  
                   Laguna    3720        Philippines

#### RECENT PUBLICATIONS

An informative illustrated booklet, Weed Control in Lawns and Gardens, is available free of cost from: Information Branch, Ontario Min. of Agric. and Food, Legislative Buildings, Toronto M7A 1A5/Canada. Authors J.F. Alex, C.G. Waywell and C.M. Switzer have compressed extensive useful information, primarily concerning chemical weed control, into 100 pages, complete with clear line drawings of numerous weed species. In English, paperbound, identified as AGDEX 646 and Publication #529.

The Industry Wild Oat Group (IWOG) of England has published References to Research Papers on Wild Oats, 1970-1981. The spiralbound, paperback work is intended to increase accessibility and reading ease for research connected with control of Avena fatua. The 1981 publication, edited by F.E. Shotton, in English, contains 238 references grouped in 3 sections, plus an authors index. Cost \$4.50, from: IWOG, Ayres House, Station Rd., Wallingford, Oxon OX10 OHZ/U.K.

A 1982 hard-bound volume from Wiley-Interscience, 605 Third Ave., New York 10158/USA, comprises an extensive survey of the origin, discovery, and nature (taxonomic and physiologic) of herbicide-resistant weed bio-types. The 401-page work, Herbicide Resistance in Plants, by H.M. LeBaron and J. Gressel, provides an overall view of current knowledge, plus an appendix listing known resistance and tolerant weed species. In English, cost US\$47.50.

