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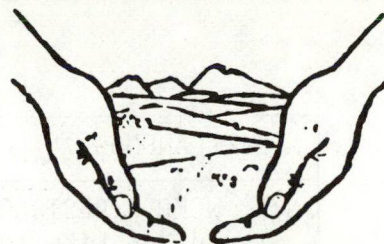
Vol. 5 No. 6



THE OFFICIAL JOURNAL OF THE INSTITUTE OF NOXIOUS PLANTS OFFICERS INCORPORATED

PROTECT

The Official Journal of I.N.P.O.



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SPECIAL NOTE

The views expressed in this Journal are those of the individual and not necessarily those of the Institute of Noxious Plants Officers unless otherwise stated.

N.Z. WEED & PEST SOCIETY

Would You Like to Become a Member?

THE NEW ZEALAND Weed and Pest Control Society provides a forum for discussion and presentation of information in the fields of weed control, insect pest management and plant diseases. Members of the Society include scientists from Government, academic and commercial research organisations, as well as farmers and others interested in dissemination of up-to-date information on weed and pest control.

Membership is open to all, at a very reasonable cost of \$15 per annum. All members receive a copy of the Proceedings of the Conference, held in August each year. These Proceedings include details of recent research on a wide range of weeds, insects and fungi. They are extremely useful for keeping those involved with practical aspects of weed and pest control in touch with the latest research and the capabilities of new pesticides. Members are also, of course, encouraged to attend the Conference, where they can talk to the people involved in research.

The Society also publishes books which are useful to those involved in controlling weeds and these books are available to members at reduced prices. Examples are Arthur Healy's "Identification of Weeds and Clovers" and "Standard Common Names for Weeds". Soon to be published is a new book, "Weeds in Colour".

All who are involved in weed or pest control would benefit from membership of the Society. If you wish to join, please send \$15 (remember, it's tax-deductible) along with your name and address to:

The Secretary,
NZ Weed & Pest Control Society,
C/- Ministry of Agriculture & Fisheries,
P.O. Box 85,
HASTINGS

LAND CRESS CAUSING TAIN

TAINT FROM A common weed has caused considerable losses to dairy companies over the last few years.

Even a small amount of the weed - land cress - can result in downgrading a whole day's butter production said Mr Garry Condell, a farm dairy instructor with the MAF at Matamata.

Losses to a larger butter factory because of land cress taint could reach \$40,000 in one day he said. Farmers were also penalised as milk tainted with land cress received 50c per kilogram of milkfat less than pure milk.

Land cress is an annual weed. It is often the first plant to grow in bare land, mainly in gateways, races, around water troughs and anywhere where pug-ging has occurred. It is found throughout New Zealand. It also grows where the ground has been disturbed in other ways, such as where trees or hedges have been removed.

The plant grows flat to the ground and is widely branched from the central crown. It has light green segmented leaves. The fruit is two ovoid nutlets, each containing one seed. The seeds give off a strong, turnip-like odour when crushed and the plants themselves have a distinctive smell which is easily recognised.

The best control is achieved by spraying in the spring when the plant is young and actively growing.

Established pasture should be sprayed with 2,4-D or MCPA and new pasture with 2,4 DB or MCPB. Plants must be completely covered with the spray mixture and the area must not be grazed for at least 10 days as land cress becomes palatable to stock after spraying.

Removing plants by hand is the best summer control technique.

(THE ENSIGN 28.9.84)

Goat's Rue Blamed on Catchment Board

THE WAIRARAPA CATCHMENT Board has been criticised by Eketahuna noxious plants officer Bob Morgan. Mr Morgan told Eketahuna County Councillors at a meeting in September that the board had been responsible for bringing the dreaded goat's rue into the county.

He said the extraordinary thing was that while the catchment board admitted noxious plant seeds were transported into areas on the board's machinery, it would not actually do anything about the problem.

Mr Morgan said that what made goat's rue so much worse than many other noxious plants was the fact that animals would eat it. He told councillors of a recent case in Dannevirke where between 200 and 300 head of cattle died after eating goat's rue. "It's down the county river beds. It is quite clear the catchment board have brought seeds in on machinery when they're working on the rivers and the adjoining land."

Mr Morgan said the catchment board claimed the goat's rue problem was not its responsibility. "The board says it's not catchment land, it's all land belonging to farmers and it's the farmers who should take care of the noxious plants.

But the farmers aren't able to use the land because the catchment board fence it off for pole planting and general work. So the farmers' attitude is that it's the catchment board responsibility."

Mr Morgan told the councillors it was the county that was trying to cope with the problem simply because no one else would help.

He said while the problem at this stage is not costing a lot of money, he warned it could in the future. "In Pahiatua goat's rue has cost about \$70,000 to fight and the problem is still going on."

Mr Morgan is adamant that the Wairarapa Catchment Board should pay for the control of noxious weeds it introduces. "But", he warns, "the only way the catchment board will ever be forced to pay the cost is through the courts. A test case needs to be taken against the catchment board. That way, just whose responsibility it all is will be decided once and for all."

The presence of goat's rue in Featherston county is of increasing concern to Featherston County Councillors also.

Yesterday's meeting was told it is believed the plant was introduced by seeds carried by a catchment board machine.

County chairman John Read said he understood the plant was especially dangerous because it was palatable to stock and remained poisonous when it dried out.

Mr Read said he saw little point in arguing over who was to blame for the introduction of the noxious plant to the district. "It's there", he said. "We can't go backwards. The problem is how to deal with it from now on".

(WAIRARAPA TIMES AGE 15.9.84)

CARP OPPOSED



A PLAN TO USE the controversial Chinese grass carp to eradicate a noxious weed from two popular Hawkes Bay lakes has caused an outcry among anglers and wildlife groups.

Scientists of the Ministry of Agriculture and Fisheries Ruakura research station at Hamilton describe the weed, hydrilla, as a "sleeping giant" for the threat it poses to waterways outside Hawkes Bay.

Hydrilla is a class B noxious weed which means it cannot be sold or distributed. Initially imported with ornamental fish, hydrilla grows profusely in all freshwater conditions and could, according to scientists, choke lakes and rivers if it spread from Hawkes Bay. It is a big and costly problem overseas.

They are convinced its eradication is imperative in the national interest and have suggested using grass carp to eliminate the weed from Lake Tutira and Lake Opowehe nearby, about 25km from Napier.

As an alternative, the ministry researchers suggest use of a powerful slow-release chemical to kill hydrilla. But wildlife interests fear the lakes, and with them, trout, waterfowl and other sensitive freshwater species face extinction under the plan.

Opponents of the plan argue other methods could be used to control hydrilla without destroying wildlife and the favourite fishing spot of hundreds of anglers.

Dr John Clayton, of the ministry's aquatic plant section, said yesterday that hydrilla, one of the "world's worst weeds", was found only in the Hawkes Bay lakes.

Its isolation meant eradication was possible before it spread to other areas. Hydrilla had only recently been found in Opowehe and could eventually cause costly problems in drainage systems, canals and hydro lakes.

"If it is accepted that eradication is in the national interest, then there will have to be a temporary abatement of other lake values such as fish and recreation for about five years", Dr Clayton said.

Restocking of the lakes with suitable plants and fish after this period would speed natural regeneration.

Dr Clayton said he planned to arrange talks this month with lake users and water agencies in Hawkes Bay to consider an eradication trial. But Mr Norman Campbell, president of the Hawkes Bay Acclimatisation Society, said there was a lot of concern over the ministry's plan.

Anglers and other lake users were prepared to lose access for a short time but did not believe the carp project would finish in five years. Swans were cropping hydrilla and the weed, which had been in Lake Tutira for at least 20 years, seemed to be under control.

"We don't want to see hydrilla spread, but we think it would be an environmental disaster to destroy the lake", Mr Campbell said.

There is also concern that the liberation of grass carp into the lakes could see the fish spread to other parts of the East Coast.

Earlier this year, the escape of hundreds of grass carp from what was considered a secure Ministry of Agriculture and Fisheries project in the lower Waikato River, caused widespread alarm and led to demands for the destruction of all remaining carp.

But Dr Clayton said that while there were some misgivings about grass carp, they were not a self-perpetuating species. Chances of their breeding in the wild were remote because they needed ideal conditions.

He emphasised that they were quite different from the destructive Japanese oi carp, which pose a big threat to North Island trout fisheries.

(NEW ZEALAND HERALD 11.10.84)

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PLANT HABIT

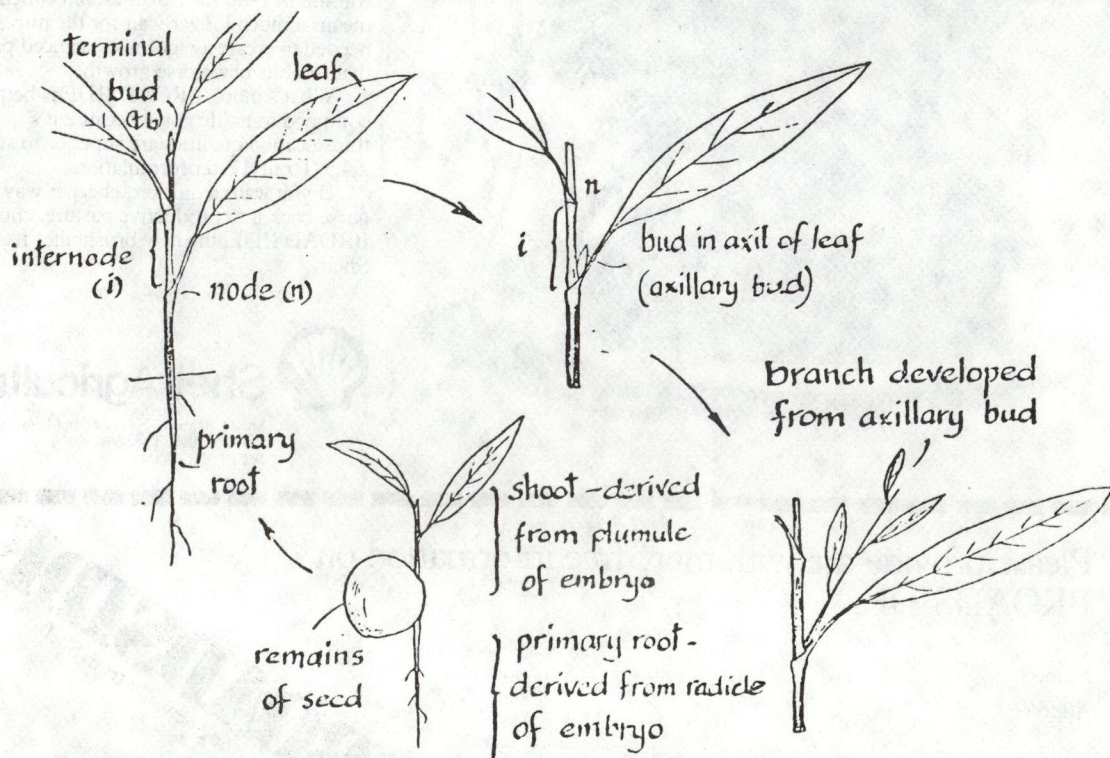
— In Relation to Weed Potential

AMONG THE FEATURES which make some plants undesirable are their rapid reproduction, and persistence.

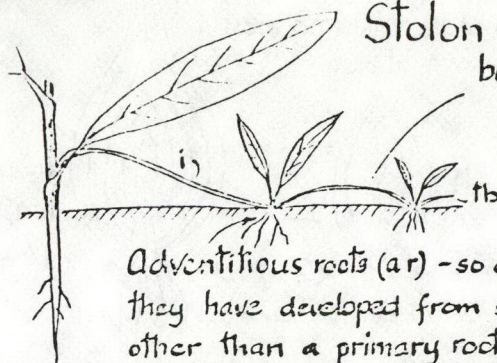
Many of these plants reproduce by seeds, and persist as seeds through periods unfavourable for their growth. There are vegetative parts also which perform these functions.

The habit is the general form, or mode of growth of a plant. Here we consider habits of some herbaceous (non-woody) plants and explain their derivation and contribution to the success of the plants that possess them. The structures involved are stems, roots and leaves which take on other forms.

First, let us be sure of the nature of normal stems, roots, and leaves, then relate the modified structures to them.



STOLON



Stolon or runner - a shoot that has bent to the ground and taken root

Adventitious roots (ar) - so called because they have developed from some part other than a primary root

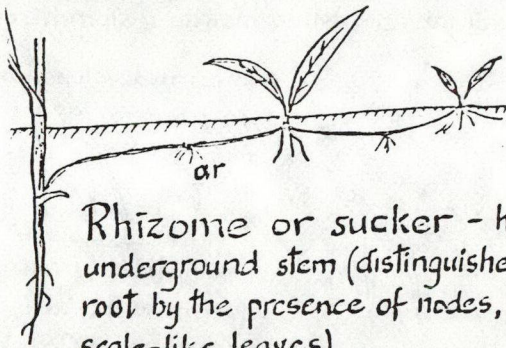
Examples - kikuyu grass, wandering Jew, carpet grass, alligator weed, creeping mallow



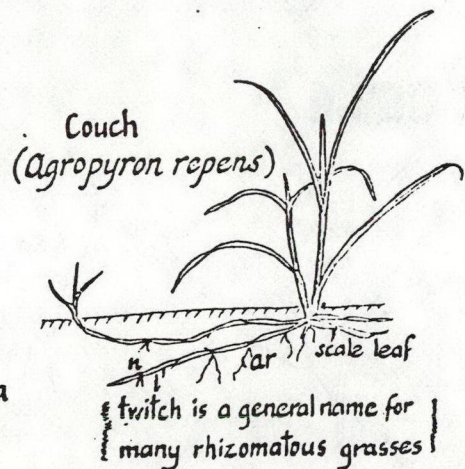
Reproduction has taken place when the plantlet becomes separated from the parent plant. This is vegetative reproduction. Every plantlet is a clone of the parent plant.

— Advantage — • ability to establish among other plants where seedlings could not succeed

RHIZOME

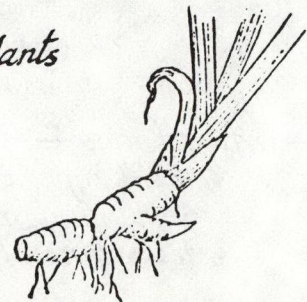


Rhizome or sucker - horizontal underground stem (distinguished from a root by the presence of nodes, buds or scale-like leaves)



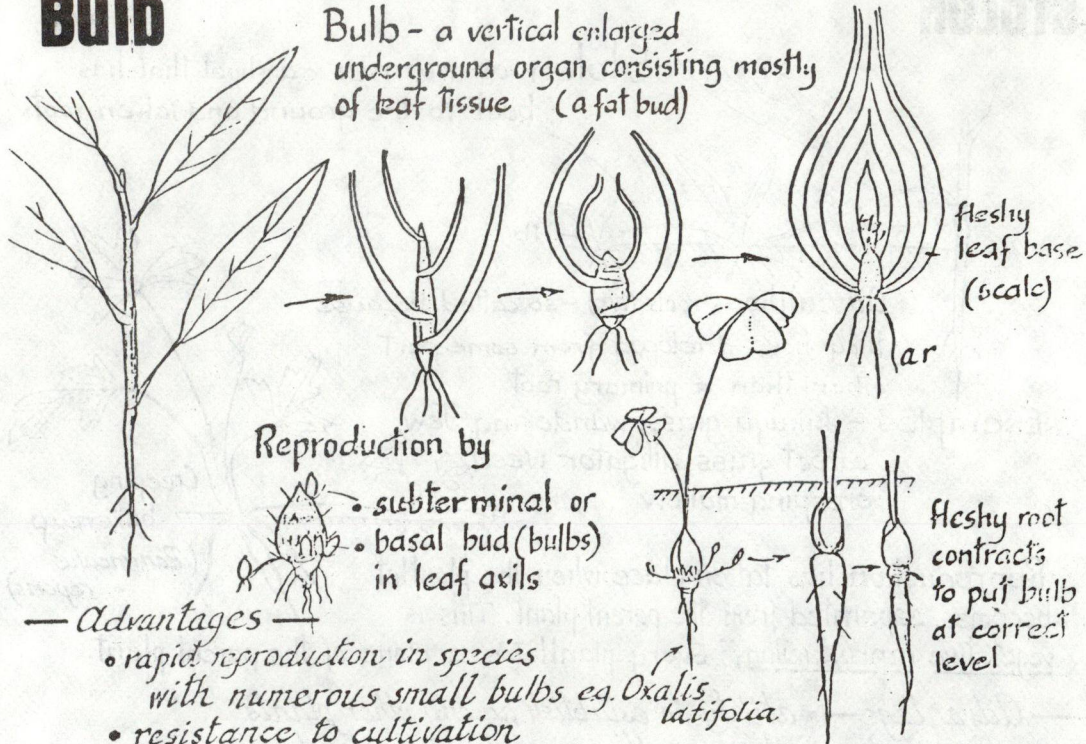
— Advantages — • ability to establish among other plants
• resistance to cultivation

Some (in spite of general definition) grow on the surface, and may be short and stout (internodes contracted)
Examples - wild ginger, stinking iris



Bulb

Bulb - a vertical enlarged underground organ consisting mostly of leaf tissue (a fat bud)



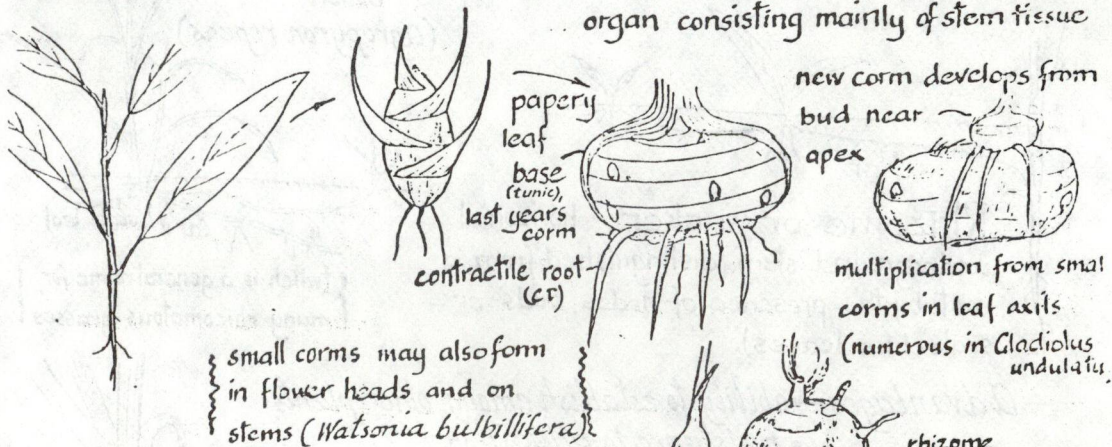
— Advantages —

- rapid reproduction in species with numerous small bulbs e.g. *Oxalis latifolia*
- resistance to cultivation
- less vulnerable than seedlings

small bulbs may also form in flower-heads (*Allium vineale*)

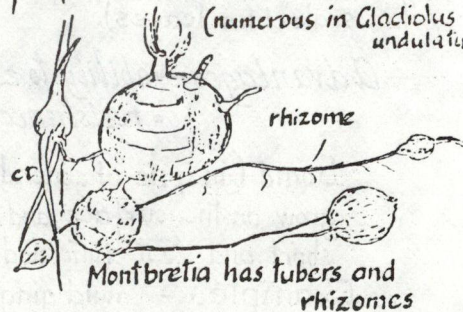
CORM

Corm - a short vertical enlarged underground organ consisting mainly of stem tissue

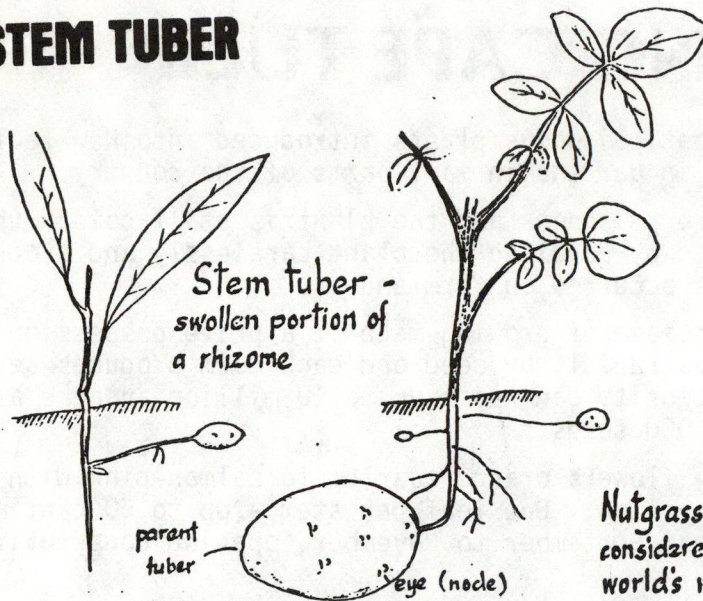


— Advantages —

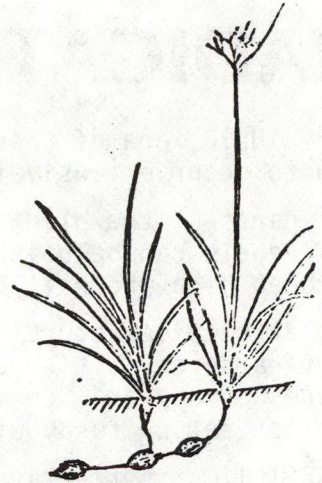
- rapid reproduction in species with numerous small corms
- less vulnerable than seedlings



STEM TUBER



Potato shows the characteristic features of tuberous plants

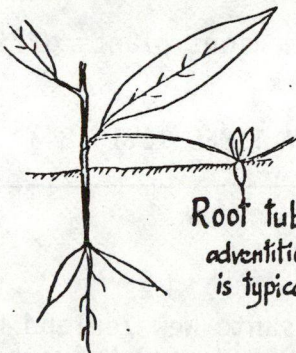


Nutgrass (*Cyperus rotundus*) is considered to be one of the world's worst weeds

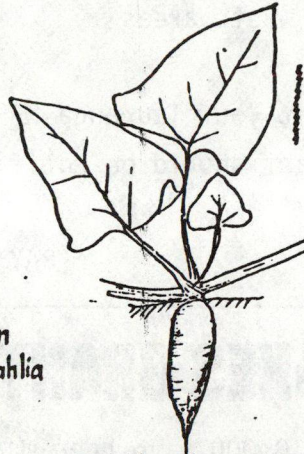
Advantages —

- woody tubers are resistant to cultivation
- rapid reproduction if tubers are produced freely

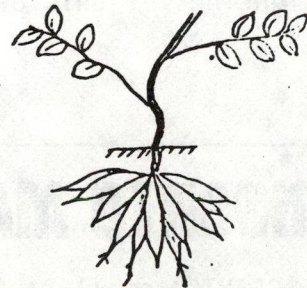
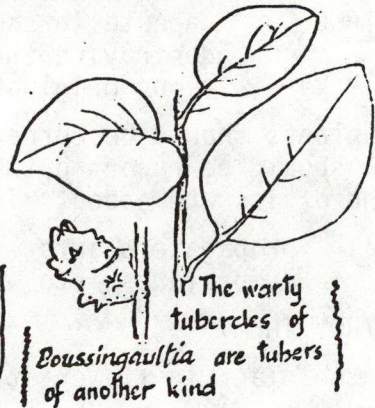
ROOT TUBER



Root tuber - swollen adventitious root (dahlia is typical example)



Climbing dock grows tubers where stem contacts soil of kumara



Smilax resprouts from stem, not from tubers

— Advantages —

- some resistance to cultivation
- additional means of reproduction in climbing dock

ERADICATING CAPE TULIP

CAPE TULIP, one of the most poisonous plants introduced into New Zealand, is known to occur extensively in gardens in many parts of the country.

All parts of the plant are poisonous and the plant is still poisonous when dry. People can be poisoned by handling the plant carelessly and stock losses have been high where it has occurred on farmland.

Its attractive nature and ease of growing make it a prize possession of the unwary gardener. It spreads rapidly by seed and each corm produces several new ones each year. Corm density can reach up to 10 million an acre and each plant can set up to about 6000 seeds.

DESCRIPTION: Attractive - flowers orange-scarlet to salmon-pink with basal parts yellow; One leaf per stem - up to 60 centimetres; Flowers appear September to November, opening consecutively up the stem.

CONTROL: Cape tulip should be destroyed. The MAF has a mobile team destroying the known major infestations. All these infestations originated from plants dispersed from home gardens.

All plants should be burned or dug and 24D poured on to corms. Major infestations should be reported to MAF. Everyone either possessing Cape Tulip or knowing of its whereabouts is requested to co-operate to ensure its eradication.

DON'T - propagate plants
- dump plants into waste areas

DESTROY THEM!

See the plant in flower at your Tauranga MAF office.

Any sightings of this plant should be notified to a noxious plants officer or MAF.

(BAY OF PLENTY TIMES 11.10.84)

MONSANTO MAKES GRANTS

THREE GRANTS totalling \$10,000 have been made by Monsanto New Zealand Limited to researchers at Lincoln College and a combined MAF-DSIR-Massey University group.

The grants follow an economic study of the effect of weeds which estimated the cost of control and lost production at about \$350 million a year.

A grant of \$4000 went to Dr Ian Popay of MAF's Research Division in Palmerston North who is spokesman for the combined group.

The grant will help the group with a project initially surveying the national distribution and importance of non-palatable herbaceous pasture weeds.

Dr Roger Field, reader in plant science at Lincoln College, received a grant of \$3000 for a study of Californian thistle.

A further grant of \$3000 was awarded to Dr Gerald Frengley, a lecturer in farm management with the department of farm management and rural valuation at Lincoln College.

Mr Allan Scherp, manager of Monsanto's New Zealand agricultural operation, said the research projects would have an influence on agricultural production and therefore on the economy.

"We hope these results will lead to better agricultural production in the long term", Mr Scherp said.

The awards will be formally presented at a function in Wellington later this year.

(CHRISTCHURCH PRESS 2.11.84)

SEEKING CLASSIFICATION

MASTERTON COUNTY Council is to join two other Wairarapa counties in a request to have goats rue declared noxious plants.

Councillors agreed at yesterday's meeting to the measure following a request from noxious plant officer Mr K. Worsley.

Mr Worsley told councillors that the plant had proved fatal to stock.

Councillor Terry McGruddy supported the claim when he said there had been substantial stock losses around the Tiramea and Manawatu rivers from goats rue.

Councillor McGruddy said it was important goats rue be declared a class "B" weed. He stressed the council must move immediately to have this done.

Councillors agreed to forward their concerns and requests to the noxious plants council.

(WAIRARAPA TIMES AGE 10.10.84)

Residue Probe Wanted

THE SOIL Association is calling for a public inquiry into pesticide residues on fresh fruit and vegetables.

It is concerned about the results of a report which showed 28 percent of farm workers were poisoned using organophosphates.

Such a large number of workers "abusing or misusing" pesticides could be reflected in oversprayed and contaminated fresh fruit and vegetables.

Association secretary Libby Shepherd said the inquiry should look into the safe levels of residue contamination from commonly used pesticides and fungicides.

It should also query whether New Zealand's acceptable levels differed from other Western countries and whether the country was treated as a dumping ground for rejected products.

"For those who worry about Antarctica, whales and forests, what about the soil which nurtures and feeds us. It has become a dumping ground for tonnes of toxic chemicals. This is our most rapidly diminishing resource," Ms Shepherd said.

There was an important relationship between healthy soil, healthy food and healthy people.

(MANAWATU EVENING STANDARD 10.10.84)

CO-OPERATION

— A Two Way Deal

CO-OPERATION IS ALL very well so long as it works both ways. But the Matamata County District Noxious Plants Authority is fighting despair in its attempts to be both advisor and prosecutor where its constituents are concerned.

At a recent meeting of the authority's committee, a letter was received from the county solicitors, advising of a recent weeds prosecution conviction - and of the judge's comments.

"Judge Green said he trusted the authority would heed the suggestions he had made in his judgement..." the letter read.

The first suggestion was for "improved co-operation with farmers on noxious plants problems."

LAST RESORT

The second was that: "... noxious plants problems would be dealt with by co-operation rather than prosecution, with prosecution being used only as a last resort with those who are too obstinate to be persuaded by any other means"

The reading aloud of the solicitor's letter certainly drew a reaction from the committee meeting.

Comments were to the effect that the authority's noxious plants inspector, Ray Iremonger, already did give advice. But he couldn't force the farmer to take it.

An example was in the application of commercial chemicals.

One farmer who just this season was advised against using a particular chemical mixture, ignored what Mr Iremonger said and went ahead on recommendations from other quarters.

Subsequently, his weeds persisted, albeit a bit worse for wear.

"We can't stand there and hold an axe over them so they don't use it" said Cr Sue Lane.

Generally speaking when the authority came to the point of Prosecution to enforce the Noxious Plants Act, it was having a lot of trouble getting the charges to stick.

The meeting was sure that the only property occupiers the authority was taking to court were those "too obstinate" to be persuaded by any other means to clear noxious plants from their land.

"A lot go to court once and get the message even though the fine may not be very big", said committee chairman Gilbert Flavall.

"On others it doesn't mean a thing. Their fines are virtually a licence to grow weeds," he said.

(MATAMATA CHRONICLE 20.9.84)

SPRAYING WORRIES



THE "COMPLACENT ATTITUDE" of farmers spraying weeds near horticultural blocks is worrying the Ministry of Agriculture and Fisheries in Whangarei.

And the often impossible task of proving exactly who has caused a particular spray drift damage is compounding the problem. During the last two months, the ministry has investigated nine complaints of damage to shelter belts, kiwifruit and a glasshouse tomato crop. Many crops are still showing signs of damage from last year's spray drift problem.

Typical signs of browned off branch tips and leaf damage do not appear in every damage case, but poor thrift can result in damaged crops being slowed in their development for at least two years, Mr Graham Peake, field officer with the ministry says.

"Farmers should have finished spraying for thistles a month ago, but we are worried late spraying will cause further damage," Mr Peake said.

The small percentage of complaints successfully prosecuted after getting to court was tending to compound the problem, he said.

Because of the difficulty of conclusively proving responsibility for spray damage, the ministry is worried farmers may continue to spray without regard to neighbouring horticulture.

As kiwifruit start to flower during the next few weeks any spray damage to crops flowers or young leaves would be particularly devastating and have long-term effects.

Mr Peake said the three major precautions farmers could take were not always being used.

"Farmers should spray when the wind is blowing away from horticultural blocks", he said. "They should put anti-drift in spray tanks and should adjust the pressure on tanks to ensure minimum drift. Incorrect pressure adjustment is one of the main causes of excessive spray drift".

Mr Peake said farmers tended to use pressure that was too high so that droplets were fine and went too high into the air. Provisions under the Agricultural Chemicals Act existed for ministry staff to prosecute people for the reckless misuse of chemicals, Mr Peake said.

The greatest incidence of spray damage is at present concentrated around the Maungatapere irrigation district because of the concentration of horticulture in the area. Out of seven orchards in the Maungatapere irrigation district visited by Mr Peake, six showed signs of spray damage with up to 50% of leaves that were new three weeks ago being damaged.

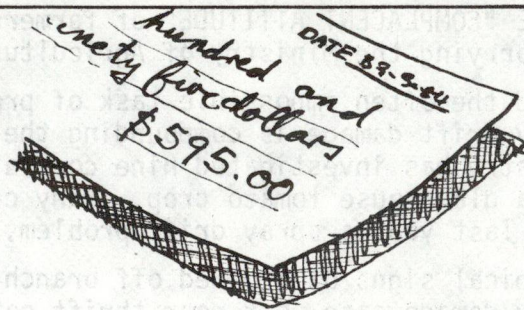
Three weeks ago a lot of hormonal spraying for pasture weeds, particularly thistles, was still being done. It was the leaves and shoots of shelter belts and horticultural crops that were young around this time that had been damaged Mr Peake said. As horticulture has developed in Northland, the spray drift had become increasingly worse, he said.

Individual farmers, rather than agricultural contractors, were the main cause or the problem.

(NORTHERN ADVOCATE- 23.10.84)

Costly Weeds

FAILING TO COMPLY with a notice to eradicate noxious plants has cost a School Road property owner \$595.00.



William Russell Haig, publican, was convicted and fined \$500 costs \$20, and solicitors fees of \$75 on a charge of failing to comply with a notice issued by the Silverpeaks Combined District Noxious Plants authority requiring him to eradicate gorse, broom and hawthorn growing along the boundary of the land on School Road within 14 days of the date of notice.

Mr Haig sent a letter of explanation to the Dunedin District Court.

Mr Raymond Read, the senior noxious plants officer, gave formal proof to the Court.

Later he told the Herald another similar charge is pending.

This kind of action has not been taken for many years, but he said, if the noxious plants are allowed to spread, a serious problem could re-develop.

(TAIERI HERALD 11.9.84)

Noxious Plant Officer Is A Rare Breed



Ms Rebecca MacIntosh

NEW HOKIANGA COUNTY Noxious Plants Officer Ms Rebecca MacIntosh has joined a unique group- she is one of only four women in charge of weed control throughout New Zealand's 221 municipalities.

Ms MacIntosh, of Kohukohu, took over the position after Mr Graeme Dempsey quit the post recently. She had formerly worked for 12 months under his direction making maps of weed infestations in the county.

Coinciding with the new appointment, the Hokianga County Council has decided to set up a district noxious plants authority with five council representatives and four other local community representatives selected from Federated Farmers, marae committees and trusts, Government departments or other appropriate organisations.

CARD SYSTEM

Before taking up her new duties Ms MacIntosh spent 10 days on a training course in the Rodney County where she spotted a few administrative methods which she brought to her council's attention.

In a report on the training course, she said she was shown a card system listing full details of Rodney weed control work, including data on individual farms and the amount of subsidies they collected.

"The possible utilisation of such a card system in Hokianga encompassing data collected on previously done physical weed surveys as well as other information collected could be a valuable idea", Ms MacIntosh said.

The training course took her to Auckland, where she was shown a patch of *Clematis vitalba*, a vine that can stifle growth of native seedlings.

"It was of special interest to me as I had never seen it and believe there to be sites in Hokianga", she said.

In the Huapai district Ms MacIntosh was shown biological weed controls with rhinocellus beetles eating nodding and winged thistles, and her report pointed out that ragwort was also being controlled with insects.

EFFECTIVELY CONTROLS ISOLATED BRUSHWEEDS.



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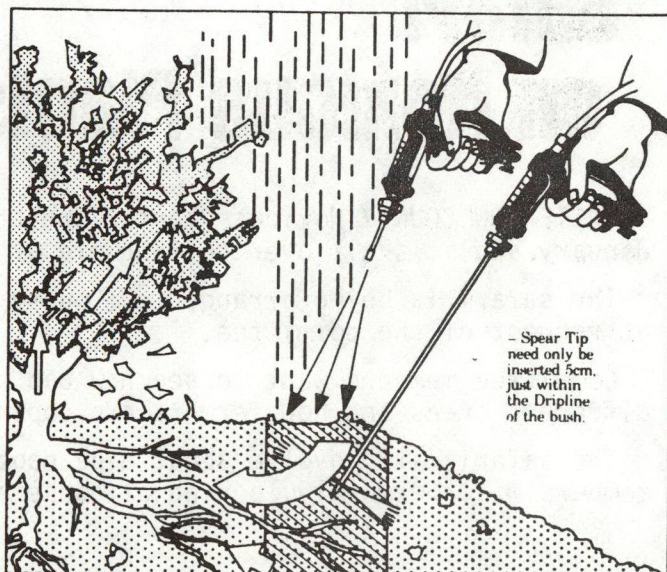


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▲ Du Pont Spotgun™ on-surface nozzle for flat ground. Spear for sloping ground to minimize run-off.

Velpar Liquid/Dose Rate Table				
WEED SPECIES		0-1 Metre Height	1-2 Metre Height	For Larger Bushes
Easy To Kill	(Ragwort	2-4ml	—	8 mls per metre within the dripline around bush
	(Woolly Nightshade	4 ml	8 ml	
	(Tauhinu	4 ml	8 ml	
	(Blackberry	4 ml	8 ml	
Harder To Kill	(Sweet Briar	4 ml	8 ml	8 mls per metre within the dripline around bush] NOT RECOMMENDED
	(Boxthorn	4 ml	8 ml	
	(Hawthorn	4 ml	8 ml	
	(Seedling Gorse	4 ml	—	
	(Seedling Broom	4 ml	—	
	(Barberry Suggested Rates	4 ml	8 ml	
	(Privet Suggested Rates	4 ml	8 ml	

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Agrichemicals

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On the last day of her training course she visited a Puhoi farm, where she heard that a helicopter pilot had stated he suspected gorse on dry coastal land was becoming resistant to 2,4,5-T.

(NORTHERN NEWS 2.11.84)

Safari on Noxious Plants



MASTERTON COUNTY Noxious Plants Committee members will be on safari in January and it's all over getting rid of weeds.

The safari is being arranged by County Noxious Plants Officer Kevin Worsley at request of the committee.

Committee members want to see how bad the noxious plants problems are in different areas and how farmers are coping.

The safari will involve about nine people and a number of farms. Committee members will be mainly looking at gorse and nodding thistle problems.

(WAIRARAPA TIMES AGE 24.10.84)

FURTHER SUPPORT FOR LUPIN CLASSIFICATION

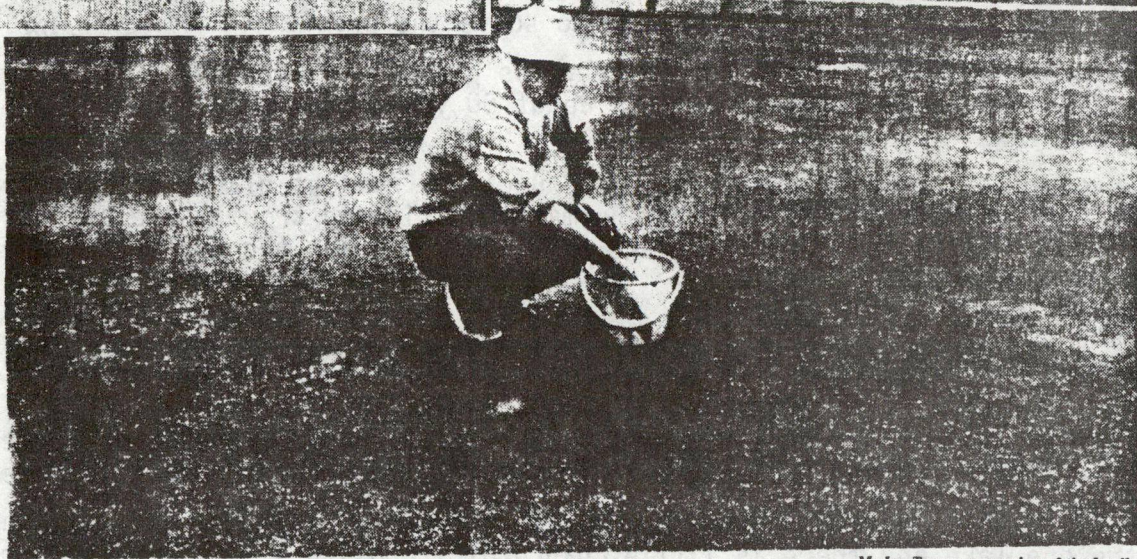
WANGANUI COUNTY councillors agreed yesterday to support a move by Rangitikei County Council to have lupin declared a noxious weed, north of State Highway 3.

The chairman of Wanganui county's noxious weeds committee, Roger Caseley, said lupin was creating a serious problem in Rangitikei county. It was spreading quickly and earthworks on the electrification of the main trunk railway line had made the problem worse. Furthermore, cattle would not eat the plants.

Rangitikei county recognised the need for lupin in the sandhills south of State Highway 3 as a stabilising agent, Mr Caseley said. But the plant was expected to become a nuisance in Wanganui county shortly unless action was taken to eradicate it now.

(DOMINION 13.10.84)

Wrong mix **bowls greens**



Mr Ian Turner, a member of the Lyall Bay Bowling Club's greens committee, surveys part of the club's devastated greens.

The Lyall Bay Bowling Club's weed greens — acknowledged as among the best in Wellington — have been destroyed as a result of a mix up with chemicals.

According to club president Mr Jon Farrell today a chemical was applied about a month ago to treat a grub.

He said the chemicals had been ordered over the telephone.

"After the material was applied the greens started to brown off," Mr Farrell said. "We expected something like that and were not too concerned. But then it got worse and worse and it was obvious something was very wrong."

It was discovered that instead of the chemical to treat the grub another chemical with a similar name had been applied.

A hurried call was made to the turf culture department at Massey University and an officer carried out an urgent inspection. But the news was all bad.

Response

Mr Farrell recalls: "He took one look at it and said 'You've had it mate, she's gone'."

Mr Farrell described the chain of events leading to the application of the wrong chemical as "an unfortunate accident."

Mr Farrell said the greenkeeper had been with the club for about six years and had done a very good job. He was no longer with the club.

Sympathetic

"I have not seen the chap since this happened but I understand he is very down to it. It is a very unhappy situation."

Mr Farrell said one cotula weed green had been resown in grass. A nylon net borrowed from the Stokes Valley club to help germination had been laid over it and it was hoped the green could be available early next year.

Mr Farrell estimated the enforced closure of the greens until at least Christmas would cost the club about \$10,000 in lost revenue.

In the meantime, thanks to the co-operation of the Miramar, Kilbirnie and Newtown clubs, Lyall Bay's 90 members are able to continue their club competitions. "The help we have received from other clubs has been tremendous and we are most grateful for it."

Low point

Mr Farrell said the grass greens were likely to be temporary.

"We will consider later whether to put weed down again — I would think we would."

Mr Farrell said the club would come back stronger. "We are a pretty hardy lot down this way — we have to be to survive the southerlies."

LILY TAKING OVER

AN ORNAMENTAL LILY planted 50 years ago is now taking over a wildlife refuge in Central Hawkes Bay.

Catchment Board, Ministry of Agriculture and Fisheries and noxious plants experts are trying to solve the problem.

One plant of the nuphar lutea variety was planted at Horseshoe Lake at the end of Mangarara Road near Patangata about 50 years ago and now covers 40% of the 42ha lake.

A report to the Waipukurau District Council by noxious plants officer Mr Keith Anstis said the plant is not normally considered troublesome but because it has been multiplying in this lake for about 50 years the quality of the lake water has decreased.

An underwater diving inspection of the lake has been carried out by Miss Lucy Harper from the ministry's aquatic section at Ruakura and by Miss Susan Porter from the Hawkes Bay Catchment Board.

Miss Harper is now trying to devise a herbicidal control but water rights will be needed for any spraying because the lake is a gazetted wildlife refuge.

There is no immediate danger to wildlife from the weed. The lily is confined to the one lake and there is little chance of it posing a problem elsewhere.

The district council is waiting for a report from Miss Harper before deciding what to do.

(DAILY TELEGRAPH (Napier) 27.9.84)



FURTHER STUDIES WELCOMED

THE APPARENT relationship between bowel cancer in sheep and the use of phenoxy herbicides has come up again.

Victoria University welcomed the decision by Director General of Health, Dr Ron Barker, to ask the Medical Research Council to consider further studies into the relationship.

Mr Renner performed the statistical analyses associated with a Council-sponsored study which suggested that sheep grazed on land previously sprayed with phenoxy and/or picolinic acid herbicides had a higher incidence of small bowel cancer than those grazed on unsprayed land.

He also jointly authored a summary of that study which was presented to the International Congress of Agricultural Medicine and Rural Health in Christchurch in September. He said that the study team had strongly recommended that further investigations should be undertaken.

The Council-sponsored study examined a variety of environmental factors and identified a few which deserved more intensive examination.

Mr Renner rejected criticism of the design and conduct of the Council study and of the questionnaire sent to farmers.

"The design of the study was extremely conservative in all respects. After the exclusion of all mobs about which any information was missing, there were still more than 16,000 sheep eligible for the herbicide analysis.

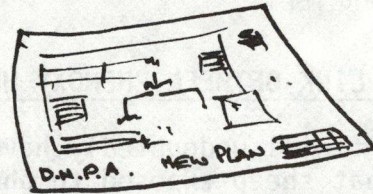
"Numbers of this magnitude had been specified to detect smaller differences in tumour rates than were actually observed.

"There was constant pressure throughout the data-collection process to achieve the specified numbers of sheep, a near 100 per cent response rate from farmers and to ensure the veracity of responses", Mr Renner said.

(WANGANUI CHRONICLE 24.10.84)

NEW LOOK D.N.P.A.

THE HOKIANGA COUNTY COUNCIL has restructured its District Noxious Plants Authority to increase community involvement and awareness of noxious plants programmes.



The authority is to have five council members and four members representing interests such as Federated Farmers, forestry, Maori committees and the Ministry of Agriculture and Fisheries.

It will formulate and implement policy and direct the county noxious plants officer, but where commitment of rates money is involved prior approval will be needed from the council.

The move was made on the recommendation of the county noxious plants officer for the past five years, Mr Graeme Dempsey, who resigned recently. He has been replaced by former project employment programme noxious plants research assistant, Ms R. MacIntosh.

District noxious plant authorities were required to maintain a programme setting out policy and management plans for noxious plants control in their areas, Mr Dempsey said.

The programme had to be publicised and objections invited, thus involving the community in weed control work. However, up until now the county council had left it to the noxious plants officer to formulate policy for approval by the council.

The recommendations of a single officer were not adequate in covering the various community interests and it was time for a district authority to become involved.

The authority should set objectives and direct the officer, instead of dealing with situations crisis by crisis, he said.

The new authority would have more time than allowed at council meetings to talk in depth on noxious plant issues, he added.

(NORTHERN ADVOCATE 29.9.84)

Phenoxy Herbicides /Bowel Cancer in Sheep

IN VOLUME 5 No.5, page 21, PROTECT published an article dealing with a link between 2,4,5-T and cancer. A further article on the subject appears on page 22 of this issue.

Mr Tony Jaques, Advertising and Public Relations Manager for Ivon Watkins-Dow Ltd has kindly made available the following internal circular for publication in PROTECT.

ALLEGED LINK BETWEEN PHENOXY HERBICIDES AND BOWEL CANCER IN SHEEP.

All staff will undoubtedly have read or heard about the widely reported recent claim that sheep exposed to phenoxy herbicides were said to have a higher rate of bowel cancer than those not exposed.

And some may have read the much less publicised report of the Review Committee, set up by the Health Department, which cast serious doubts on the reliability and accuracy of the original paper. In addition to specialists from the Health Department, the Committee also included representatives from the Pesticides Board, from Massey and from the University of Otago Medical School.

Because the press gave so little prominence to the Health Dept review the following excerpts will help gain a better perspective on the very controversial claims which have been so widely publicised and accepted.

"The committee noted that the study was not designed to test the hypothesis that the herbicides are a cause of small intestinal adenocarcinoma in sheep.

It was also aware of the difficulties in collecting reliable data about past use of pesticides (over a period of up to 7.5 years) and about other factors which may be relevant to the occurrence of small intestinal adenocarcinoma in sheep. Nevertheless, the committee had serious reservations about some aspects of the design and conduct of the study, particularly the questionnaire which was sent to farmers."

In different versions of the research report, this study has been described as both a case-control study and a retrospective cohort study. In fact it is neither of these. It is a descriptive study, in which the prevalence of tumours in groups of sheep has been correlated with information obtained

from farmers by questionnaire. The important limitations of descriptive studies need to be borne in mind.

According to the protocol for the study, only groups containing more than 200 sheep were eligible for inclusion. It is clear from the analyses, however, that several groups containing much smaller numbers - down to 34 ewes - have been included. It is stated that "some animals in some groups were later omitted due to uncertainty concerning their eligibility". No details are given of the numbers excluded nor of the precise reasons for their omission. Such basic information would be expected in a brief paper on an epidemiological study, let alone in a full report of 107 pages."

The committee also noted that although the farmer questionnaire said that sheep had "received no special attention whatever" in the freezing works, this seemed to be at variance with the methods used, and in addition "it appears likely that the farmers were informed of the prevalence of cancers in their sheep at the same time as they were being asked about the use of chemicals sprays and other factors.... If this is so, the study contains an elementary defect in design which could have produced important bias in the findings. Given the continual publicity about the possible link between herbicides and cancer, for example, it is possible that those farmers who were surprised by the high frequency of tumours in their sheep would have been more likely to recall use of herbicides in past years."

Referring to the questionnaire sent to farmers, the committee questioned possible ambiguity which could apply to the issue of when and how often pastures were sprayed and concluded:

"The Committee is concerned that the main analyses in the research report use herbicide exposure categories that are clearly not justified on the basis of the questions asked.

The questionnaire relied on farmers' recall of spraying practices up to 7.5 years previously. The report does not mention any attempt to test the validity of information obtained in this way. No details were sought as to how often pastures had been sprayed during the lives of the sheep."

The Committee expressed concern over failure to give details of the rate of nonresponse to the farmer questionnaire and said it had since obtained confirmation that "further responses had been sought from some farmers after preliminary analyses had shown the association between phenoxy herbicides and small intestinal adenocarcinoma. It is possible that such a procedure would have introduced bias", said the Committee.

After commenting on the analytical method used, and after expressing surprise that the original study should be published before it had been completely analysed, the Committee said its own examination of the statistical data led it to believe that the methods used to try and eliminate variables such as breed and tumour rates meant that the conclusions were "open to question".

"The research report does not give sufficient emphasis to the possibility that, if there is a real association between use of herbicides and small

intestinal adenocarcinoma in sheep, this could well be indirect," the Committee said. "For example, it is possible that spraying with the herbicides could make noxious plants temporarily more attractive to grazing stock, and that some component of these plants is responsible for an increase in tumour incidence."

Concluding its review of the methodology, the Review Committee summarised:-

"It is difficult to draw any firm conclusion from the study about any association between the herbicides and the risk of small intestinal adenocarcinoma in sheep. Even if a causal association were to be shown, the relevance of this to human health is uncertain.

Despite its reservations about the study the committee agrees with the authors' recommendations that more specific studies are warranted. Accordingly, it recommends that the Director-General of Health forward a copy of this review to the Medical Research Council and any other appropriate agency to consider what further studies should be carried out."

In addition, IWD staff will be interested to know that the Pesticides Board recently considered the same study and concluded that it did not warrant further study.

We have almost certainly not heard the last of this study, but the information set out here should assist in gaining a proper understanding of its importance.

19 November 1984

Crop list planned

A meeting to discuss the compilation of a list of growers of sensitive crops in the Waikato to help prevent damage to crops due to hormone herbicides is to be held on Monday (Nov 12).

The meeting, organised by the Waikato branch of the New Zealand Weed and Pest Control Society, is open to members and invited participants.

Speakers from Te Kauwhata Growers Association, the Waikato branch vice-chairman and an agricultural chemical contractor will outline the problems involved with hormone herbicides.

Major concerns of the Waikato branch are the inadequacy of pesticide regulations for pinpointing re-

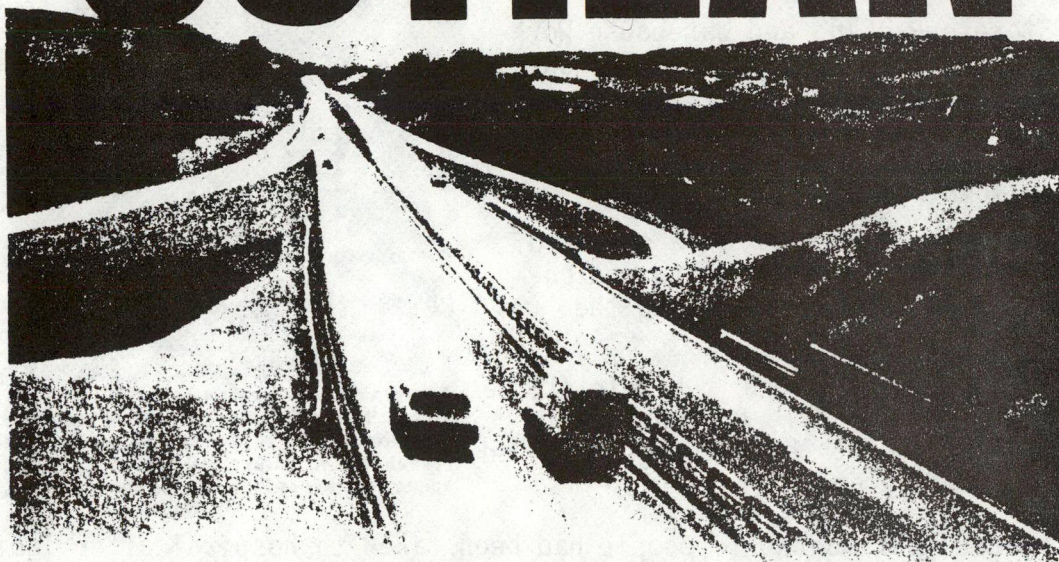
sponsibility when damage occurs and that lists of sensitive crop growers are not available to other users of herbicides.

Branch secretary Eric Beetz said the Ministry of Agriculture and Fisheries did not accept responsibility for the compilation of a list and had stopped surveying growers on a regular basis for crop information.

"There is an obvious deficiency of information which could be used to help protect the interests of sensitive crop growers and assist applicators of hormone herbicides, thus minimising the chances of costly mistakes," said Mr Beetz.

(WAIKATO TIMES : 16-11-84)

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MILES AHEAD OF OTHER RESIDUAL HERBICIDES

USTILAN is not just another weedkiller, it is a broad spectrum herbicide that controls both broad-leaved and grass weeds including many obstinate species. Ustilan can be applied in lower water volumes provided good even spray coverage is attained.

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TOO HOT TO HANDLE

A CONTAINER OF undeclared dangerous goods sits blacked today (see date below) in a Christchurch freightyard awaiting its owner.

The Stores, Packing and Warehouse Workers' Union has banned handling the container in the Curries Road Tranzealand yard after undeclared potentially lethal weedkiller was found in it, packed beside women's clothing.

The incident is another in a series of incidents of hazardously packed and undeclared goods which is alarming the union.

"We're not saying we won't handle it," a union organiser, Mr Dave Dickinson said today. "But we want these things declared and packed safely and correctly".



Tranzealand's dangerous goods officer, Mr Clive Murdoch, searches the undeclared weedkiller can label for information on its safe handling, while a union organiser, Mr Dave Dickinson, holds samples of documentation which should have accompanied the container.

In the past six months 14 people had been taken to hospital after incidents with undeclared dangerous goods, he said.

The union, with the watersiders, harbour board, seamen, drivers and railway workers, has asked the Government for safety legislation on the transport of dangerous goods.

"We want the recommended code of practice made law", Mr Dickinson said.

At present, the New Zealand Standards Code remained a recommendation followed by some and ignored by others.

Under the code all dangerous goods must be declared and carry documents in transit explaining their potential hazards.

"We then know exactly what to do should a spillage or accident occur".

Consigners faced an extra cost for declaring dangerous goods, Mr Dickinson said.

(CHRISTCHURCH STAR 8.10.84)

R E M E M B E R

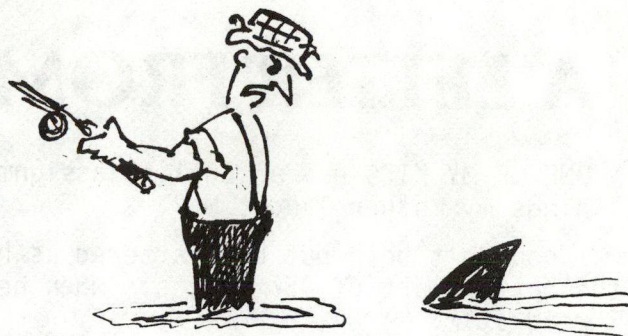
I am still very much interested in receiving "Judgement Notes" with regards noxious plants cases.

Also reports on trial work carried out. Thanks.

Ed.

RIVER THREAT

THE NOXIOUS Japanese koi carp is breeding in the Waikato River and posing a devastating long-term threat to central North Island river systems, according to fisheries scientists and wildlife experts.



Ministry of Agriculture and Fisheries officials are worried that the rapacious koi could spread to famous trout-fishing areas at Rotorua and Lake Taupo.

Freshwater biologist with the ministry in Auckland, Mr Stephen Pullan, said yesterday New Zealand's international reputation as a trout fisherman's paradise could be damaged if the golden-scaled carp expanded rapidly through the Waikato river system.

Koi grow rapidly, breed profusely and, according to Mr Pullan, have the potential to become the biggest fish in the Waikato.

(TARANAKI HERALD 22.9.84)

NOT GUILTY

Noogoora Burr

THE LATEST ISSUE of Protect (Vol.5 No.4) contains an article on page 12 relating to the establishment and spread of Noogoora burr.

I wish to point out that, to the best of my knowledge, Noogoora Burr does not occur in the Waipa County despite claims to the contrary.

I bring this fact to your attention so that I am not contacted for advice on control matters, or positive identification procedures on a problem weed that I, as yet, have no dealings with.

Trusting this clarifies the matter,

Yours faithfully,

K.J. FIELD
Agricultural Supervisor
Waipa County Council

A LETTER FROM A MUM

ONE OF MY KIDS has an English assignment the other night to do a paper on "Things my Mother Taught Me".

I couldn't help but be flattered as he wrote feverishly in his notebook for the better part of 45 minutes. When he was finished, I asked "Do you mind if I read it?"

He shrugged, "O.K. If you want to, but don't get it dirty".

Things My Mother Taught Me

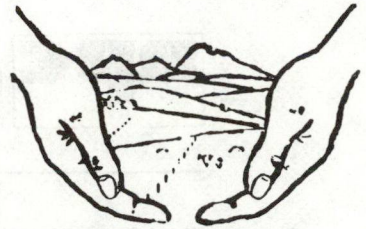
- LOGIC: If you fall off that swing and break your neck, you're not going to the shops with me.
- MEDICINE: If you don't stop crossing your eyes, they're going to freeze that way". (There is no cure and no relief for frozen eyes)
- OPTIMISM: You're going to enjoy yourself at that birthday party or I am going to break every bone in your body.
- PHILOSOPHY: You show me a boy with a pet snake and I'll show you a boy who wants his mother dead.
- E.S.P: Put on your sweater! Don't you think I know when you're cold?
- SCIENCE: You put your hand out of the car window and it will blow off. (Gravity - what goes out must blow off)
- FINANCE: I told you the Tooth Fairy is writing cheques because computerised billing is easier.
- CHALLENGE: Where is your sister and don't talk with food in your mouth.
ANSWER ME!!
- ETHICS: If you are too busy to take out the rubbish you are too busy to need any pocket money.
- GENEOLOGY: Shut that door, or were you born in a tent? (You're asking me??)
- SUSPENSE: Can you guess what I found under your bed today?
- HUMOUR: When the lawnmower cuts off your toes, don't come running to me.

I took off my glasses and put down the paper. Goodness! I would have been willing to bet during all those years he had not heard a word I had said.

Doesn't that sound familiar??

THE INSTITUTE OF NOXIOUS PLANTS OFFICERS INC.

Members' Section



EXECUTIVE RESTRUCTURE

Further to my letter to executive members of the 23 October 1984 concerning the two resolutions passed at the Special Emergency Meeting held in Blenheim on 18 October, I am pleased to advise that they were both passed unanimously and congratulate Kevin and Murray on their appointments.

This means that Kevin Worsley becomes President and Murray Turner Vice-President of the Institute until the 1985 Annual General Meeting at Alexandra.

The change-over of the Presidency and Vice-Presidency became effective on the 19 November 1984.

I would in conclusion like to take this opportunity on behalf of all Institute members to thank both Graham Strickett and Doug Robertson for their time and hard work that they have devoted to the Institute over the years and to wish them all the very best in their new positions.

D.J. Brown
NATIONAL SECRETARY

COMMUNICATION BREAKDOWN?

It appears that there may be a slight or otherwise breakdown in communication between N.P.C. and the individual Officer regarding information being circulated by the National Council.

Rather than printing such material here in the pages of PROTECT where it would not serve the purpose it is intended to, we will instead bring to your notice some of the circulars that you should by now have seen.

1. Replacement pages No.'s 6,7,8 and 9 for the N.P.C. Policy Manual
2. N.P.O. TRAINING- Du Pont Award Applications 1984
3. N.P.O. TRAINING- Training Projects/Study Awards/Special Projects
4. N.P.O. TRAINING- Training Projects : Study Award Applications 1985/86

If you haven't sighted the above material as yet, then it may still be in the IN BASKET of the C.C. or G.M.

Not there? Then, maybe the mailman's falling down on the job.

If there is a problem, let either PROTECT know about it or our National Secretary and we'll see what can be done to help.



Noxious Plants Council
Private Bag Wellington New Zealand

Gillingham House
101-103 The Terrace
720 367

The Secretary
I.N.P.O.

Dear Sir,

REMIT 3 1984 CONFERENCE

Please refer to your letter of 12 October 1984, and to my recent letter in which I indicated I would reply to this remit on Mr Hercus' behalf. The conference remit proposes that all plants gazetted in a region and known to occur in a DNPA be scheduled in the district programme. The purpose of the Classification Committee's review of classification is to ensure that classification is soundly based on technical and ecological information, on the priorities of the Council, and on the need to ensure that DNPA's set priorities and concentrate their efforts on high priority and target weeds. Council was concerned that some DNPAs were returning to the situation that existed under the 1950 Act, where many plants that were classified in district programmes either did not occur in the DNPA, or where effectively planned, programmed and managed work was not being carried out for their control. The classification review is designed to rationalise classification so that each DNPA will schedule a limited number of plants upon which the force of the Act, and the planned and programmed operations of occupiers and DNPAs may focus. Council therefore places great emphasis on ensuring that where any plant is classified in a DNPA, that it meets the criteria, that a reasonable and practical programme of control has been approached, and that the district programme will provide clear guidance to occupiers in the necessary requirements for control. Scheduling of plants that are not classified may tend to obscure the priorities of Council and DNPA's for the control of higher priority needs.

By the end of this year the recommendations of the Classification Committee will have been considered by Council.

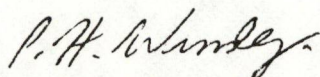
Over the next two months Council, with the help of the field officers will also provide guidelines to DNPAs on the contents and format of district programmes. The Council will as a result of the review of classification, be able to assist DNPA's rationalise their list of gazetted plants. Council will be able to classify further plants within a short time span if necessary provided DNPA's can provide sufficient evidence of an extensive programme of control.

1984 CONFERENCE REMITS

Thank you for your letter of 12 October 1984. It is of concern that your Institute has not received a reply on Remit 3, and I will respond to this remit on Mr Hercus' behalf as soon as possible. I have initiated action on Remit 4, and received some assurance that appropriate MAF publications will be amended in accordance with the recommendations of your Institute. I have attached copies of the action that has been taken.

The recommendations for amendments to the enforcement provisions of the Noxious Plants Act were widely circulated. I had assumed that the Counties Association would circulate these proposals to all DNPAs, and that noxious plants officers would have major input into the DNPA responses to Council as a result. I also forwarded copies to Graeme Strickett at his request, and felt that the Institute would be able to comment through Mr Strickett. I have, however, attached the proposals, and welcome any submissions from your Institute by 15 December 1984. I give you my assurance that no amendments to the Act will be finalised without detailed consultation with noxious plants officers, either directly with your Institute or through the two field officers that Council is employing, both of whom have served as senior office holders in your Institute.

Yours sincerely



(Peter Winsley)
Secretary

FROM: New Zealand Counties Co-operative Insurance Company Limited
TO: National Secretary, Mr D.J. Brown
SUBJECT: Public Liability

Dear Sir,

PUBLIC LIABILITY

I wish to advise that the current policies issued to Local Authorities, i.e. the Officials Indemnity Policy and the Third Party Liability Policy would cater for any liability found against the local authority in respect of these two policies.

You will be mindful that I cannot categorically state that these policies would cover all eventualities, although we do believe that these policies will cater for 99.9% of the cases brought against local authorities providing the terms and conditions of these policies are fulfilled by clients.

The Officials Indemnity Policy has a special waiver of subrogation clause included therein which states that the company will not attempt to recover any amounts paid under this policy against the employee unless the claim had been brought about by dishonest, fraudulent or criminal or malicious act or omissions of the employee.

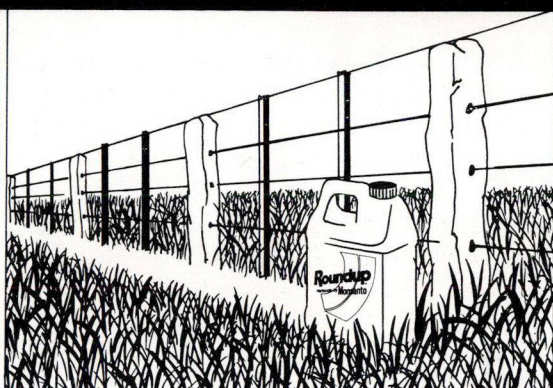
This, of course, means that there is not an automatic right of recovery against any employee.

I would, however, point out that the Third Party Liability Policy does not have this waiver of subrogation clause as it was not considered necessary or appropriate. Our experience in this area has confirmed that there has never been a case brought against an individual employee as opposed of that of a local authority. This, I believe, as far as the insurance coverage could extend but I would be happy to discuss this matter with you at any time should you so desire.

Yours faithfully,

A. Robertson
UNDERWRITING MANAGER

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Right down to the roots

Ideal because Roundup® herbicide translocates throughout the entire plant down into the root system to control a wide range of broadleaf and grass weeds.

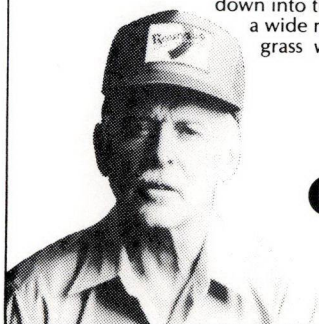
Costs less

Ideal because with Roundup you can control weeds with one treatment. You don't have to spray the same weeds again and because you can reduce the amount of herbicide you need on the next season's spraying, it actually costs you less in the long run.

Biodegradable

Ideal because Roundup is biodegradable, breaking down to natural products in soil and water. You can even spray Roundup without obtaining water rights.

Get some Roundup from your merchant today and get your weed management right the first time.



Clean up with Roundup® herbicide

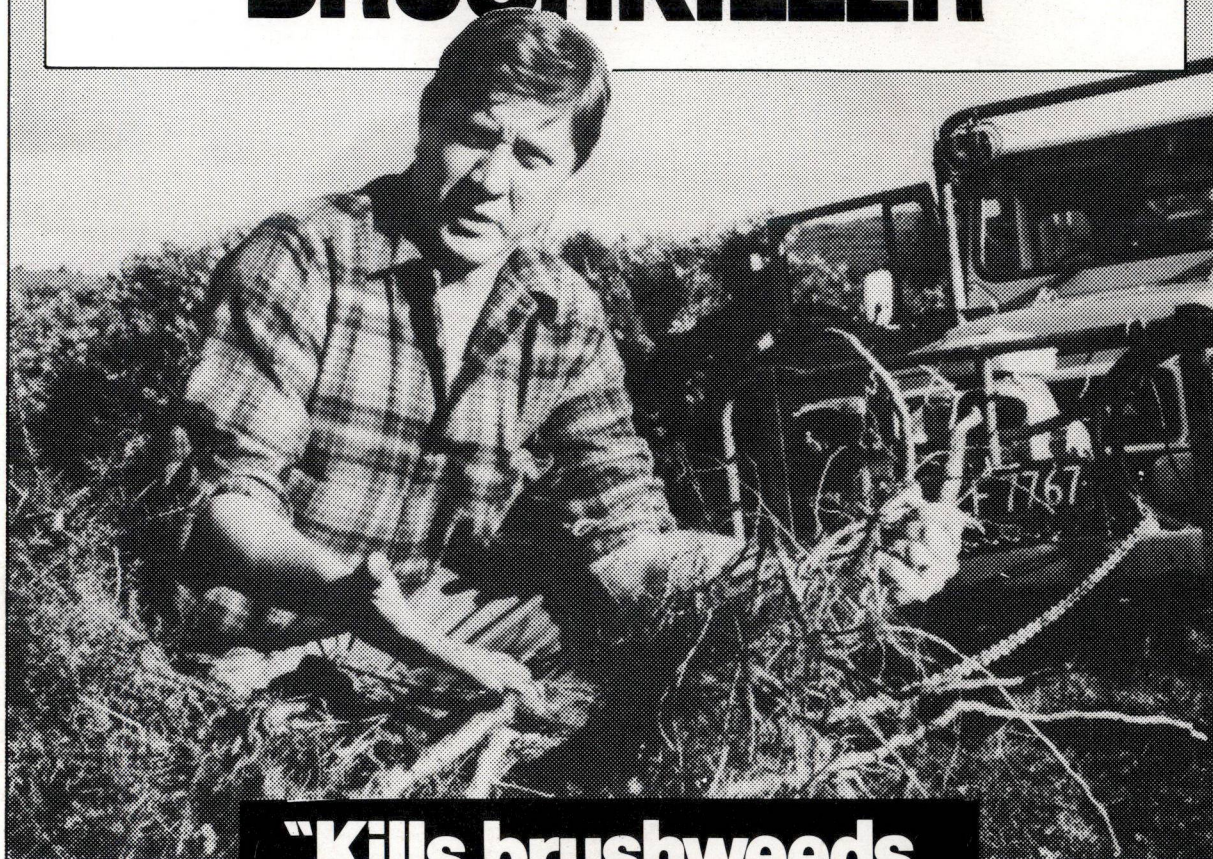
Monsanto

MS 541

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TORDON^{*}

BRUSHKILLER



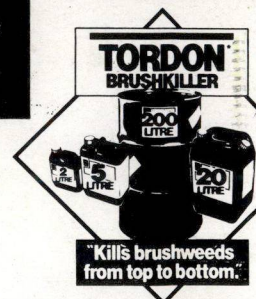
**"Kills brushweeds
from top to bottom."**

Sprayed from the ground or air, Tordon Brushkiller
penetrates the root system giving effective, long-term control.

Effective against gorse, blackberry,
sweet brier, broom and all brushweeds.



**MAKING SCIENCE WORK
FOR THE COUNTRY**



IVON WATKINS-DOW LTD Private Bag New Plymouth
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POISON - KEEP OUT OF REACH OF CHILDREN