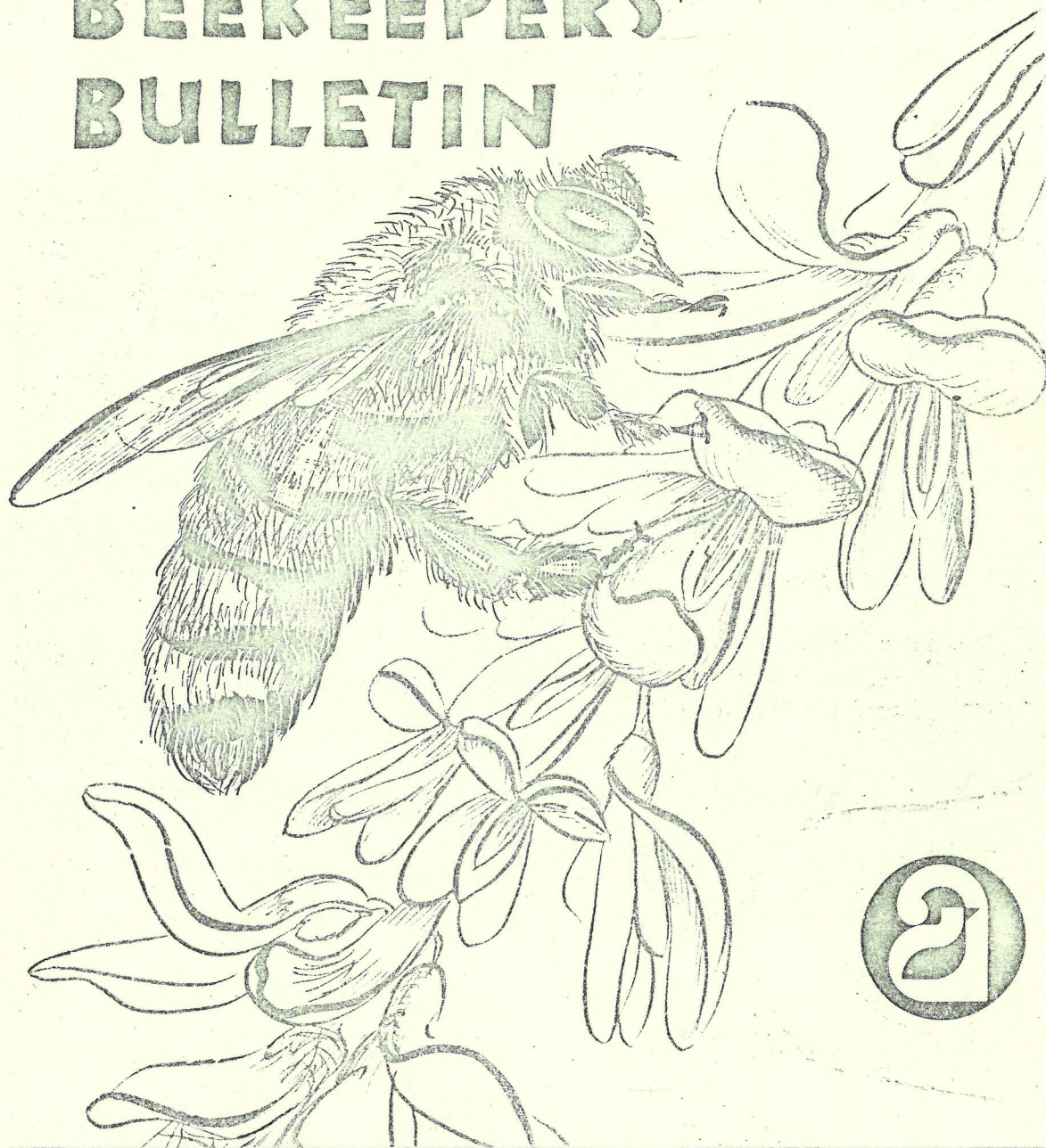


# THE BEEKEEPERS' BULLETIN



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Ministry of Agriculture and Fisheries  
Private Bag  
NELSON

Telephone: 81 069

Volume 2 number 4  
May 1981



This season is one that we'll all forget about fairly quickly, I think. Nowhere was it especially good or especially bad, just average overall but reasonably variable.

B.L. figures were about the same as last year's, but there is still room for improvement.

-ooOoo-

#### WASP EAT WASP

Although it may be hard to convince beekeepers of the fact, German wasps have a small economic impact as pests, especially when compared with things like grass grub or porina. What can't be measured in dollars and cents is the wasp's high nuisance value; to orchardists at harvesting time, small children playing in paddocks, or tourists innocently trying to have a picnic on the West Coast.

## Children suffer multiple stings

MASTERTON, April 10. Five playcentre children were rushed to Masterton Hospital this morning with multiple wasp stings, after a nest was disturbed in a paddock next to the playcentre.

One child has stings in the mouth, but none were serious enough to cause the children to be admitted.

The playcentre's assistant supervisor, Mrs F. Kerr, who also suffered several stings, said about 13 children were observing an ant's nest in the paddock, when one child stepped on what looked like a piece of cow dung.

However, it turned out to be

the top of the wasp's nest, and the group were instantly swamped by the insects.

A total of 10 children and two adults suffered stings.

The Masterton Borough Council was contacted and poison has been spread.

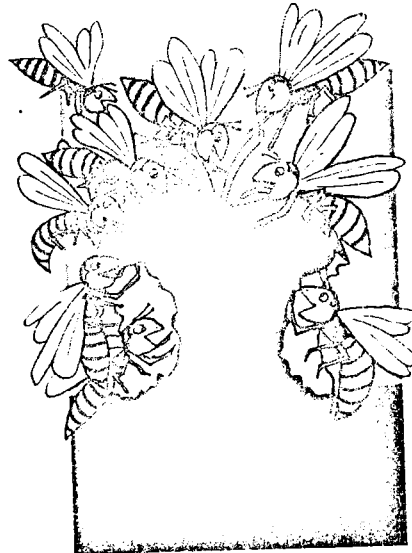
A hospital spokesman said the stings can only be fatal if a person stung is allergic to them but the children were extremely upset.

This is the second recent incident where the hospital has had to deal with multiple stings to children. Several young people were attacked by wasps while watching a raft race in Masterton's Queen Elizabeth Park a fortnight ago. — NZPA

Control of the German wasp has been a low priority for scientific work in New Zealand, so it is encouraging to see that work is being done on its biological control. Chemical control, even if successful, can only achieve short-term relief in a limited area. Only biological control can bring about a permanent reduction in wasp numbers.

While at DSIR Entomology Division at Lincoln recently, I was interested (and pleased) to see that Barry Donovan is looking at biological control of the German wasp. Scientists overseas have been sending examples of small ichneumon wasps, which attack developing brood in German wasp nests.

The ichneumon wasps are Sphecophaga vesparum vesparum from Europe and Sphecophaga vesparum burra from North America. They are currently being bred in captivity, and will only be released after it has been firmly established that they will not parasitize any beneficial insects.



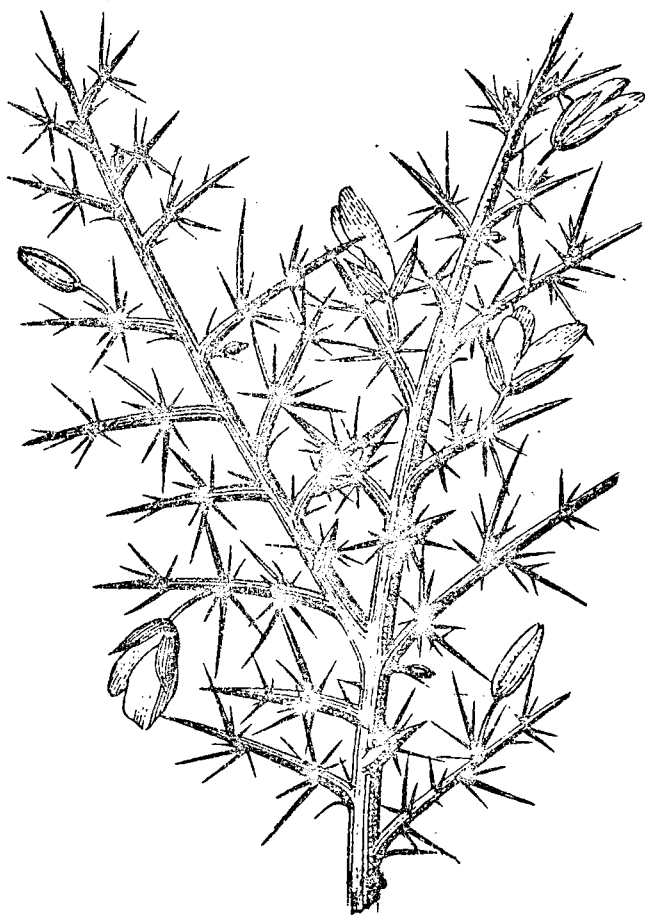
-ooOoo-

Jones' Law states "The man who can smile when things go wrong has thought of someone he can blame it on".

-ooOoo-

## GORSE

Beekeepers on the Coast will not be overjoyed to hear that other DSIR scientists are looking at biological control, by insects, of gorse.\* Surprisingly, there are currently at least nine species of insects attacking gorse, including the introduced gorse seed weevil.



This weevil was introduced in 1931 to control the spread of gorse. Although it is now very common, it does not exert much control because sufficient gorse seeds escape to maintain the species.

The report concludes "Despite its value to beekeepers and in controlling erosion, gorse is a serious weed in New Zealand. Present control procedures are difficult and often not economically feasible. They are costing New Zealand at least \$7 million per year and the rising costs of petrochemicals will probably lead to further steep increases in the future.

The successful introduction of a (control) insect would go a long way to stabilising, if not reducing, present costs". Watch out West Coasters!

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\* MacCarter, L.E.; Gaynor, D.L. 1980. Gorse: a subject for biological control in New Zealand. N.Z. Journal of Experimental Agriculture 8: 321-330.

## COVERING HONEY HOUSE FLOORS ...

The acidic nature of honey means that it is pretty hard on concrete floors. There is a wide range of "extras" available to protect honey house floors, varying from relatively cheap to very expensive.

The primary consideration is the quality of concrete used, and this should be discussed with the supplier (if the concrete is being bought in). Details of mixes and other technical data are available from:

General Manager  
Portland Cement Association  
P.O. Box 2792  
WELLINGTON

Some of the coatings and other preparations are listed below. You will have to check local distributors for details of availability and price.

### 1. Cementfortis

This is a liquid which combines chemically with the free lime of the cement and the particles of silica in the aggregate. The result is a surface which is very hard and resistant to acids.

Cementfortis is best applied to new floors but old floors can be coated if thoroughly cleaned. This is one of the cheapest treatments available.

Manufactured and distributed by Joseph Nathan & Co. Ltd.,  
P.O. Box 1231, Palmerston North or P.O. Box 73303,  
Hamilton.

### 2. Modopox Paint Industries, 7 Akata Road, Glen Eden, Auckland

A two-pot epoxy paint which is diluted with water. Good surface preparation is important. Epiglass produces a similar product.

3. Carbolene

This is also a two-pot epoxy preparation. I have seen this material down in a new honey house, and it looks very good. The company's technical information service is comprehensive, and they have a variety of applications for different situations.

4. Formrok

W.G. Hitchens Limited  
P.O. Box 13  
Renwick.

There is a range of Formrok products, differing in thickness, strength, resistance to corrosion, etc. They are either epoxy or polyurethane finishes which are trowelled on top of concrete floors.

There is also a less expensive product called Vinrok. Sales representatives for this area can be contacted at Hitchens Marketing Limited, P.O. Box 11223, Wellington.

5. Polyflor, 102 High Street, Hamilton

A 1-2 mm thick plastic based covering.

6. Vynic

Novaplast, P.O. Box 50013, Porirua

7. Muraflex

Muraflex Products Limited, Gavin Street, Ellerslie, Auckland 6. An acrylic coating sprayed on. About \$13/metre<sup>2</sup> (1980).

8. Revertex

Flecto is one such product - very expensive but quite attractive flecked surface. H.C. Cotton & Sons, Haven Road, Nelson have the franchise for this and Hitchen products.

9. Sprayed-on Fibreglass

Most swimming pool installers could arrange this.  
See the yellow pages.

10. CBT (carbon bisol tryphose)

New Zealand Safety Flooring Limited, Sylvia Park,  
P.O. Box 62013, Auckland. This is a very hard and  
inert material which is resistant to abrasion and  
acids. It is a plastic coating with carborundum  
chips incorporated in it. Price \$22/metre<sup>2</sup> laid (1980)  
and it is put on by applicators employed by the company.  
Approved by M.A.F. for food handling environments.

11. Sureshield (Alex Harvey Industries)

Silica sand bonded with fibreglass in a 5-6 mm thick  
layer. Costs about \$25 per square metre (1979)  
and has a five year guarantee.

The list could obviously be extended, and building trade  
magazines are probably a good place to start.

-ooOoo-

Wise words from Columella (1BC - AD 76) in his book  
"De re rustica" - a sort of Whole Earth Catalogue for ancient  
Rome.

"He who keeps bees must watch the times he inspects and feeds  
them. On the preceeding day he must have had no contact with  
women and must approach them washed and clean. Likewise let him  
abstain from any foods with strong smell and anything smelling of  
garlic and onions".

-ooOoo-

... AND OTHER PARTS

An interesting new product which could have considerable application in honey houses is called Hippolon and is made by AHI. It comes in the standard 2 400 x 1 200 mm sheets (8 x 4 to some) and is 3 mm thick. Unlike Seratone, which is composed of a layer bonded onto hardboard, Hippolon is an extremely tough plastic called polypropylene.

It is resistant to heat and cold ( $-40^{\circ}\text{C}$  to  $110^{\circ}\text{C}$ ), acids, and physical shock. You can spend some time bending a piece back and forth, but it won't break. Hippolon is suitable for lining extracting rooms, coolrooms or hot rooms. It is approved by MAF for use in farm dairies.

Sheets of Hippolon are fixed to existing walls by Fastfix Christmas Tree Fasteners. Joints can be filled with sealer and covered with PVC mouldings (walls) or heat-welded (floors). Sheets can be bent or moulded to fit around corners or covings. Price: \$29.33 per sheet.

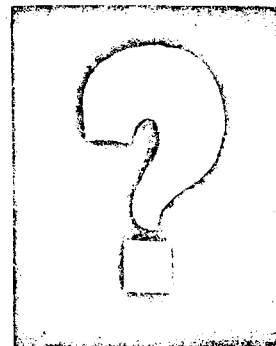
Mention of any proprietary brand or product does not constitute endorsement by the Ministry of Agriculture and Fisheries, nor recommendation over other products not mentioned.



THE WHAT?

THE; a common word, but did you know that the letters also stand for:

Technical  
Help to  
Exporters?



THE is an export advisory service which is run by the Standards Association of New Zealand (SANZ).

THE aims to provide exporters with the technical information required for successful exporting particularly with regard to overseas standards, regulations, codes of practice and approval procedures.

The service provides reports on these standards, obtains overseas publications from international standards associations, and provides a translation service. All of these are chargeable, of course,

More information from:

Technical Help to Exporters  
Standards Association of N.Z.  
Private Bag  
WELLINGTON  
Telephone: (4) 842 108  
Telex: 3850

If you're interested in exporting, you should also have a copy of "How to Export", a free 90-page booklet obtainable from the Department of Trade and Industry, Private Bag, Wellington.

It sets out the basics of exporting, including marketing, payment, obtaining finance, documentation, transport, export incentives and government assistance to exporters.

And while on the subject of exporting, don't forget the pre-conference seminar this year is on "Exporting bee products".

There will be speakers from various governmental agencies such as Trade and Industry, Rural Bank, M.A.F.; export agents, beekeepers and others.

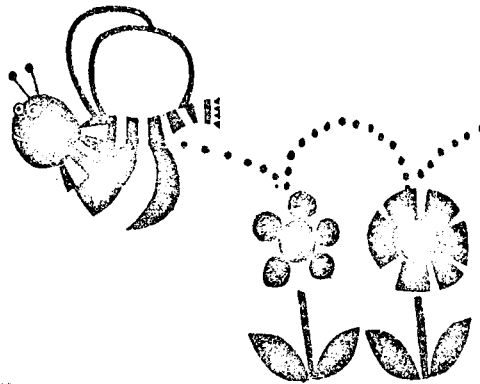
Venue: Lakeland Inn, Queenstown

Date: Tuesday 21 July 1981

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## KIWI FRUIT POLLINATION



Kiwi fruit plantings in Nelson province continue to expand at a rate of knots (see table overleaf). It's interesting to predict the number of hives required by growers, even to pollinate present plantings when they mature, let alone forecasted plantings.

MAF recommendation for kiwi fruit pollination in the Bay of Plenty is eight hives per hectare. Based on that figure for vines four years old or more, and four hives per hectare for three-year old vines, I've calculated a "recommended" number of hives needed.

In this area the "required" number of hives is likely to be less than eight per hectare, because of the higher number of feral hives at least. Because of this, and conservatism of growers, the number rented is likely to be half that number, or even less. That's still a reasonable number of hives.

Year	Area in Kiwi fruit (ha)	Change from previous year's	"Recommended" Hive Numbers
1973	5		
1974	5	0	
1975	8	+3	
1976	11	+3	
1977	33	+22	40
1978	93	+60	52
1979	172	+79	76
1980	367	+195	176
1981	(467)	(+100)	504
1982	(567)	(+100)	1060
1983	(667)	(+100)	2156
1984			(3336)
1985			(4136)
1986			(4936)
1987			(5736)

Figures in brackets are conservative estimates

#### AND OTHER POLLINATION

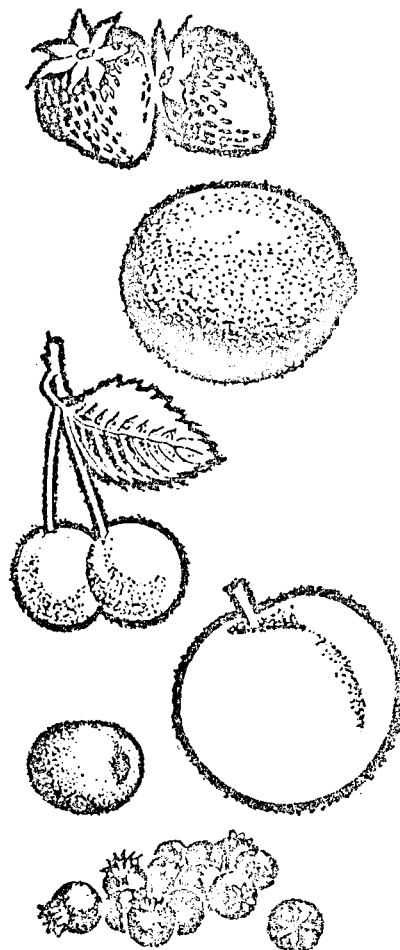
A meeting of the Nelson branch, N.B.A., on 11 May discussed the workings of a pollination service in Nelson. Beekeepers there agreed on quite a few matters, and this is encouraging for better liaison with the fruit-growing industry.

Prices agreed on are:

Pip and stone fruit: \$32 (with a \$2 discount for early payment)

Berry fruit: \$32 (with a \$2 discount for early payment)

Kiwi fruit: \$47 (with a \$2 discount for early payment)



## EFFECT OF AMOUNT AND COLOUR OF COMB ON HONEY BEE HOARDING BEHAVIOUR

Measuring honey production in the field and comparing the effects of different factors is not always easy to do, because of all the variables involved.

Scientists often measure the hoarding behaviour of honey bees in laboratory cages, and this has been found to be closely related to honey production of that strain in field conditions.



Recent work done at Baton Rouge, Louisiana,\* produced some interesting results. Bees given more empty comb hoarded more syrup i.e. the presence of empty comb actually stimulated hoarding ("nectar collecting") behaviour. This has been known from some of Rinderer's earlier work, where he suggested that bees which are crowded up to the beginning of the honey flow and then given plenty of room will return up to 25% more honey.

This might work well in some areas where there is only one main honey flow each year, and it is regular. In areas where that first box needs to go on early for willow and barberry, then the theory might come unstuck. Still, one thing's certain. Honey boxes won't get filled while they're sitting in your shed!

Rinderer also found some other interesting things. Overall, bees did not hoard more in the presence of dark comb than with light comb. Some strains hoarded more when given dark combs, others were the reverse. This opens up possibilities of selecting for stock that would produce

maximum amounts of honey when supplied with light storage combs.

\* Rinderer, T.E., Baxter, J.R. 1980. Hoarding behaviour of the honey bee: effects of empty comb, comb colour and genotype. Environmental Entomology 9 (1): 104-105.

-ooOoo-

More from Columella

"To keep bees, you must be faithful and loyal, and there are few such in this world. He who keeps them must be neither deceitful nor negligent, for they do not like to be treated with meanness and greed."

-ooOoo-

Have you ever heard of the Golden Rule? - "Whoever has the gold makes the rules".

-ooOoo-

## COURSES FOR BEEKEEPERS



### 1. Expanding into commercial beekeeping.

Telford, Monday 10 August - Thursday 13 August 1981

People had to be turned away from this course last year, so if you're interested, you'll have to act soon. The course is for those about to embark in beekeeping as a part or full-time occupation.

Informed planning is the theme, and the subject matter is diverse: deciding objectives, getting started, establishing apiaries, making and preserving hive equipment, cash records and budgeting, getting money. And that's just the first day. If you want to find about the remainder of the course, write to:

Mr K.W. Simpson  
Ministry of Agriculture and Fisheries  
P.O. Box 96  
OAMARU

### 2. Business management for bee farmers.

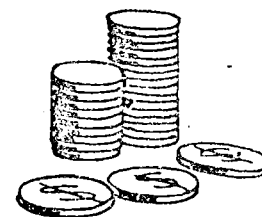
Telford, Tuesday 2 June - Friday 5 June 1981

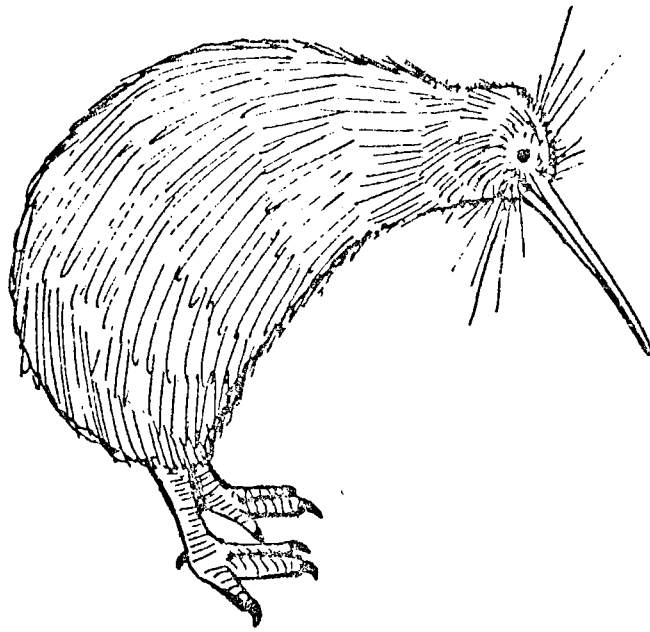
This has been advertised before, and if you're keen to go you'll have to ring Telford promptly.

Formal enrolments for BOTH courses to:

The Registrar  
Telford Farm Training Institute  
Private Bag  
BALCLUTHA

Telephone: Balclutha 81 550





### KIWIS AGAIN

It seems that the bees won't always have things their own way when it comes to pollinating kiwi fruit. Scientists at the DSIR Mount Albert Research Station have been investigating supplementary pollination of tree fruits, including kiwi fruit.\*

Insect pollination has uncertainties - the flight activity of honey bees is reduced by cold, cloudy weather, wind and rain. Rain also washes free pollen from the flowers. Collecting pollen, mixing with a liquid or powder, and then spraying it onto the orchard has been tried overseas in date and oil palm plantations.

Problems with supplementary kiwi fruit pollination mainly centre on the loss in viability of pollen when it is mixed up and sprayed onto the vines.

Kiwi fruit blocks which were spray-pollinated only had the same level of fruit set as bee-pollinated orchards, but only half as many export quality fruit. This indicates that spray-pollination may have commercial value as an adjunct to pollination by honey bees, particularly in areas or years that have a poor pollination record, rather than as a replacement for bees.

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\* Hopping, M.E.; Jerram, E.M. 1980. Supplementary pollination of tree fruits. N.Z. Journal of Agricultural Research 23: 509-515

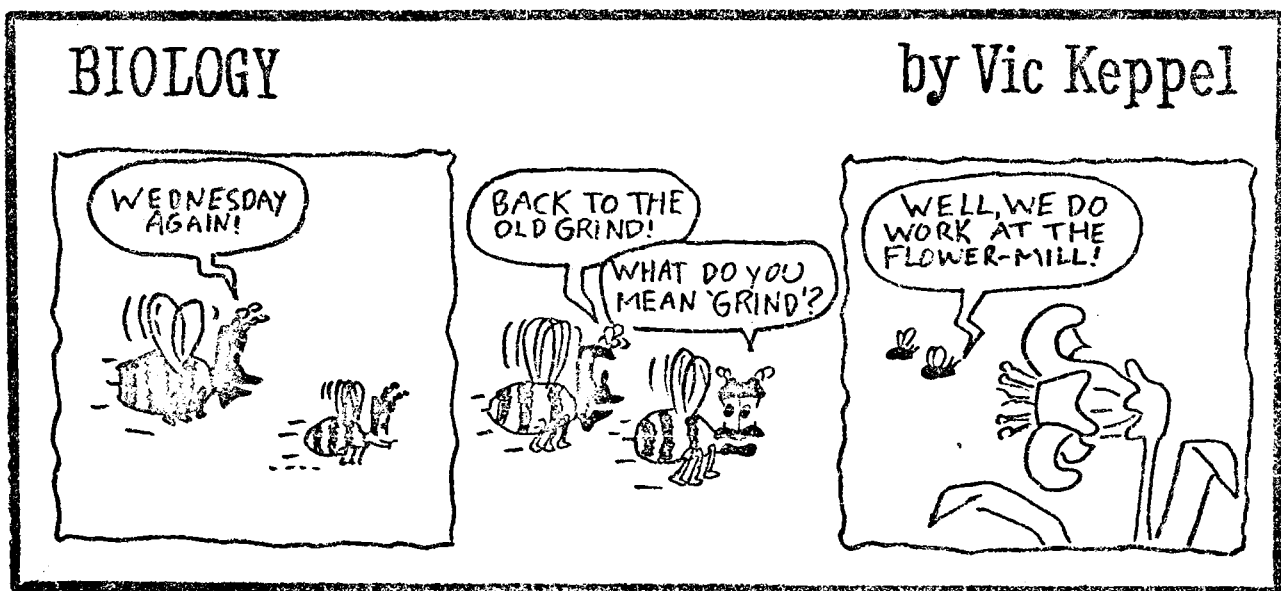


## POLLEN, PROPOLIS AND ROYAL JELLY

Heatheries in Auckland are still wanting to buy pollen, and are finding difficulties in obtaining it in sufficient quantities. They also want 250 kg of propolis (price to be negotiated) and 50 kg of royal jelly (\$150/kg or \$4.26/oz).

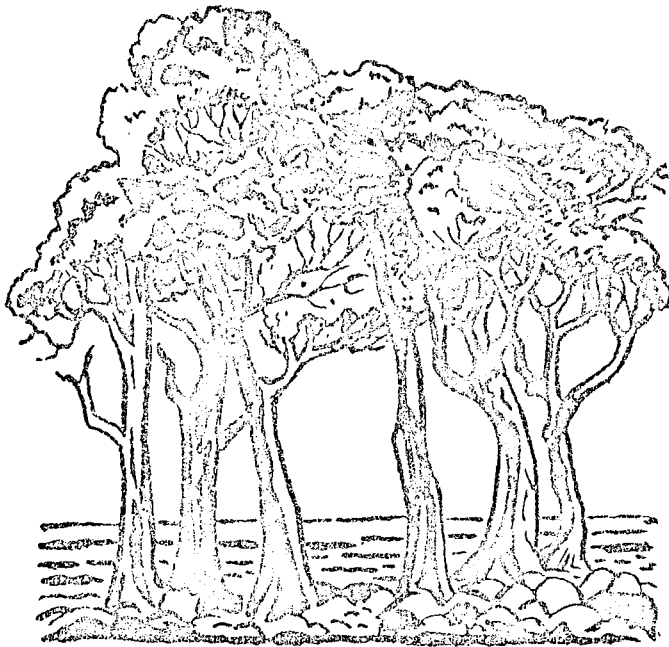
There are other local buyers who are interested in obtaining royal jelly - perhaps anyone seriously interested in producing it could contact me.

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## TIMBER PRESERVATION



More about Tricunol - the timber preservative mentioned in the last "Beekeepers' Bulletin". It is rather like Metalex, in that the main ingredient is copper naphthenate. It also contains tributyl tin, waxes and resins.

Turpentine is the recommended diluent, and the waxes and resins counteract turps' customary drying effect on wood. Dilution is one part Tricunol: three parts solvent.

Full instruction sheets are available from:

Celcure Timber Preservation Limited  
P.O. Box 13 445  
Onehunga  
AUCKLAND

Telephone: 663 769

Prices (August 1979)

Ex factory, Christchurch (Retail less 12½% for payment within 21 days.)

20 litre	\$27.34
60 litre	\$71.09
200 litre	\$213.28

Bye for now

Andrew Matheson  
APICULTURAL ADVISORY OFFICER