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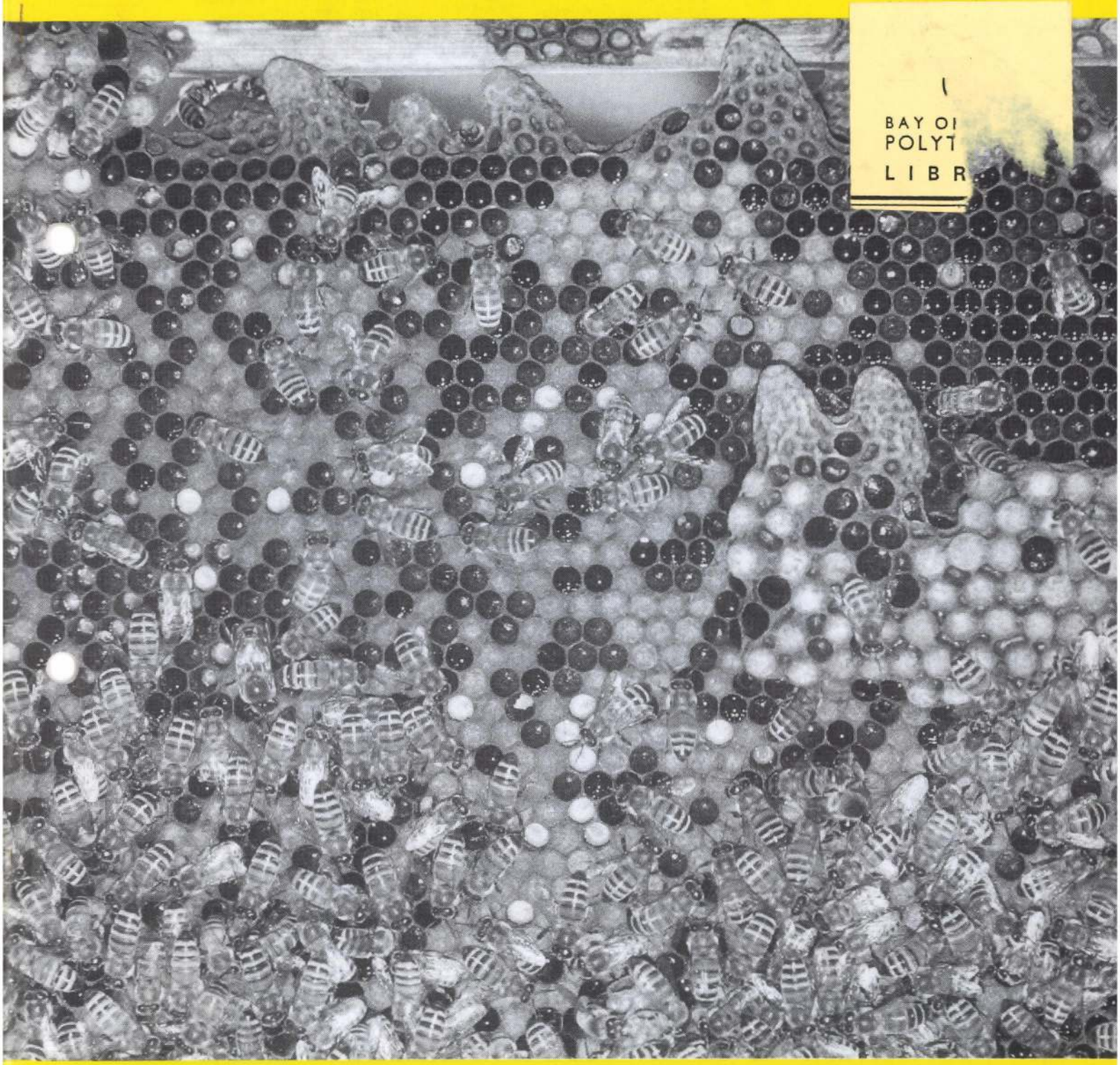

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Notes from the President

Collection of the Hive Levy

On behalf of the association, the Executive attempts to collect the hive levy through cost effective and evenhanded means. I believe the NBA is obliged to take reasonable efforts to ensure that all levy due to the NBA is paid. Only if members are confident that the Hive Levy Act is being applied as it was intended will there be general acceptance of the levy.

Over the last three years, the NBA Executive has begun to take new steps to both ensure full payment and to be able to demonstrate to the membership that the collection is occurring as it should be.

It has cost the NBA in legal fees to obtain the advice and assistance we require to collect levies that we believe to be due. Several court cases have resulted. While such outcomes can be both expensive and certainly undesirable from our organisation's point of view, they are sometimes necessary to ensure that the rest of the beekeepers who DO pay their levy have respect and confidence in the levy.

Recently, a request for information went out to a randomly selected group of hive levy payers. The purpose of the request was quite straightforward; we wanted to check the figures against the original levy declarations, as a form of audit. I believe that, apart from a few notable exceptions, beekeepers are paying the hive levy in a thoroughly honest and open manner. I hope the results of the audit will help to convey that feeling to the rest of the membership.

I hope that no one who received the request for a statutory declaration takes offence, or believes that they have been singled out for special action. Rather, I hope beekeepers will simply do their best to comply with the requirements. Remember, it is this same set of requirements that are used to obtain payment from those who DON'T play fair with their levy declarations. I hope it can give members a feeling that the Executive IS serious about collecting the levy. If any member has any questions or comments about the levy collection, I do hope you will contact me direct.

In my time on the Executive, I have heard some amazingly creative excuses for why a beekeeper doesn't think a levy is due. Probably the most common is that 'My hives didn't produce any honey this year' or 'My hives are kept for pollination, so I don't have to pay a levy'. Neither of these are valid. The Executive has spent a considerable amount of time and money obtaining legal opinion on the meanings of the words in the Hive Levy Act.

One other beekeeper claims to have given away hives in multiples of 49. The 'new owners' of those hives allow the beekeeper to continue to run them. Once again, the NBA will be obliged to use legal means to obtain the levy due.

I hope that there IS a reasonable level of confidence in both the hive levy and the Executive's efforts to ensure fair collection. I hope that there IS a reasonable level of confidence in both the hive levy and the Executive's efforts to ensure fair collection.

New Zealand eighth in world for competitiveness

By Nick Brown of NZPA

London, Sept. 5 - New Zealand is ranked the eighth most competitive nation in the world, according to an annual survey released today.

The World Competitiveness Report says New Zealand "continues to be impressive with its remarkable comeback from 18th position in 1991".

New Zealand was eighth in 1993 but slipped a notch last year in the survey compiled by the Swiss-based World Economic Forum and International Institute for Management Development.

The survey — topped for the second year running by the United States — assesses 48 economies for their competitiveness, which it defines as the ability to generate wealth in international markets.

The assessments are based on at eight factors which contribute to competitiveness — domestic economic strength, internationalisation, government, finance, infrastructure, management, science and technology, and people.

"Recovering from a severe economic slowdown in its domestic economy,

Continued on page 11

Cover photo
Another of the superb photographs supplied by Bruce Stanely, Fosters Road, R.D. 1., Whakatane.

Announcement

Bensemann — Finally Richard and Claudine *(nee Obelnicki)* announce the arrival of Brittany Juliette (7lb 7oz) on September 7th, 1995 at Ashburton Maternity.

Thanks to the best doctor in the world. Baby and mum fine... Dad still recovering.

No photos as I haven't censored them yet.

The New Zealand Bee Keeper

THIS ISSUE

National Beekeepers Association

Committees and responsibilities of Executive

For effectiveness and efficiency, the NBA Executive creates committees and appoints both executive members and others to the committees to conduct business. As well, the NBA Executive appoints executive members and others to committees of other organisations to represent the interests of the NBA. Finally, individual members of the NBA Executive take particular responsibility for specific items, areas of interest and liaison with speciality groups

This paper describes the current committees, special interest responsibilities and the members (NBA Executive and other) associated with them.

Nature	Name	Members
Sub-comm of Exec	Marketing Committee	A McCaw (chair), N Stuckey, S Jenkins, P Bray, B Bixley, B Floyd (advisor/consultant), H Brown (sec'y)
Sub-comm of Exec	Apicultural Research Advisory Committee (ARAC)	M Goodwin (chair), A McCaw (sec'y), E Roberts, S Ogden, B Donovan, R Berry, H Brown (sec'y)
Sub-comm of Exec	Export Certification Committee	R Bensemann (chair), M Cloake, J Ward R Berry, M Haines, P Bray, G Cammell, H Brown (sec'y)
Sub-comm of Exec	Disease Control Committee	T Gavin (chair), W Hantz, J Van Hoof, B Stevenson, B Clements, A McCaw, G Wilson, C Van Eaton (advisor/consultant), M Goodwin (advisor), H Brown (sec'y)
Sub-comm of Exec Exec resp	Library Committee Publications	K Herron, A McCaw, J Heineman R Berry, W Hantz
Exec resp	Branch responsibility (Far North, Northland, Auckland)	T Gavin
Exec resp	Branch responsibility (Waikato, Southern North Island, Hawke's Bay)	R Berry
Exec resp Exec resp Exec resp Exec resp	Branch responsibility (BOP, Poverty Bay) Branch responsibility (Canterbury, Marlborough, Nelson, West Coast) Branch responsibility (South Canterbury, North Otago) Branch responsibility (Otago, Southland)	N Wallingford R Bensemann W Hantz K Herron
Exec resp Exec resp	Methyl bromide IHEO, USDA, statistics	G Cammell K Herron
Exec resp Exec resp	New Zealand Queen Bee Producers Assn Pollination Associations	T Gavin W Hantz
Exec resp	Foundation for Research, Science and Technology	R Berry
Exec resp Exec resp	Trusts and Trustees Federated Farmers, Land User Forum	R Berry N Wallingford
Repr of Exec Repr of Exec	Pesticides Board Landcare (wasps)	F Trewby R Bensemann
Repr of Exec	Ruakura Apicultural Research Unit (RARU)	P Townsend

NEW ERA FOR HONEY INDUSTRY

by Jocelyn Syme

A new era has dawned for the New Zealand honey industry. It's smartening up its image, improving the quality and range of its honeys and has become proactive in developing product opportunities.

It's had to do so because it had become obvious that otherwise honey would slip even further down the commodity track and become a lower value product.

Already the honey industry's new strategy seems to be paying off. The latest Nielsen scan data shows a modest growth in honey sales volume plus better dollar returns.

Key strategies enlisted by the honey industry to increase sales and its members' incomes include:

- Promoting honey as a food ingredient
- Promoting beekeeping products besides honey such as propolis, royal jelly, pollen and wax
- Promoting honey's health attributes
- Getting consumers to appreciate the different flavours and uses of individual floral source honeys
- Introducing tighter quality control, including product specification standards and the Honey Quality Mark.

All beekeepers are levied a certain amount per hive and this money goes towards the cost of the National Beekeepers Association, disease control and - in the last three years - marketing.

The New Zealand Honey Food & Ingredient Advisory Service was established in 1994 to encourage the food manufacturing and food service industries to use honey.

Marketing consultant Bill Floyd says the service receives at least one inquiry a week and help given is free of charge. Through this advisory service, food manufacturers can gain access to a wealth of detailed information and research reports on honey and its applications, including those from the American Honey Bureau.

Floyd says he's willing to sign confidentiality agreements. "The American Honey Bureau initially tried to be neutral in the area of product development and disseminate general information to everyone.

"It was found that this approach was not progressing concepts through to products on the shelf and so they are now working with specific companies (if necessary to the exclusion of other companies) because in the long term, that is in the best interests of honey producers.

"Once a product is on the shelf, other companies can then determine if they want to create a'me-too' or variation of it," Bill Floyd says.

The New Zealand Honey Food and Ingredient Advisory Service is also in the process of developing a Honey Research Unit at Waikato University which will be charged with investigating key concepts that may have food manufacturing applications.

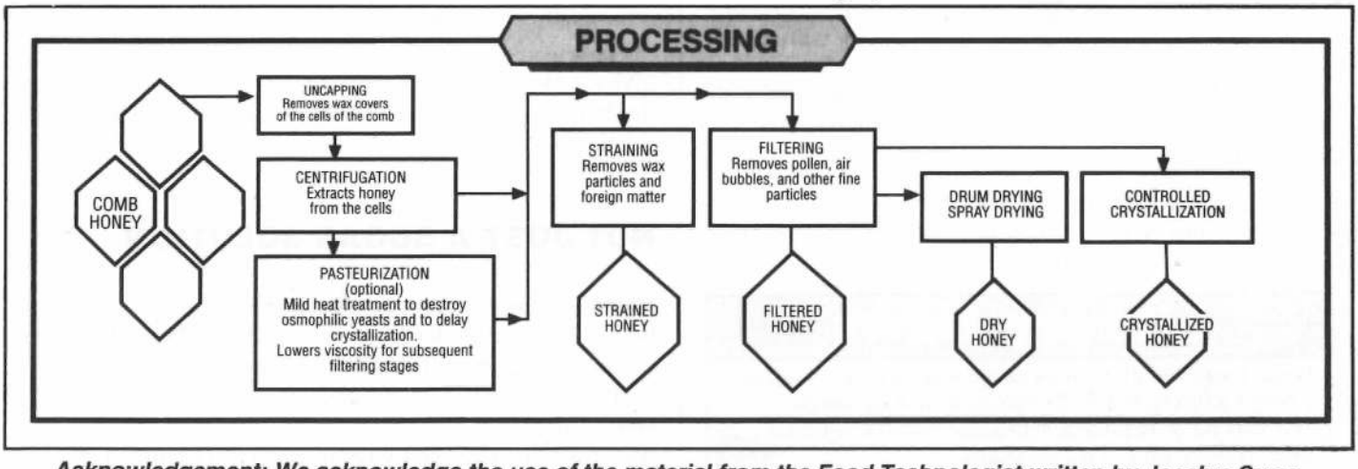
Many "old wives' tales" about honey may have a basis in fact, Bill Floyd says.

Honey's preservative effects are being investigated and this could be especially useful in dairy and meat products. A honey coating on meat, for example, appears to stop bacterial activity and may also have an anti-oxidant effect.

These antibacterial properties are probably due to one or more combinations of four factors:

- Honey's acidity, ranging from a pH of 3.4 to 6.1
- Osmolarity - the high sugar content of honey makes water unavailable for micro-organisms
- Hydrogen peroxide - the major antibacterial factor in honey. The glucose oxidase enzyme activated by dilutions of honey generates hydrogen peroxide
- Other components - antibacterial substances produced by certain species of plants.

Manuka honey has attracted much publicity for its unique antibacterial properties. Associate Professor Dr Peter Molan of



Acknowledgement: We acknowledge the use of the material from the Food Technologist written by Jocelyn Syme.

Waikato University is researching whether or not manuka honeys can provide substantial relief from the symptoms of stomach ulcers and whether they can help in the healing of ulcers.

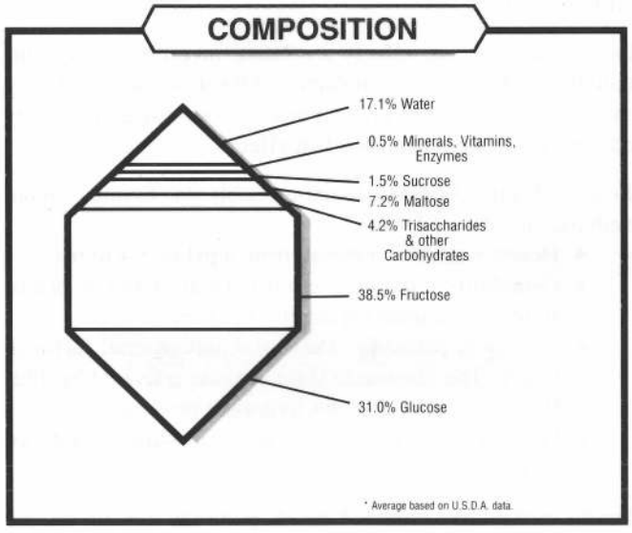
Waikato University has developed a certification system so beekeepers can have their honeys tested for antibacterial "activity". Only some manuka honey is "active" and the degree of antibacterial strength in these "active" manuka honeys varies from the equivalent of a 4% solution of carbolic acid to more than 15%.

More research is being done on the whole issue of integrity of certification, Bill Floyd says.

Another honey concept being explored is the possible connection between milk, honey and strong bones. Dr Peter Molan has been involved in research with both honey and dairy companies.

He's now carrying out research to explore the hypothesis that the gluconic acid in honey may mix with the calcium in a milk product to form calcium gluconate and as a result,
provide the body with a more efficient uptake of calcium from the milk.

Floyd says the New Zealand honey industry is being proactive in developing product opportunities.
"The information that we are getting from the American Honey Bureau and concepts that we are testing through Waikato University are allowing us to take a concept and champion it to a food manufacturer.



"We will be targeting manufacturers whom we believe will get the best value from those ideas, whom we think will benefit from the inclusion of that product in their product line.

"We accept that food technologists have to be concerned with facts, not puffery. They are concerned with information that is scientifically valid.

"But they are also charged with being part of a company's management team that creates exciting opportunities to secure their company's future - and we're here to help," he says.

Library News

Wasp Times No. 22 from Landcare Research. A newsletter, contains article on immunotherapy for wasp sting allergy.

The 1994 bill on hazardous substances and new organism.

NBA: The new rules of the association.

HONEY
SO MUCH MORE THAN JUST A SWEET TASTE

By Jocelyn Syme

What's old and new at the same time? It's honey, that sweet sticky substance eaten by ancient cave dwellers at least 20,000 years ago and used today in ways that would no doubt surprise our ancestors.

"It's a sunrise industry - a Peter Pan product that never grows old because it's always new and exciting," says Bill Floyd, marketing consultant for the New Zealand Honey Food & Ingredient Advisory Service.

He pours scorn on the idea that honey is just another sweetener and says that food manufacturers should use it to add value to their products rather than just cost.

Certainly honey can't compete with other sweeteners such as corn syrup and refined sugar on cost alone, with their bargain basement prices as low as $0.80/kg.

Honey varies in price from a low "commodity" price of $2.10/kg to more than $3/kg for the top notch monofloral varieties.

Using honey as a food ingredient in premium products confers definite marketing advantages, with the trend towards "healthy, natural" food.

Research commissioned by the NZ Honey Food & Ingredient Advisory Service in 1994, conducted by MRL Research. revealed that an overwhelming 88% of New Zealanders e. honey. Per capita, we're among the world's largest consumers of honey, eating more than 2 kg a year.

According to the research report, 71% of New Zealanders believe honey is nutritionally better than sugar and 84% believe it is one of the most natural foods.

"What's more, we've got research to back up these perceptions that honey is good for you. It's by no means just a strong sugar solution," Floyd says.

NOT JUST A SUGAR SOLUTION

Honey is a complex product. It consists of varying amounts of the sugars dextrose, levulose, sucrose and maltose. Then there are the acids, ranging from the familiar amino, lactic and citric acids to malic, gluconic, cyccinic, formic, bueric and pyroglutanic acids.
Along with proteins and vitamins such as niacin and pyridox-

ine, honey contains all sorts of minerals - notably potassium, calcium and magnesium.

Most of these nutrients are present in tiny amounts, but honey still contains more nutrients than refined sugars. As a rule, darker honeys contain higher amounts of minerals than lighter honeys.

NEW ZEALAND HONEY UNIQUE

As part of moves to upgrade New Zealand's honey industry and improve beekeepers' incomes, the industry is moving away from "commodity" honey to an emphasis on the wide range of monofloral honeys and the idea that specific honeys can be tailored to specific applications.

New Zealand honeys are unique - ranging from strong, pungent manuka honey and malty honeydew honey to the burnt caramel taste of rewarewa and the light, golden beeswax taste of nodding thistle honey. More than 15 types of floral honeys are produced commercially and even the same sort of honey can vary from region to region.

"Organoleptics" is a word used frequently by Bill Floyd, referring to the often very different characteristics of various honeys as regards colour, flavour and texture. He says they're as varied as wines made from different varieties of grapes.

"No one would confuse a chardonnay with a sauvignon blanc. You can't say honey is just honey," he says.

Varietal integrity has become even more important now that monofloral honeys are being promoted more strongly. Waikato University researchers Dr Peter Molan and Dr Alister Wilkins have devised a way of identifying specific honeys by pollen analysis and light spectrophotometry.

Beekeepers can't force their bees to make honey from one particular source of nectar, but they try to achieve this by placing the hives in areas where those flowers are dominant.

Honeybees fly up to 8km to collect nectar, and one of the reasons why Canterbury produces exceptionally pure clover honey is because the bees can fly for hours in clover fields without encountering any native bush.

Different honeys have different properties which can be most useful to food manufacturers. Viper's bugloss honey, for instance, has a high fructose content which is of special value in microwaveable food formulations.

According to research funded by the USA Honey Board, honey heats significantly faster than high fructose corn syrup. Other chemical components of honey which make it a natural microwave reactive ingredient for baked goods formulations include glucose, maltose, trisaccharides, free proline (naturally available for browning reaction under slightly alkaline conditions) and organic acids.

Together they make surface films or coatings based on honey heat up fast and help baked goods brown in a microwave oven.

MATCHING HONEYS TO APPLICATIONS

The differences in organoleptics between the various honeys do carry through into ingredient applications, Floyd says. He's been working with tutors and trainee chefs at the Christchurch Polytechnic's Professional Cookery Unit to match honey flavours to particular foods.

They grouped honeys into three types: seasoning, mellow and sheer. Seasoning honeys are dark, highly flavoured and somewhat gluey - such as honeydew, kamahi and rewarewa honeys. These strong flavoured honeys were especially suited to meat and savoury dishes, complemented by strongly flavoured herbs such as thyme and rosemary along with oranges and lemons.

Mellow honeys were seen as ideal spreads, as well as being useful for preserves, confectionery and butter blends. These honeys include manuka, rata, pohutukawa and North Island clover.

The third group of honeys, the sheer honeys, were described as being clean-textured, light in colour and delicately flavoured. These honeys include viper's bugloss, nodding thistle, blue borage, South Island clover and tawari. Applications include desserts, cakes, sauces and dressings and suggested seasonings to go with these delicately flavoured honeys include rose petals and lemon balm.

Along with their varying organoleptic characteristics, honey has other attributes which makes it "functionally fantastic".

In baked goods, for example, honey adds flavour, contributes moisture as well as attracting moisture (because it's hygroscopic) and helps extend shelf-life. It provides a natural gold colour and caramelises during baking.

Another big growth area for honey is in cereal products. Honey caramelises during baking and roasting and adds crunch to toasted whole-grain cereals and puffed cereals. As well as being available in a dry powder, liquid honey's viscosity is also an advantage because it can be used to coat, enrobe or bind

such foods as honey coated flakes and cereal clusters.

In dairy products honey's viscosity is used to thicken them and improve mouth-feel. Honey's use in a frozen food formulation can lower the freezing point so crystallisation is delayed and the product's softness is maintained.

Honey is naturally acidic so it works well with low pH dairy products such as fermented drinks and yoghurt.

Other useful functional attributes of honey include its flavour and the way it enhances other flavours; its versatility (can be modified into a variety of textures); its compatibility with fat systems such as butter and chocolate; nutritional qualities; whipability; and the ease with which honey can be pumped and extruded.

"There are tremendous opportunities for developing exciting new products using honey," says Bill Floyd.

Whereas products such as cane sugar or corn syrup add simple sweetness, New Zealand honeys add sweetness in balance with other interesting flavours, he says.

"It is this 'three dimensional' organoleptic value, coupled with the inherent goodness that people believe of honey that can create some very exciting opportunities for food and beverage manufacturers when they use honey as an ingredient in their products."

Honey Research Unit

Associate Professor of Biochemistry, Dr. Peter Molan, has pioneered honey research at Waikato University and in so doing, he has developed an international reputation for his work.

"In recognition of his contribution to the honey industry, the relationship between the university and the industry will be formalised later this year with the establishment of the Waikato University Honey Research Unit" says Bill Floyd.

Funding from the New Zealand honey industry plus research monies from other sources will enable students to work on projects with commercial application. The goal will be to pollinate industry with suitably qualified people working on specific applications.

"In this way we will achieve a triple win: the University students will get the opportunity to undertake industry related post-graduate research, manufacturers will get the opportunity to explore new profitable business concepts, and the New Zealand honey industry will have its products used in exciting and innovative new ways" says Bill Floyd.

STOP PRESS

The hot news from Apimondia '96 —
The world will be, is now, desperately short of honey!!
The Canadian crop is only two months old, and sold out.
World price for honey has risen US$200 tonne.
Argentinian honey has doubled in price.
It could and should be a seller's market, a good year for New Zealand beekeepers...

THE SWEET TASTE OF HONEY

by Jocelyn Syme

More food manufacturers are developing products which feature honey as a food ingredient.

Some use honey as a sweetener, others use it for its taste, colour and functional properties. It's a smart marketing move, since New Zealanders eat more honey per capita than any other country in the world and honey is widely perceived as being "healthy".

In 1994 the National Beekeepers Association of New Zealand recognised innovative products made with honey with the inaugural New Zealand Honey Food Innovation Awards. Twenty one companies received awards for their products, ranging from honey liqueur made by Alsace NZ Distilling; honey muesli bars made by Bluebird Foods; honey-sweetened drinks made by a range of companies including Barker's Fruit Processors, Baker Hall NZ Ltd and Hansells NZ Ltd; to kiwifruit and honey chocolate (Nyco); and even manuka honey sk treatment cream (Living Nature Natural Skin Care).

Four companies were presented with trophies for Innovative Excellence, including Comvita NZ Ltd (honey-based health care products); Havill's Mazer Mead Company; Phoenix Natural Foods Ltd ; and the Southern Fresh Milk Company.

"The Food Technologist" spoke to two of the trophy winners to find out why they use honey in their products.

Phoenix Natural Foods uses honey as the only sweetener in a wide range of added-value consumer foods and beverages. Established nine years ago, this Auckland-based company's products are targeted specifically at health food buyers.

Using honey helps the company differentiate its products from the others, according to director Chris Morrison.

"People are willing to pay a little bit extra for products that are made using honey. And as a small company with 10 staff members, our products are labour intensive and we have to be able to demand a higher premium for our products," he adds.

Phoenix Natural Foods manufactures four honey sweetened soft drinks under the brand-name "Phoenix Natural Drinks", including old favourites cola, ginger beer and lemonade as well as melon-flavoured mineral water.

Then there's the "Handmade" range of chutneys, jams, marmalades and sauces such as plum jam and grapefruit marmalade as well as apple and feijoa chutney and mustard relish. They are all made with organically grown fruit and sweetened with honey. Phoenix's range of premium gift preserves are appropriately named "Heavensent".

In the peak fruit processing season, Phoenix Foods uses about a tonne of honey each week.

"We use a multifloral honey because it's very important to get something that's not too dominant over the fruit. We're using it mainly as a sweetener and that honey taste can be a bit of a problem - especially in the drinks, where we've been trying to tone it down," Chris Morrison says.

He adds that it's important for food manufacturers considering using honey to build up a good relationship with the honey supplier, both to secure the honey supply and to ensure the honey itself meets the manufacturer's needs and is of consistent quality. Phoenix's honey supplier is Auckland beekeeper Graham Cammell.

The fact that the company's products are sweetened with honey features prominently in Phoenix Natural Foods' advertising. Morrison says the company's sales are increasing and it's also exporting to Asian countries and the United States.

"Not using sugar is definitely a positive thing. People don't see sugar as being good for their health - they believe honey is better for them," he says.

Deregulation of the town milk supply and the dramatic loss of market share was the spur for Southern Fresh Milk Company of Invercargill to diversify and develop a new product.

Chief Executive Alasdair McLachlan says the company had to use its core competencies to develop innovative products if it was not only to survive but also succeed in the new marketplace.

Southern Fresh had looked at nearby resources and apple juice from the Central Otago apple crop provided an obvious opportunity. However the company needed an added benefit to offer consumers and to be able to differentiate its apple juice from competing brands.

During a visit to Japan, McLachlan had been impressed with the variety of uses for honey in foods and beverages and visited a company that specialised in using honey as a food ingredient. So he decided to try using honey in the apple juice.

"Our first step was to trial all the honeys available and to find out if they were available in the right quantities. We had a taste panel to choose which honey flavour was best with the apple juice.

"Then we had to do various tests to ensure the honey didn't react with the apple juice and that the mixture remained stable."

Viper's bugloss honey from the Southland high country proved to be the perfect honey for the new product, which is called Benger Gold Apple & Honey (named after a mountain near Roxburgh, the source of the apple juice). The formulation includes four percent honey by volume.

The Southern Fresh Milk Company launched four Benger Gold natural juices at the same time, including Apple & Cherry, Apricot, Orange and Apple & Honey. So far the Apple & Cherry flavour has proved the most popular.

As for the Apple & Honey drink, McLachlan says: "It's been pretty successful, although it could have been better if we'd had more money to promote it more strongly."

Southern Fresh Milk's innovative use of honey and apple juice.

Trade Barriers

by Andrew Matheson, Director IBRA

In an ideal world trade is between two partners: a willing buyer and a willing seller, who should proceed unhindered. And this does occur more or less inside a country or within a trading bloc.

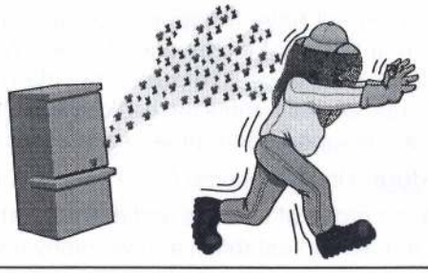
However, our world is not ideal and barriers are put up which hinder trade between otherwise willing parties. Often these trade barriers are dressed up with science to make them look respectable, but in fact are there to give unfair advantage to one part of the community over another.

The new round of Gatt, the General Agreement on Tariffs and Trade, and the new World Trade Organization are designed to break down protective barriers so trade can proceed more freely.

It is not the intent of Gatt or the World Trade Organization to allow countries to replace one set of barriers (such as tariffs or unjustifiable Zoosanitary requirements) with even more undesirable barriers based on quality or sanitary measures.

Our challenge is to encourage all governments to abide by the spirit of Gatt. We should support them, and appropriate international organizations, to develop technical guidelines and databases to allow sound decision making. We should encourage all signatories to Gatt to incorporate scientifically sound standards and conditions into their trading requirements.

Whether we are consumers or producers, we are all entitled to a level playing field.



Notes for beginners and others

By John Heineman

No matter where in New Zealand you keep your hives, October is a very important month on the beekeeper's calendar. Besides a very thorough inspection for bee diseases (B.L. especially) an eye must be kept on the food situation. Brood rearing is in full swing and stores will diminish fast. Supplementary feeding may be required, sugar or honey and perhaps pollen or pollen substitute too. Hives should hold no less than the equivalent of three combs of honey. On the other hand if colonies have the benefit of early nectar coming in they may become too strong too soon resulting in increased swarming problems. The making of splits, tops, nuclei should be seriously considered. It is the time to reverse, that is swap the bottom and second brood boxes. At the same time cull poor or very old combs and replace with frames holding foundation. Combs with brood from very strong colonies can go to boost the weaker hives, or hives can change places. Also it is the time to do the spring re-queening. The aim of all this is to have good strong colonies ready at the right time to meet the main honey flow.

That certainly implies no break in the brood resulting from partial starvation, no loss of swarms and no queens packing up when they should be flat out doing their thing. If you want more particulars about spring management go back to last year's *Beginners notes.*

Mind you queen bees do pack it in unexpectedly sometimes, we all have it happen now and then. And not seldom at the most inconvenient times. We cannot always pinpoint the cause. I am sure that many a queen has been superseded without the beekeeper being aware of it unless the superseded queen has been marked.

Supersedure is the replacement by a colony of its queen.

A swarm is a group of workers and drones that leaves a hive with a queen to establish a new colony elsewhere.

Supersedure happens when the queen is no longer able to keep the colony together and functioning properly when the production of her pheromones, those amazing chemicals, declines to such a level that the distribution throughout the colony is inadequate. Often this is a relatively gradual process. It may be a queen reaching the end of her life, running out of semen (drone layer) or it can be a younger queen which did not receive the optimum amount of semen during mating. It can be the result of disease s.a. nosema. It has happened that new queens have been introduced, showing a good brood pattern after a few weeks but then shortly after suddenly give up. Frustrating to say the least, both for the beekeeper and the queen breeder. Difficult to determine the real cause.

A bit different from supersedure is the emergency. The queen is lost to the colony suddenly. Could be accidentally (kicked over hive, rough beekeeper) or deliberate (split, nuc.). However the pheromone supply has stopped and the colony will try to remedy the situation by raising a new queen. Essentially there is no difference between a queen raised during the process of supersedure or as the result of an emergency.

However there is a marked difference between supersedure or emergency cells and swarm cells. And of course the reasons for a colony to swarm are different. Usually a portion of the parent colony with the old queen will leave the hive and look for a new home. It is the natural way of the honey-bee's reproduction method and also a way for further colonization of an area and for survival (disease, calamaties, starvation). A first or prime swarm will leave after a number of queen cells have been built and the developing queens are nearly ready to hatch. This prime swarm is sometimes followed by an afterswarm, smaller, and headed by one of the hatched virgin queens.

Swarm Cells	Supersedure Cells
many cells (six to more than two dozen);	few cells;
mostly near bottom bar, often clumped together;	cells isolated, sticking a little out from the comb's face;
cells often at different stages of development (some sealed and some unsealed);	cells at same stage of development;
queen healthy;	queen in poor condition or absent;
good brood pattern;	poor brood pattern, scattered, drone brood;
lack of worker eggs.	worker eggs still present.

At times one may find two queens in the same hive. You can be sure that one is old and one young ready to take over or already on the go. The old one will disappear shortly. Supersedure. Another type of swarm forms when a hive absconds. The whole family leaves for a new home for some reason or another. Not very common in this country. Africanized bees are very frequently absconding. We don't want them here!

Are there any good reasons why one should not make use of these swarm and supersedure cells. Good queens can come from them but...

Queens from swarm cells may well come from a colony with a tendency for swarming and carry that particular gene within her which does nothing for breeding bees with a low swarming instinct. Supersedure cells are built under an emergency impulse, probably during a time when no or very little nectar and pollen is gathered and the colony may also lack a good force of young bees. F.e. a small nuc left to raise its own queen. Nutrition is a most important factor in raising quality queens.

Also, believe it or not, nature does not always know best. Bees are just not very good in selecting larvae of the ideal age and will often use larvae which are too old to develop into real good queens. A reason why nucs left to raise their own queen so often lead to disappointment. Much better to introduce mated queens or cells produced under the right conditions and from grubs of the correct age (less than 24 hours old).

Korea eases restrictions on food

by Anne Hunter

A move by the Korean government to relax shelf life regulations will bring significant advantages for New Zealand food exporters to Korea, according to Don MacLean, New Zealand trade commissioner to Korea.

Speaking at a "Doing Business in Korea" seminar held by the Korea/ New Zealand Business Council recently he said comparatively short maximum shelf life restrictions that previously limited access for New Zealand exports to Korea have now been removed.

"Under the recent USA-ROK agreement, the Korean shelf life system has been mandated to the widely accepted international standard of MDSL — Manufacturer Determined Shelf Life," said MacLean — who believes the new regulations will directly benefit New Zealand exporters of meat products and over 200 dried, canned, bottled and packaged items.

With a growth rate of 32% over the last two years, Korea is poised to overtake the UK as New Zealand's fourth largest trading partner. It is currently New Zealand's sixth largest market with exports up from $493.3m in 1989 to $985.2m in 1994. In the year ended April 1995, New Zealand exports overran the billion dollar mark to $1.04bn, making Korea the first new market in 12 years to pass that milestone.

By comparison, Korean imports to New Zealand in 1994 were $322.2m, leaving a large trade imbalance that reflects New Zealand's supply of raw materials including logs, pulp, hides and deer velvet.

MacLean says prospects for the Korean market appear strong following a solid recovery in the economy last year when GDP grew by 8% - up from 5% the previous year. In this expansionary phase, Korean economic growth is estimated in the area of 9% for the first half of 1995.

"There is now widespread awareness of New Zealand and its 'clean, green' image," says MacLean. This is because Korea screens television programmes about New Zealand at least monthly.

Tourism has also raised the profile, with 65,000 Koreans visiting New Zealand in 1994, and the inbound prediction for 1995 is 115,000. New Zealand is now the second most preferred destination for Korean immigrants and in 1994, 1400 Korean students came to New Zealand for education.

"Korea today has a highly positive attitude about New Zealand and its products" says MacLean, who believes New Zealand food, particularly processed food, is the major future export growth sector.

He says recent liberalisation of import restrictions has created these opportunities.

"These cover certain New Zealand imports that were previously either banned or totally restricted," said MacLean.

Remaining restrictions will be progressively lifted by 1997. Access has been freed up this year for whey, infant formulas, garlic, cheese, fruit juice, milk and cream, apples, onions and some fish species. Further access will be available in 1996 and 1997 for another two rafts of products including pork, chicken and natural honey.

MacLean says import licensing has been liberalized. "It is unusual these days for an application to be turned down," he says. This brings opportunities for New Zealand exporters to deal directly with the end user rather than having to rely on the middle men and 'fat cat' traders who fed off the restricted licensing system of the past.

Despite progressive liberalization, New Zealand exporters still face frustration in a market where bureaucracy is rife. MacLean points to the banking system: "This is archaic although it's improving and the Korean Government is freeing up regulations governing foreign exchange."

MacLean maintains that smaller Korean companies are probably the best bet for New Zealand exporters. "The large Korean companies — and there are some giants — can present problems for us, not just because they are extremely hierarchical but also because their demands and requirements are often too great for a New Zealand company to meet and consistently supply".

Acknowledgement Export News September 1995

Continued from page 3

New Zealand has an outstanding result in government (third), and in management (sixth)," the report says.

"The deregulation policy undertaken by the government and the reform of the labour relations laws are now being scrutinised by experts around the world.

"The people factor is slowly being absorbed — that ranking has improved, reaching 12th position (compared with 17th in 1991)."

The major criteria assessed for the people factor are the attitude of the workforce, unemployment, employment and educational structures.

Areas that "need more work" include domestic economic strength (22nd), science and technology (22nd) and internationalisation (23rd).

But the report adds that New Zealand's business executives were "so upbeat" that they ranked their country second in the survey of executive opinion.

The rankings are weighted two-thirds on the basis of economic performance data and one-third on the executive survey.

Nearly 3300 executives worldwide answered a questionnaire for the report, whose rankings are weighted one-third on the executives' responses and two-thirds on the basis of economic performance data.

The report says that Japan, which led the rankings for nine years, had slipped to fourth position and visas continuing to slide.

Australia, in 14th position, had a "very balanced performance" — performing well in government (third), and infrastructure (fourth) which includes natural resources. But its 31st ranking in internationalisation indicated a need for the country to "determine its markets more efficiently".

Rankings continued on page 14

Marketing

Contributed by Keith Herron

Bulk honey: The market for bulk honey in New Zealand has not changed over the last few months, with manuka and some other mono floral sources commanding a premium. The bulk of the New Zealand production which finds its way onto the domestic market has remained at a low price, when the costs of production are considered, with prices ranging from $1.80 - $2.10 per kg.

Packed honey: The price has been steady or unchanged. However the South Island is presently seeing downward movement in prices. This is expected to reduce the prices being paid by packers to beekeepers.

Exports: Speciality packed honeys have been selling at good prices. Quantity exported sometimes depends on availability. Beekeepers with access to speciality sources should ensure the honey is not devalued by poor handling, poor presentation or poor marketing.

Export bulk: There is still considerably more honey in New Zealand than is required by the local market. The price offered to producers by exporters has not encouraged exports of bulk honey. Reports from the USA indicate the USA bulk honey price increased several months ago, and that this increase has been sustained. The USA has a substantial influence on the world honey market. The increased price in the USA, in combination with the New Zealand exchange rate, has not resulted in a benefit to New Zealand beekeepers.

Pollination: Most of the pollination prices will be set for this season. The return should reflect the cost of preparing your hives and the cost of moving them in — and out — of the crop that requires pollination, as well as a profit factor.

I note in one area of New Zealand beekeepers were aware that last year's price for pollination would not be sufficient reward for pollination in 1995. I understand an increase in price in the order of $20.00 per hive has been negotiated. It is good to see that the people with a crop requiring pollination understand the costs incurred by beekeepers, and the value of bees in relation to the crop to be pollinated.

The above is an indication of the way the market is at present.

As a beekeeper, when you sell a service (eg pollination, swarm removal), sell a product (eg honey, wax, bees, queens), remember your income will be the result of efficient production, or service provided in a professional way, not the result of charging just less than the other beekeeper.

And with the sale of product and services remember —

1. You must produce product
2. You must receive $$ for that product
3. The cost of 1. must be exceeded by 2. often enough to make a long-term profit.

The alternative is that your business as you and others know it will be history. ie Keep the costs realistic in relation to the revenue from the sale of product.

Handy hints for exporters

India: Avoid dealing with government and state departments — involvement with politics can adversely affect private business deals. Quality sales and promotional material impresses.

Indonesia: The understatement is 'pricing is flexible'. Kickbacks are part of business. Telecommunications inadequacies make appointments hard to get and communication frustrating. Traffic jams are a way of life. Learn not to hurry and not to hurry others.

Vietnam: Work with Communist party owned ventures. Try and get performance related agreements.

Malaysia: Government is an essential part of doing business and will continue to be a key influence — more so than the royal family. Address everyone with correct formal titles, for example Tunku.

Thailand: To gain credibility, demonstrate the following as modestly as possible: Wealth — this is a measure of success. Connections — influence impresses. References — other ventures in Asia.

China: Be aware that the Chinese control the wealth and business in many Asian countries. They love to negotiate and the ultimate aim is to win however small the stake. There will always be a counter offer and you must respond or they'll think you're not interested.

Korea: Never describe New Zealand as 'small'. That's negative and Koreans don't want to do business with a company from a 'small' country. Use the family name — never the first name. Always shake hands. Never use a red pen — red means death. Always be punctual.

Acknowledgement Export News September 1995

From the colonies

We have just exposed ourselves to the public with a small display in the local plaza. There was the frame of bees complete with brood, capped honey and a marked queen. There was an Arataki stand with different types of honey to taste. There was the information board with notices and information including an invitation to our field day. There was the raffle of a wheelbarrow full of groceries including honey and a bottle of mead.

Out there where it is supposed to happen the willows were 10 days late with the essential early spring nectar and pollen, but since then there has been good flowering weather for the stone fruit. The apples are even starting a week sooner than expected.

Again we will have a small stand at the A & P Show just before Labour Weekend. Then it is all hand to the smokers for our annual disease inspection day on November 4. This will be a 9am start from Robinson's Apiaries with experienced keepers leading teams to check-out hives in areas known to have a history of foul brood. This exercise will conclude with a barbeque as the teams return to report a job well done.

Yours faithfully
Ron Morison

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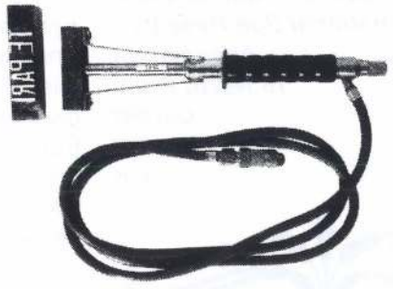

To firebrand numbers, letters, logos, etc. into wood. Typical uses include:- beekeepers branding their numbers onto hives, timber treatment plants branding treatment codes onto posts and boards, manufacturers branding their name or logo onto wooden products.
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IBRA on the World Wide Web

IBRA has launched itself on to the World Wide Web (WWW), presenting over 35 'pages' of information for beekeepers and bee scientists.

For the non-webbies out there, the WWW contains literally thousands of 'pages' of information, sounds and images on a vast range of subjects — from a video recording of tropical fish to beekeeping — which are accessed via the internet. All you need is a web browser such as Netscape or Mosaic (both freely available on the internet) and the address of the web site.

IBRA's web address is: http://www.cardiff.ac.uk/ibra/index.html

Our current pages include information about our library services and a list of the journals we receive (which is most of the beekeeping journals in the world); the journals we publish *(Bee World, Journal of Apicultural Research, Apicultural Abstracts and B.mail);* books we publish ourselves and other books we sell; meetings organized by IBRA and how you can be part of IBRA.

We also have a page with links to other sites around the world that will interest bee people, and a list of e.mail addresses of IBRA contacts.

We are still developing the site and adding new pages, so watch for innovations. Visit our web site soon.

Contact: Dr Pamela Munn
International Bee Research Association
18 North Road
Cardiff
CF1 3DY
UK

IBRA strikes gold again

Beekeepers can get high quality information from the International Bee Research Association; that's the message from the latest international beekeeping congress in Lausanne, Switzerland.

In the competition held at this recent congress, IBRA's two entries both won medals in the category for instructional material.

A colour guide to the pollen loads of the honey-bee by William Kirk took the only gold medal for this type of entry. "We've been pleased with this book ever since it was published last year", reported Andrew Matheson, the Director of IBRA who collected the medal at the congress. "The high sales figures have proved its popularity with beekeepers everywhere".

This exciting and practical manual contains over 500 colour samples, and describes (in English, French and German) the pollens of 268 species. While these are all European species, many are common in other parts of the world.

It builds on Dorothy Hodges' classic work, but goes far beyond it in the number of species covered and the accuracy achieved with modern printing processes.

The other medal won by IBRA was the bronze, awarded to *New perspectives on varroa,* edited by Andrew Matheson. The chapters in this book (also published last year), give a wide-ranging look at varroa in Europe. Four review papers look at important issues, while 25 papers in five sections review current research on this parasite. Many techniques and issues thought elsewhere to be new are more well known in Europe, and are described in this book.

These awards follow IBRA's success at the previous international apicultural congress, in Beijing, China. There the *Journal of Apicultural Research* took the only gold medal awarded to the world's beekeeping periodicals.

For further information:
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E. mail: ibra@cardiff.ac.uk
World wide web: http://www.cardiff.ac.uk/ibra/index.html

Unique group to gather in Costa Rica

Beekeepers and scientists from all around the world will be homing in on Costa Rica next August, for the 'Sixth IBRA conference on bees in the tropics: management and diversity'.

Costa Rica is an excellent venue for anyone interested in tropical bees and apiculture. Beekeeping with *Apis mellifera* has been carried out since the 19th century, though the character of honey bee management changed radically in 1982 with the arrival and subsequent spread of Africanized honey bees. The management of stingless bees has a heritage of at least 2,000 years, and is still an important part of the rural economy in some areas.

We are still learning the extent of the diversity of bees in Central America, and Costa Rica in particular, but the rich variety of habitats makes the area a prime site for study.

A varied range of technical sessions, field visits, trade displays and social events will combine to make this an informative and enjoyable programme, from 12-17 August 1996.

Write now for the second announcement with full details;
Sixth IBRA conference on tropical bees
International Bee Research Association
18 North Road
Cardiff CF1 3DY
UK
Fax: (+44) 1222-665522
E.mail: ibra@cardiff.ac.uk

Continued from page 11

Rankings in World competitiveness

Rankings:

1 United States, 2 Singapore, 3 Hong Kong, 4 Japan, 5 Switzerland, 6 Germany, 7 Netherlands, 8 NEW ZEALAND, 9 Denmark, 10 Norway, 11 Taiwan, 12 Canada, 13 Austria, 14 Australia, 15 Sweden, 16 Finland, 17 France, 18 United Kingdom, 19 Belgium/Luxembourg, 20 Chile, 21 Malaysia, 22 Ireland, 23 Israel, 24 Korea, 25 Iceland, 26 Thailand, 27 Egypt, 28 Spain, 29 Argentina, 30 Italy, 31 Portugal, 32 Peru. 33 Indonesia, 34 China, 35 Philippines, 36 Colombia, 37 Brazil, 38 Czech Republic 39 India, 40 Turkey, 41 Jordan, 42 South Africa, 43 Greece, 44 Mexico, 45 Poland, 46 Hungary, 47 Venezuela, 48 Russia.

Acknowledgement to New Zealand Press Association

Honeycomb Happenings and Classifieds

Various headings will be used within this directory as required by advertisers and will include: Branch notices (*no cost*) — Used plant, situations vacant. Beeswax, Honey, Bee Products, Woodware, Beekeepers supplies/accessories, Queens & packaging bees, Packaging Materials, FMG Insurance, Extracting services, laboratory services; Sugar supplies. The cost will be $15 per comb, per issue.

CANTERBURY MEETING

The next meeting of the Canterbury Branch will be on the last Tuesday of the month, *ie 31 October 1995* at 7.30pm. Venue: Merivale Rugby Clubrooms, Woolridge Road, between Wairakei and Harewood Roads.

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