

# Investment opportunities in the New Zealand Honey industry

Part of the Food & Beverage Information Project

www.foodandbeverage.govt.nz

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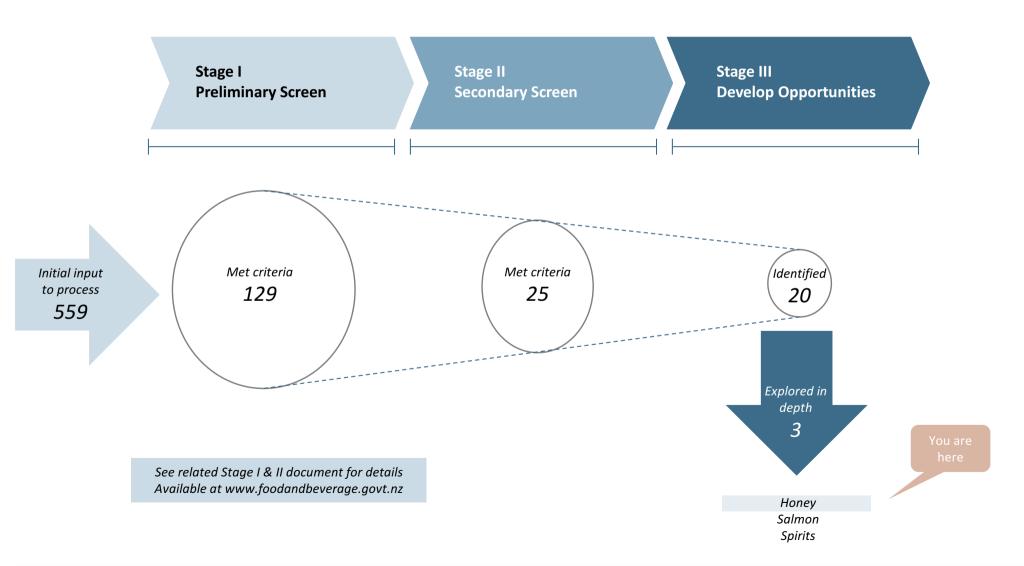


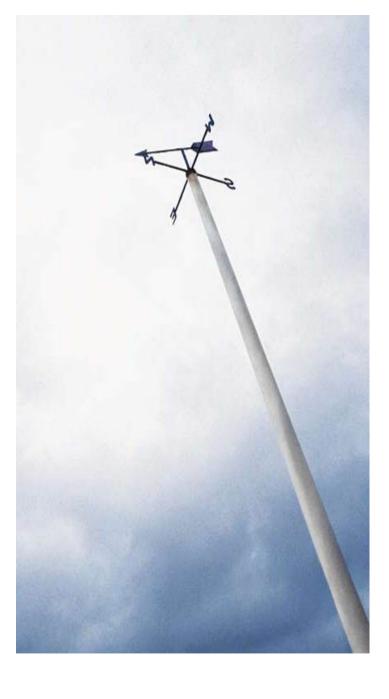




### **STAGE III**

This document represents the third stage of a wider industry screen designed to identify, develop & highlight emerging growth opportunities in New Zealand food and beverage exports for potential investors and other interested parties





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# **GLOSSARY OF TERMS**

# This report uses the following acronyms and abbreviations

ANZSIC	AU/NZ Standard Industry Classification
b	Billion
CAGR	Compound Annual Growth Rate
Ce	Coriolis estimate
е	Estimate
f	Forecast
FOB	Free on Board
FT	Full time
HS Codes	Harmonised System Codes for commodity classifications
K	Source is Kompass
Ke	Kompass estimate
m	Million
n/a	Not available/not applicable
NZ	New Zealand
NZ\$/NZD	New Zealand dollar
PT	Part time
S.H./N.H.	Southern/Northern Hemisphere
T/O	Turnover
t	Tonne
US/USA	United States of America
US\$/USD	United States dollar
UK	United Kingdom



#### **METHODOLOGY & DATA SOURCES**

## Data was from a variety of sources, and has a number of identified limitations

- This report uses a range of information sources, both qualitative and quantitative.
- The numbers in this report come from multiple sources. While we believe the data are directionally correct, we recognise the limitations in what information is available.
  - In many cases different data sources disagree (e.g. Statistics New Zealand vs. FAO\* vs. UN Comtrade).
  - Many data sources incorporate estimates of industry experts.
  - As one example, in many cases, the value and/or volume recorded as exported by one country does not match the amount recorded as being received as imports by the counterparty [for understood reasons].
- In addition, in some places, we have made our own clearly noted estimates.
- Coriolis has not been asked to independently verify or audit the information or material provided to it by or on behalf of the Client or any of the data sources used in the project.
  - The information contained in the report and any commentary has been compiled from information and material supplied by third party sources and publicly available information which may (in part) be inaccurate or incomplete.

- Coriolis makes no representation, warranty or guarantee, whether express or implied, as to the quality, accuracy, reliability, currency or completeness of the information provided in the report.
- All trade data analysed in all sections of the F&B Information project are calculated and displayed in US\$. This is done for a range of reasons:
  - 1. It is the currency most used in international trade
  - 2. It allows for cross country comparisons (e.g. vs. Denmark)
  - 3. It removes the impact of NZD exchange rate variability
  - 4. It is more comprehensible to non-NZ audiences (e.g. foreign investors)
  - 5. It is the currency in which the United Nations collects and tabulates global trade data
- The opinions expressed in this report represent those of the industry participants interviewed and the authors. These do not necessarily represent those of Coriolis Limited or the New Zealand Government.
- If you have any questions about the methodology, sources or accuracy of any part of this report, please contact Tim Morris, the report's lead author at Coriolis, on +64 9 623 1848



### **SUMMARY – THE HONEY OPPORTUNITY**

New Zealand manuka honey is an attractive, high growth industry with solid fundamentals; it offers participants a defensible base platform that can be extended into a wide range of products

#### Overview

- New Zealand's honey exports are on a roll and growing rapidly. Exports have grown at a 30% compound rate for the past decade, reaching US\$70m in 2010. Exports are strong to Europe (in particular the UK and Germany) and Asia.
- New Zeland's manuka honey is the most expensive in the world and receives a significant premium over other suppliers. The on-going international success of manuka honey is driving the growth of the total New Zealand honey industry.
- In the past decade the NZ honey industry has transformed from a small sleepy sector focused on the production of honey for domestic consumption into a fast growing, innovative, science based, high value export focused sector, with firms more akin to pharmaceutical and biotech. For example, in 5 years Manuka Health has grown from nothing to an almost \$20m company with 50 employees. It aims to double turnover in four years with a range of wound dressings.

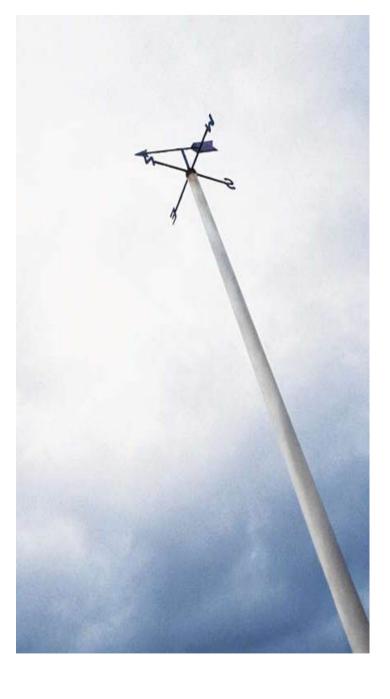
### **Drivers of growth**

- Active manuka honey has scientifically proven health giving properties which are driving global demand across a range of outlets, from pharmacies through to hospitals.
- The activity in manuka honey is unique to NZ\*, creating a highly defensible barrier to competition (and it is not economic to farm manuka trees\*\*).
- Manuka is the "perfect product" sweet, natural, guilt-free, convenient, health giving and scientifically proven – wrapped in the clean imagery of New Zealand and packaged in a wide range of forms (from lozenges to shampoo to medicine).

### **Opportunities**

- Manuka is a scalable platform with the potential for a full range of product line extensions. Once developed, strong brands can be leveraged into food, beverages, nutraceuticals and the HBC (health & beauty care) space.
- The recent aborted attempt by Suntory/Cerebos to acquire NZ listed Comvita demonstrates the success of the NZ honey industry has not gone unnoticed globally.
- Experience of other sectors suggests the industry is likely to be on the crux of a number of waves of consolidation, leading to a small number of large players rather than a large number of small players. This consolidation will be driven by economies of scale and scope, increasing investment required in R&D and NPD+ and the need for in-market sales forces.
- The real opportunity for investors in this point in the industry's life cycle is providing capital to the emerging winners to facilitate those winners driving scale through industry consolidation.
- Investments in the sector would have a wide range of available exit strategies in a 3-5 year time frame, including sale to a global nutraceutical/pharmaceutical company, sale to a competitor or listing.



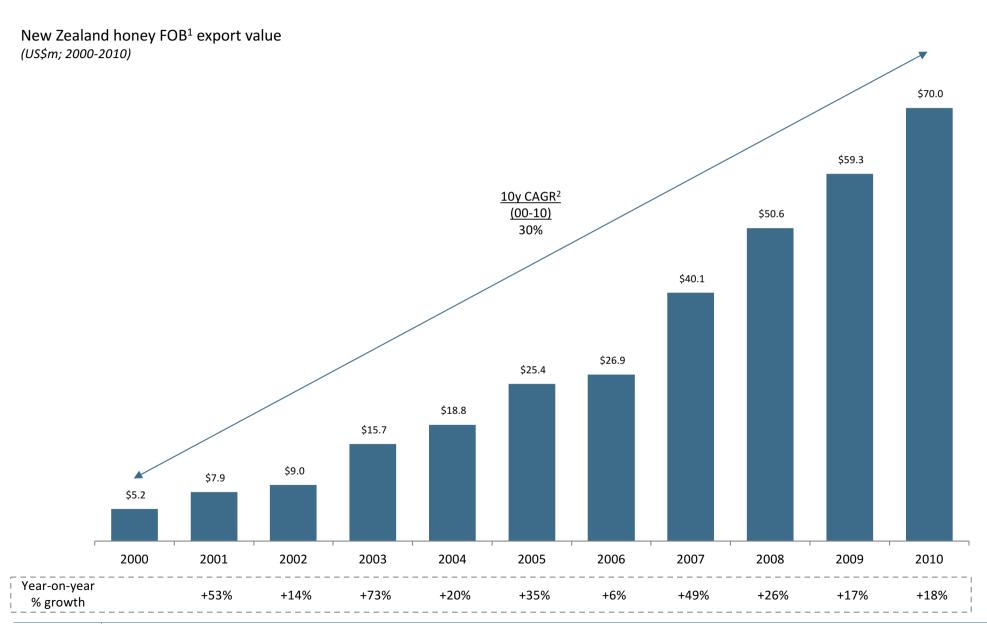


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### **NEW ZEALAND – HONEY EXPORT VALUE**

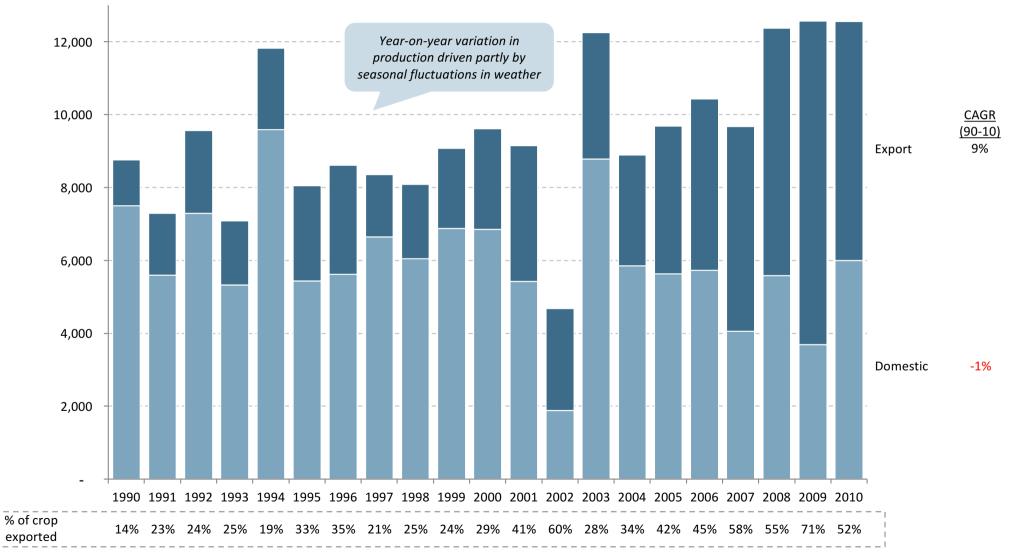
# The total value of New Zealand's honey exports is growing rapidly

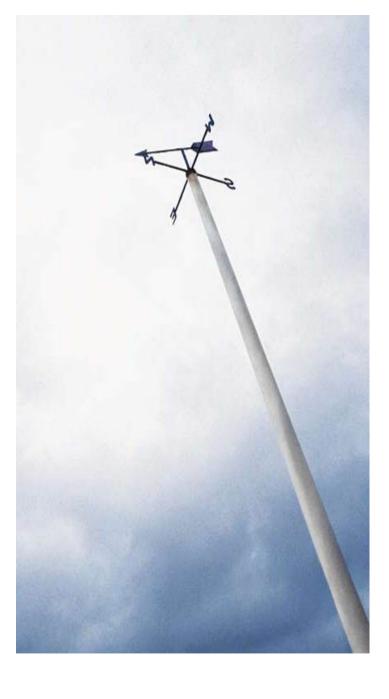


### **NEW ZEALAND – HONEY BY DESTINATION MARKET**

New Zealand honey production is growing in response to increasing export demand

Composition of New Zealand honey crop by destination market: domestic vs. export (t; 1990-2010)





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### **NEW ZEALAND – HONEY TIMELINE**

While honey has a long history in New Zealand, the unique properties of manuka honey were only identified in the late 80's

Timeline of major events in the history of the New Zealand honey industry (1800-2011)

Year	Event(s)
1839	Two hives of honeybees introduced to New Zealand by Mary Bumby to the Mangungu Mission Station in Hokianga Harbour
1852	L.L. Langstroth of USA patents moveable frame "Langstroth hive" [still used today] and queen excluder triggering modern honey industry
1878	Langstroth hive introduced to New Zealand
1905	Isaac Hopkins appointed as first Government Apiarist for Department of Agriculture Model bee farm set up at Ruakura government farm
1908	The first Apiaries Act was passed making the keeping of fixed frame hives illegal and introduced measures to control American Foulbrood
1930's+	Much of the New Zealand crop being sold to the Internal Marketing Division (a government agency)
1953	Formation of The NZ Honey Marketing Authority (NZHMA) as single desk seller of honey (excluded comb honey and some other products)
1970's-80's	Growth of kiwifruit and pipfruit industries increases demand for pollination services
1983	Dissolution of Honey Marketing Authority (single desk)
1988	Professor Peter Molan at the University of Waikato identifies unique type of antibacterial activity in manuka honey
1991	Government ends funding for endemic bee disease control; industry uses self-funding
1997	Formation of Active Manuka Honey Industry Group (AMHIG) [later AMHA/UMFHA]; creation of UMF trademark
Nov 2003	Comvita lists on New Zealand sharemarket
Jan 2008	Professor Thomas Henle, Dresden University of Technology (Germany) identified methylglyoxal as the active compound in Manuka honey.
Sep 2009	Synergistic molecule in manuka honey identified which increases its anti-bacterial effect
May 2011	Primary Growth Partnership with Manuka Research Partnership (NZ) Ltd and Comvita that invests more than \$1.7 million in research to cultivate high active Manuka plantations on back country land. A seven-year programme of innovation is planned to enable growth of the medicinal Manuka honey industry 16-fold. Its current estimated worth is \$75 million.
Nov 2011	Suntory-owned Cerebos make an unsolicited offer of NZ\$71.6m for listed Comvita; offer rejected by board and shareholders

#### MANUKA DRIVING GROWTH

# The success of manuka honey is driving the growth of the New Zealand honey industry

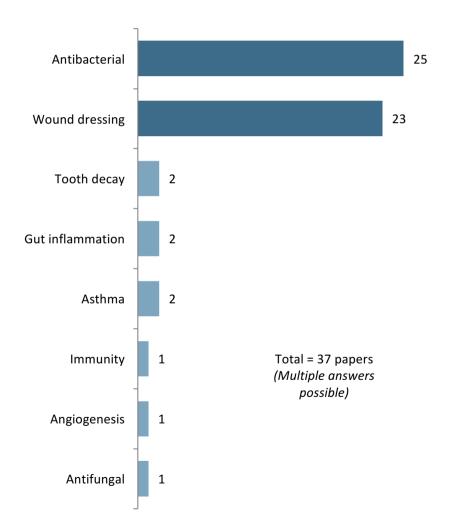
- "The antibacterial activity of honey was first recognised in 1892... It has been found that mostly the activity is due to the hydrogen peroxide produced enzymically in honey, but there have been some reports of minor additional antibacterial components. A survey of 345 samples of New Zealand honeys from 26 different floral sources carried out by Allen et al. (1991) found that when catalase was added to destroy hydrogen peroxide the honey from only one of the floral sources, manuka (Leptospermum scoparium), had any significant amount of antibacterial activity remaining. This was unique amongst the many reports on other honeys around the world in that this non-peroxide component was a major contributor to the antibacterial activity, although a subsequent survey of 340 samples of Australian honeys from 78 different floral made a similar finding for honey from jellybush (Leptospermum polygalifolium)." Peter Molan, Manuka honey as medicine, July 2001
- "Research by Peter Molan at Waikato University has shown honey from nectar collected from manuka flowers to have antibacterial properties.

  As demand has grown for this dark honey with its earthy scent and mineral, slightly bitter, flavour, its price has increased." Dominion Post, Mar 3, 2009
- "Manuka honey is a unique New Zealand product which offers a new method of treating otherwise untreatable wounds. Even the flesh-eating bacteria succumb to the high activity manuka honey." Bill Bracks, Chairman, Comvita, April 2004
- "[Manuka honey has] come a long way. Twenty years ago we couldn't give it away, because its taste was so strong. It was used as a feed to keep the bees going over winter and that was it. Today, with its proven health benefits, people are prepared to pay three times more for it than traditional honey." Pam Flack, Director, Arataki Honey, Mar 2009
- "Manuka honey commands a high price because of its proven antibacterial and other health properties. According to the experts it helps combat everything from sunburn, sore throats and wrinkles to the notoriously hard to fight superbug infections." Unlimited Magazine, Mar 2010

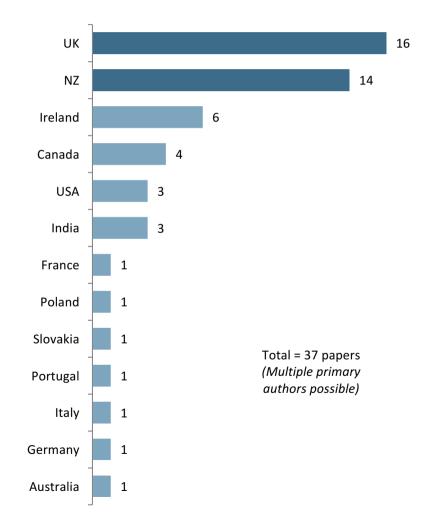
#### **RESEARCH ON MULTIPLE MEDICAL USES**

Manuka honey has been scientifically researched for a wide range of uses – its antibacterial properties and use as a wound dressing are the most researched/validated use

Number of papers on medical usage of manuka honey by activity studied in US National Institute of Health's (NIH) PubMed database (studied; 1988-2011)



Country of primary author(s) of these papers (studied; 1988-2011)



### **PRODUCT PROFILE - MANUKA HONEY**

# Manuka honey has been validated for wound healing and is approved for hospital use

Overview of current state of scientific research into Manuka Honey as a nutraceutical supplement and for medical usage (various; 1988-2011)

Delivery Mechanism	Competing Products
- Raw honey as a food	Natural:
<ul> <li>Honey supplements with royal jelly/propolis/ pollen added</li> <li>Added to wound dressings</li> <li>Combined into a gel for wound treatment</li> </ul>	Totarol, oregano oil Other honeys Probiotics Tea tree oil, eucalyptus
Components	Conventional Medicine:
Methylgloxal Low pH As yet unidentified synergistic factors	Antibiotics Topical creams Revamil® Honey
	Research State
History	Antibacterial/Wound Dressing: Very well researched, convincing evidence, "proven"
Honey has been used to treat wounds for millennia. In 1988, Dr Peter Molan's lab at the University of Waikato discovered manuka honey had antibacterial properties.  Manuka honey was later shown to have bactericidal activity distinct from other honey and was effective in wound treatment.  It is now collected widely in NZ and certified for use in hospital wound care.	Soon to be used as part of hospital wound care in several countries FDA approved product  Other: Other uses are spin-off from anti-bacterial care (i.e. tooth care) or are only at the initial phase of research Difficult to judge promise of research into these areas
	NZ Research Centres
Patents/IP/NZ-specific advantages  Proprietary blend of manuka honeys tested (for instance Comvita) Patents on extraction/isolation of active ingredient and wound gel technology (bought from WaikatoLink) Manuka honey primarily NZ, also Australia	Waikato Honey Research Unit (University of Waikato) University of Waikato Massey University - Manuka Research Partnership (Primary Growth Partnership) Plant and Food Research



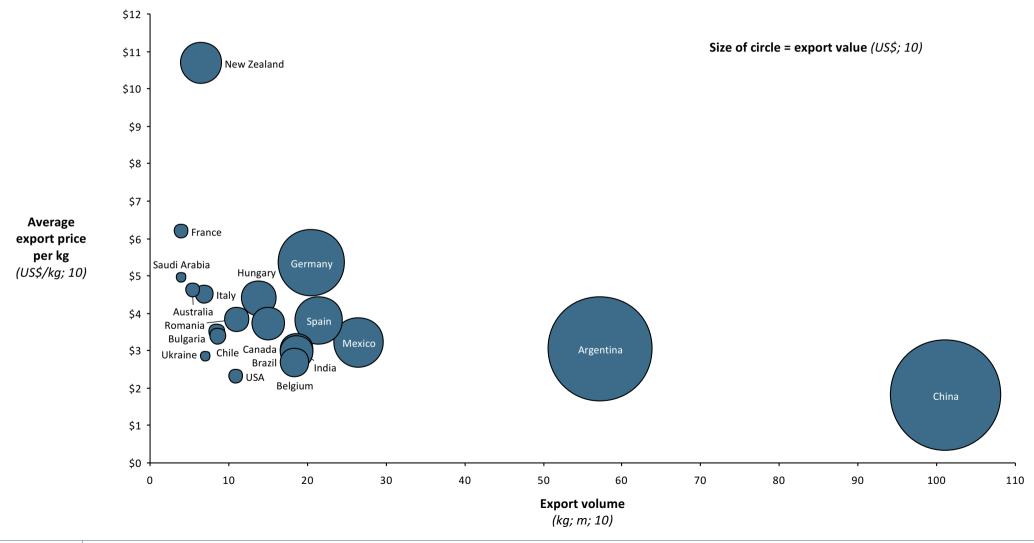
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### **EXPORT MATRIX**

# New Zealand achieves a dramatically higher average price for its honey than competitors

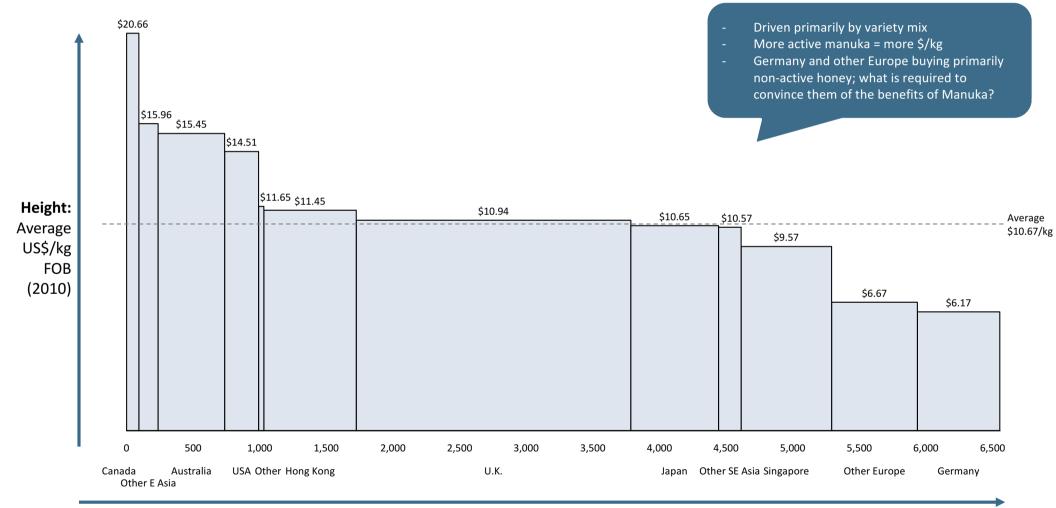
Export matrix: export volume vs. export value per kg vs. export value for top 20 honey exporting countries (by value) (various; 2010)



# **NEW ZEALAND – EXPORT VOLUME VS. \$/KG**

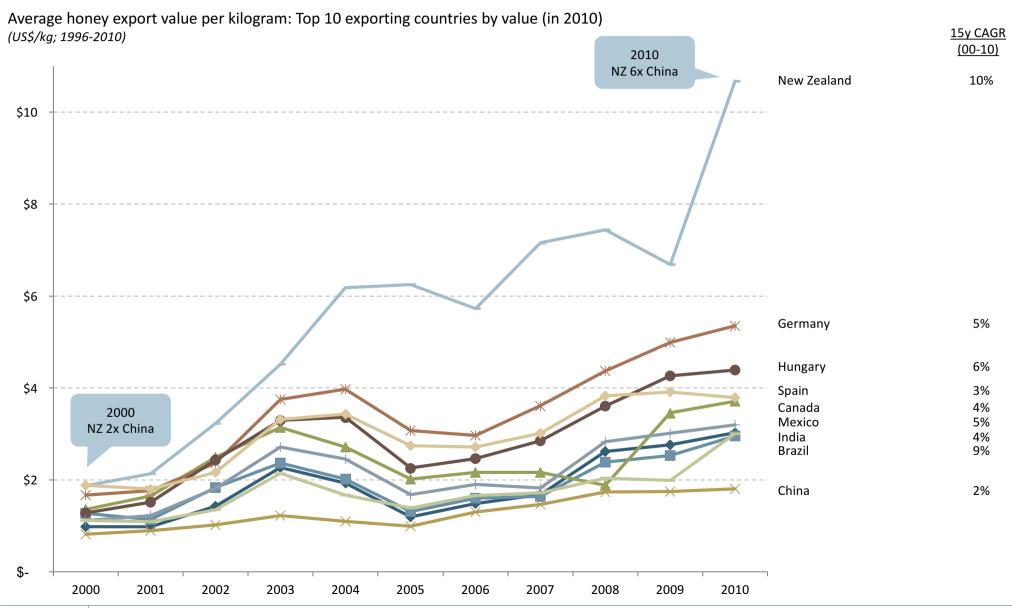
However, the average export value per kilogram varies by market driven by product mix (% active/manuka)

Mekko chart comparing New Zealand export volume by market with average export value per kg (t; US\$/kg; 2010)



# **EXPORT \$/KG**

# The New Zealand honey price is growing at double digit rates



### **HONEY – EXAMPLE – RANGE AT SAINSBURY U.K.**

New Zealand honey is typically sold in export markets as either super-premium active manuka – under manufacturers or retailers brands – or as premium specific origin (non-active) honey

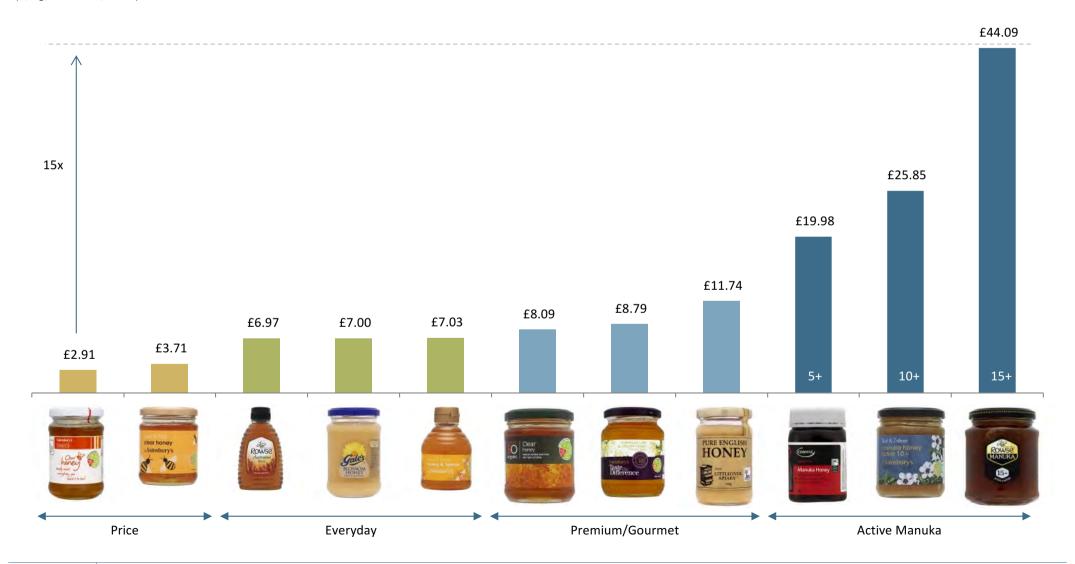
EXAMPLE: Sainsbury's (UK) total honey range by category and brand ownership (presence; 1/2012)

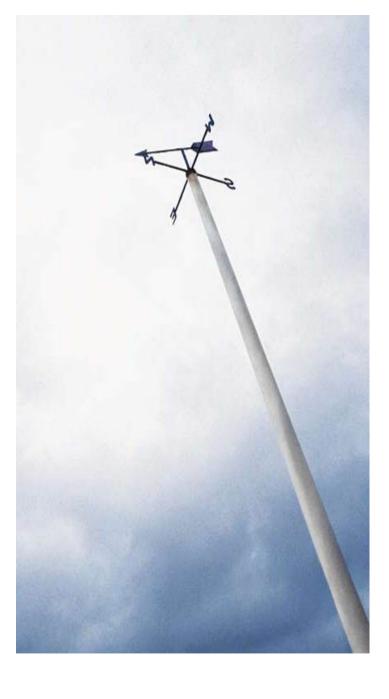


### **RETAIL PRICE PER KILO**

New Zealand active manuka honey achieves a large price premium on the shelf; for example at Sainsbury's it is up to 15x times the price of the cheapest honey on the shelf (on a unit price basis)

EXAMPLE: Retail shelf price of select honey products in Sainsbury's London (£/kg; actual; 1/2012)



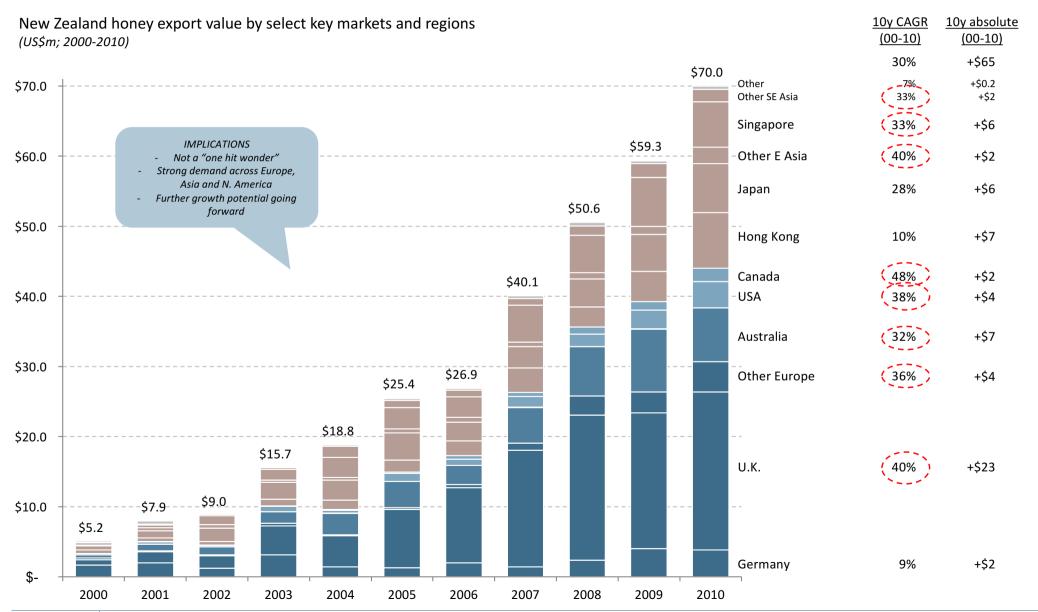


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### **NEW ZEALAND – EXPORT VALUE BY DESTINATION**

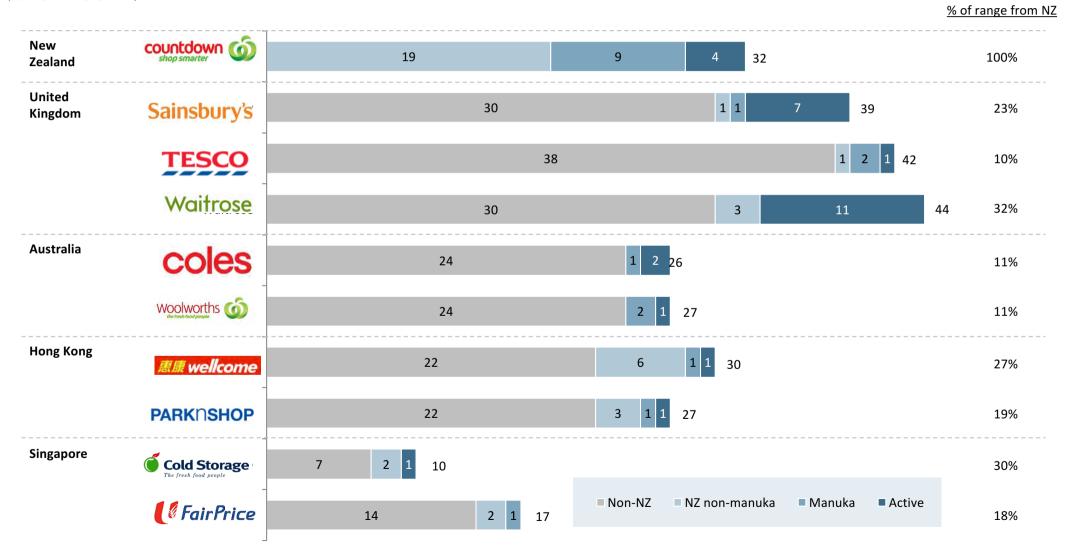
The value of New Zealand honey exports are growing at very high rates to key markets in Europe, North America and rich/developed Asia



### **# OF HONEY PRODUCTS ON SHELF**

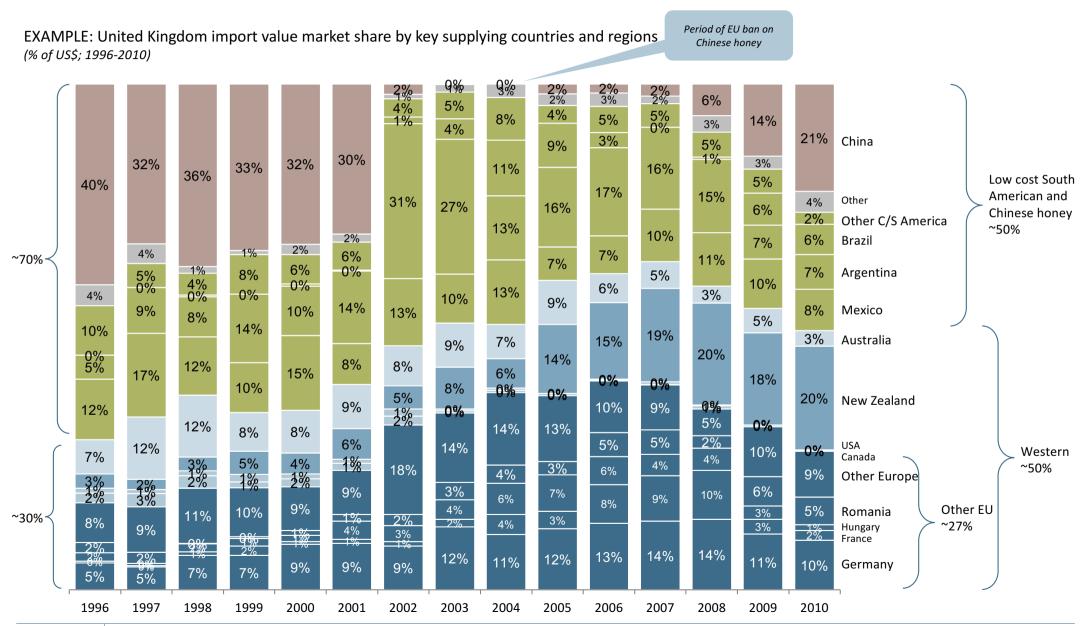
New Zealand honey is achieving good shelf presence in supermarkets across all major markets

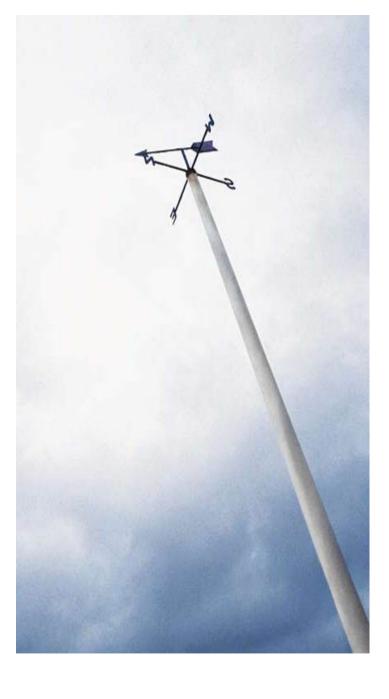
Number of different honey products on the shelf (sku) in select supermarkets in key markets for New Zealand honey: NZ and total (#; sku; actual; 1/2011)



#### **UK MARKET – HONEY SHARE**

New Zealand is taking value share in its key markets, as this example from the UK shows



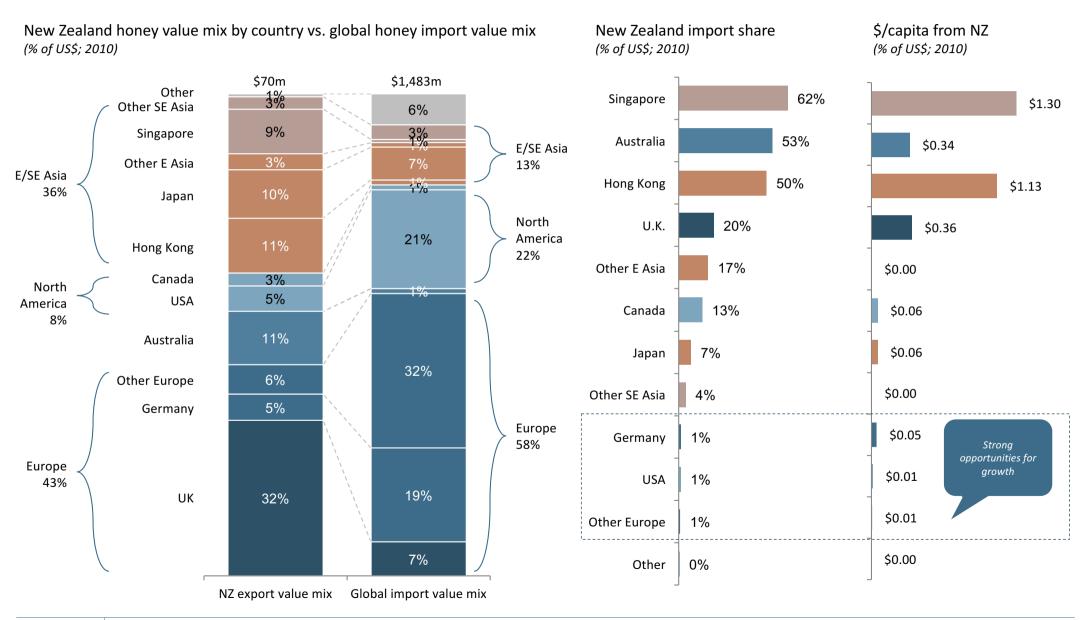


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#### HONEY: NZ EXPORT VALUE MIX VS. GLOBAL IMPORT MIX

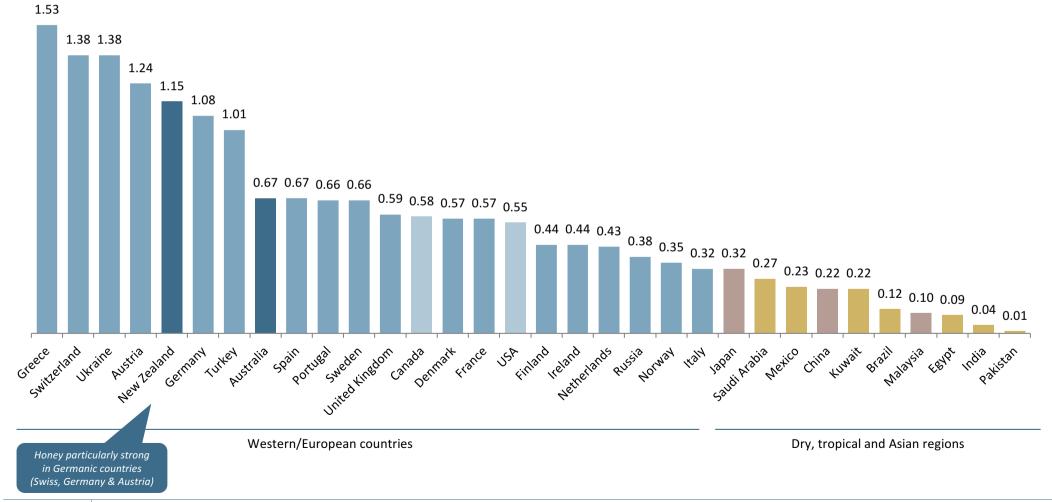
# New Zealand honey appears to have clear opportunities for continued growth



#### **HONEY – PER CAPITA BY COUNTRY**

The high consumption European countries – particularly Germany, Austria and Switzerland – with high incomes and a strong interest in natural health products – stand out as strong opportunities for growth

Apparent per capita honey consumption in all forms by select countries (kg/person; 2007)





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### **RANGE OF USES**

Honey is commonly used as an ingredient in a wide range of products, typically as a natural flavour in foods and beverages or for its perceived natural health giving properties in natural medicines and cosmetics

EXAMPLES: Products from the US market which use honey as an ingredient (1/2012)

Confectionery



**Energy bar** 



Cereal



Beverage



**Processed meat** 



**Cough treatment** 



Medicine



Supplement/Nutraceutical



Skin care



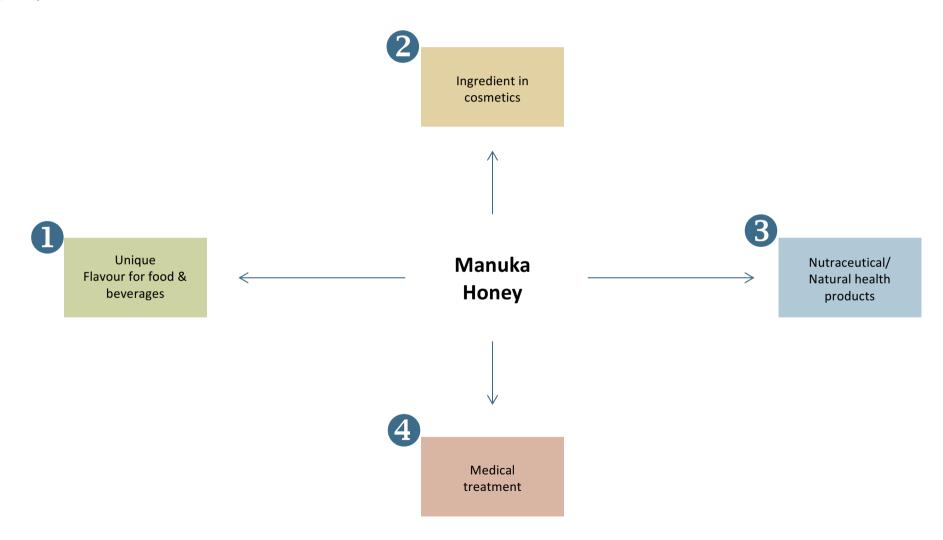
Cosmetic



### **EXTENSIBLE PLATFORM**

New Zealand manuka honey provides an extensible platform that can be expanded into a range of new products and categories

Directions for the extension of manuka honey *(model; 2012)* 



## 1. UNIQUE FLAVOUR - FOODS

# Manuka honey is being used as a flavour in a range of foods

EXAMPLES: Foods marketed as being flavoured with manuka honey (2012)







Freedom Farms Shaved Manuka Honey Leg Ham

Flavoured with manuka honey 100g NZ\$4.20

Freedom Farms(NZ)
Manufacturer of ham products

Sanitarium Light N Tasty Cereal

Flavoured with manuka honey, date & nut 500g NZ\$6.49

**Sanitarium**(NZ) (Seventh Day Adventist Church) Manufacturer of health foods **Comvita Manuka Honey Bar Boost** 

Contains 6 superfoods (including manuka honey) 40g NZ\$3.00

Comvita (NZ)

Manufacturer of health products

### 1. UNIQUE FLAVOUR - BEVERAGES

## Manuka honey is achieving front of label cut through on a number of prominent beverages

EXAMPLES: Beverages marketed as being flavoured with manuka honev

(2012)



UK herbal drinks group Firefly Tonics plans to launch a drink called Health Kick, containing honey from the manuka bush, indigenous to New Zealand. Researchers claim that the honey has anti-bacterial properties, and can be used to boost the immune system

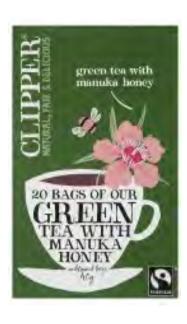
as well as being applied

externally to skin cuts and

irritations.



"Manuka honey... One of nature's Wonder-Foods... An intense, brooding vodka with an aroma of beeswax, honey and caramel, with a just sweet flavour of honey, butterscotch and aniseed, and a smoky, spicy aftertaste."



#### **Firefly Health Kick**

Flavoured with Blood Orange & Manuka Honey 330ml £1.65 at Lloyd's Pharmacy (UK)

#### Firefly Tonics (UK)

Manufacturer of healthy & convenient beverages

#### 42 Below Manuka Honey Vodka

Flavoured with Manuka Honey 700ml NZ\$42.99 at Glengarry

# Manufactured by 42 Below (owned by Bacardi)

Manufacturer of spirits

#### Clipper Green Tea with Manuka Honey

Contains manuka honey 40g £1.65 at Sainsbury's (UK)

#### Clipper Tea (UK) (FF&P Private Equity) Manufacturer of tea



# 2. COSMETIC/SKIN CARE INGREDIENT

Manuka honey is being used as a named ingredient in an increasing range of cosmetic and skin care products

EXAMPLES: Cosmetics & skin care products marketed as containing manuka honey (2012)







#### **Ecostore Soap**

Containing manuka honey & kelp 80g NZ\$2.50 at Countdown

#### **EcoStore (NZ)**

Manufacturer of natural cleaners

#### **Carex Nature Protect Manuka Antibacterial Handwash**

Contains manuka honey 250ml £1.60 at Boots (UK)

#### PZ Cussons (UK)

Manufacturer of health & beauty products

#### **Antipodes Aura Manuka Honey Treatment Mask**

Contains 6 superfoods (including manuka honey) 75ml NZ\$44.50 at Pharmacy Direct

### **Antipodes New Zealand**(NZ)

Manufacturer of cosmetics

## 3. NUTRACEUTICAL/NATURAL HEALTH PRODUCTS

Manuka honey is being used as a named active ingredient on an increasing range of natural health products

EXAMPLES: Nutraceutical/natural health products marketed as containing manuka honey (2012)







#### **Green Bay Active Manuka Honeysuckers**

Containing manuka honey & propolis 12 count £4.99 at Waitrose UK

#### Green Bay (UK)

Manufacturer of natural health products

#### Comvita Children's Manuka Elixir

Containing manuka honey & propolis 200ml NZ\$22.99 at Amcal

#### Comvita (NZ)

Manufacturer of natural health products

#### **Manuka Gold Manuka Throat Spray**

Containing manuka honey & propolis 15ml £2.50 at OneClick Pharmacy (UK)

#### FSC (UK)

Manufacturer of natural health products



### 4. MEDICAL TREATMENT

# Manuka honey is being used in medicine

EXAMPLES: Medical products marketed as containing manuka honey (2012)







#### ManukaMed Manukapli

Containing medical grade manuka honey 2 tubes at 1oz/each US\$16.99 from Starry Brook (US)

#### Watson&Sons (NZ)

Manufacturer of manuka health products

#### Comvita Manukacare 18+

Containing UMF 18+ manuka honey 50g £10.24 at OneClick Pharmacy (UK)

#### Comvita (NZ)

Manufacturer of natural health products

#### Medline Therahoney Gel

Containing medical grade manuka honey 5oz

Available to US hospitals from Medline

### Medline (US)

Manufacturer and distributor of medical supplies





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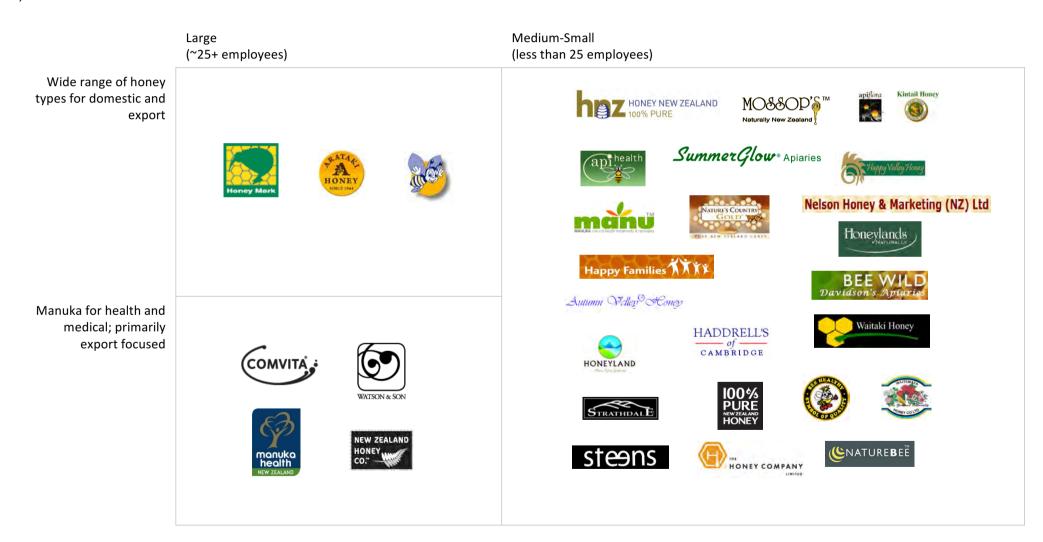
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### **NEW ZEALAND – RANGE OF FIRMS**

There are a wide range of firms involved in the New Zealand honey industry; many would be potential investment targets

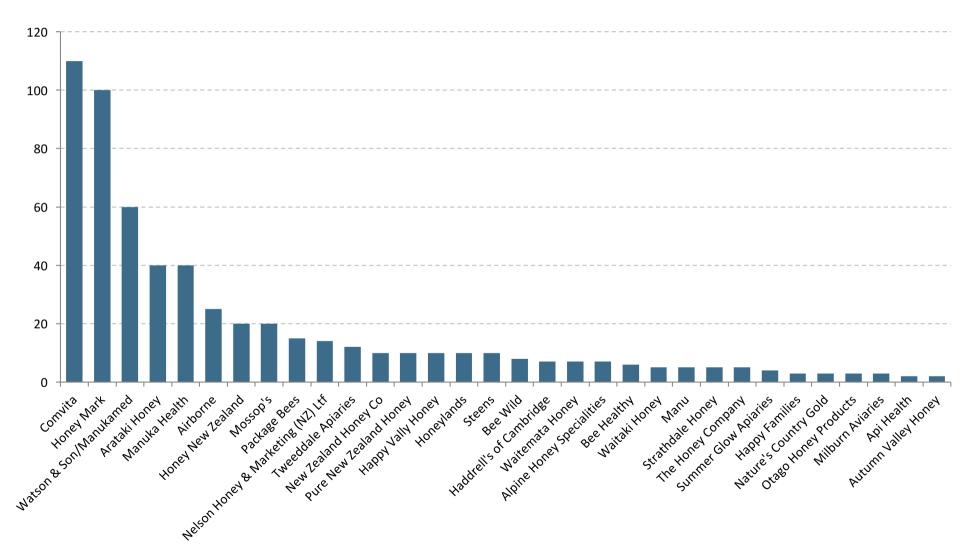
Selection of honey processors in New Zealand sorted by employment size (2011)



### **CONSOLIDATION OPPORTUNITIES**

The New Zealand honey industry is still relatively fragmented; experience of other similar industries suggests consolidation opportunities going forward

Identified New Zealand honey firms by number of employees (# of people; 2011 or as available)



# Our research has identified the following honey firms in New Zealand...

	Turnover	% Export	Employees	Ownership	Year founded	Notes
Honey/Bee products						
COMVITA	\$85m (2010)		143 <sup>1</sup>	New Zealand; Listed (NZX: CVT)	1974	www.comvita.com Manuka honey; wide range of other products
MANUKA <b>MED</b>	\$1-5m (K; 06)	59% (K)	10 (K)	New Zealand; private (Watson family; Daniell family)	2003	www.watsonandson.co.nz www.manukamed.com 15,000 beehives
manuka health we now	\$20m	90%	50	New Zealand; private (numerous)	2006	www.manukahealth.co.nz Honey products in medifoods, cosmecueticals, 70 products in 40 markets
HONEY SINCE 1944	\$5-10m (K)		40	NZ; private (Berry family; others)	1944	www.aratakihoneyhb.co.nz
Honey Mark	\$10.8m (2010)		N/A	NZ; cooperative (80-100 beekeepers)	1950's /1981	www.nzhoney.co.nz New Zealand Honey Producers Co-operative took over the assets of the Honey Marketing Authority Hollands; 3 Bees; SweetMeadow; Hororata
NEW ZEALAND HONEY CO."	\$5m (npa; 09)	90%	N/A	New Zealand; private (Ward family)	2005	www.newzealandhoneyco.co.nz Honey products; parent is Alpine Honey
Airborne Est 1910	\$3m (Ke)		25	New Zealand; private (Bray family)	1910	www.airborne.co.nz Regular, manuka, active manuka, and honey lozenges
HONEY NEW ZEALAND	\$3m (Ke)		20 (K)	New Zealand; private (Pringle family)	2003	www.honeynz.co.nz www.beesonline.co.nz Honey
MOSSOP'S TM  Naturally New Zealand	\$3m (Ke)		20 (K)	New Zealand; private (Mossop family)	1952	www.mossopshoney.co.nz Wide range of honey products

# ... continued...

,	Turnover	% Export	Employees	Ownership	Year founded	Notes
Honey/Bee products						
apiflora Kintali Honey NEW ZEALAND PACKAGE BEES	\$3m (Ke)		15 (K)		1947	www.packagebees.co.nz
Nelson Honey & Marketing (NZ) Lt	<b>d</b> \$2.4m (Ke)		14 (K)	New Zealand; private (Cropp family)	1972	http://www.nelsonhoney.com Honey; bee products
100% PURE HONEY	\$2m (Ke)		10 (K)	New Zealand; private (Lyttle and Ball)	1995	www.purenewzealandhoney.com Manuka honey, active manuka; other honeys
Thopay Valley Flowey	\$1m (Ke)		10 (K)	New Zealand; private (Lipscombe family)	1976	www.happyvalley.co.nz; www.happyvalleyhoney.com.hk Honey and bee products
Honeylands	\$2m (Ke)		10 (K)		1995	www.honeylands.co.nz
BEE WILD Davidson's Apiaries	\$1m (Ke)		8 (K)	New Zealand; private (Davidson family)	1945	www.beewild.co.nz
HADDRELL'S cambridge	\$1m (Ke)		7 (K)		1993	www.haddrells.co.nz; Cambridge Bee Products Bee products; UMF honey (Golden Hills brand)
Control of the contro	\$1m (Ke)		7 (K)		1960	www.waitematahoney.co.nz Honey, UMF Honey
	\$3m (Ke)		6 (K)		1991	www.beehealthy.co.nz; www.ecroyd.com/ Honey; manuka honey; bee products
Waitaki Honey	\$2m (Ke)		5 (K) 3,500 hives		1940	www.waitakihoney.co.nz
SummerGlow® Apiaries	\$1m (Ke)		4 (K)		1976	www.manukahoney.co.nz/ Manuka honey; UMF honey

# ... continued...

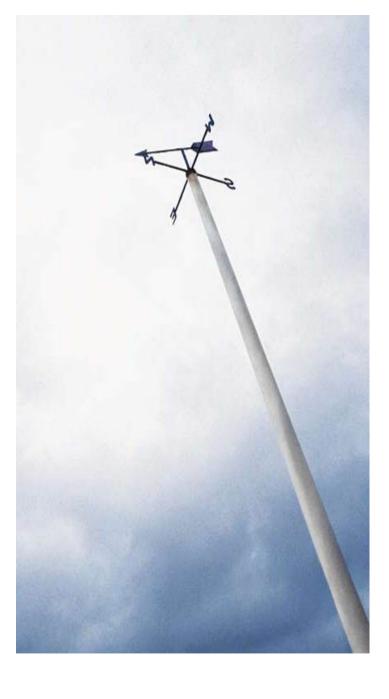
·	Turnover	% Export	Employees	Ownership	Year founded	Notes
Honey/Bee products						
Honey and Propolis NZ Ltd Tweeddale Apiaries	N/A		12	New Zealand; private (Tweeddale Family)	2002	Partnership in Manuka Research Partnership (60%) 17,000 hives; No website located
api health	N/A		N/A	New Zealand; private (Nikolaeva family)	1998	www.apihealth.com Bee venom; bee products
THE HONEY COMPANY	\$1.5m (Ce)		N/A	New Zealand; private (Darren Clifford)	2006	www.thehoneycompany.co.nz
manufactures in versions in versions	N/A		N/A	New Zealand; private (William Gluyas)	1990	www.manukanatural.com/ Manuka products; honey
Happy Families 📆 💢 🏋	N/A		3 (K)	New Zealand; private (Bickerstaff and Wheeler)	1997	www.honeybalm.com Bee product based supplements
Nature's Country GOLD 192	\$1m (Ke)		1-5 (K)	New Zealand; private (Pohio family)	2000	www.naturescountrygold.co.nz Honey; Manuka Boosta honey-based energy-bars
Autumn Walley Honey	\$0.7m		2 (K)	New Zealand; private (Clarke family)	2003	www.autumnvalleyhoney.co.nz
HONEYLAND Possible Glass	\$0.3m (Ke)		1 (K)	New Zealand; private (Walker family)	1986	www.honeyland.co.nz
STRATHDALE	N/A		1,200 hives	New Zealand; private (Dale family)	1959	www.strathdalehoney.com Clover honey; bio-gro organic certified; C. Otago
<b>©</b> NATURE <b>B</b> EË	N/A		N/A	New Zealand; private (Cook family; Goodman family)	1997/ 2000	www.naturebee.com Potentiated pollen; bee venom; AMF manuka honey
steens	N/A		N/A	New Zealand; private (Steens family)	2000	www.steensnewzealand.com Active manuka honey; in Waitrose UK



# ... continued...

	Turnover	% Export	Employees	Ownership	Year founded	Notes
Honey/Bee products						
HAUORA 100% PURE NEW ZEALAND HONEY	N/A		N/A	New Zealand; private (Huang & Zhang)	2003	www.hauorahoney.co.nz/ NAC Trading Ltd Range of floras incl UMF manuka (control all chain)
Otago Honey Products	\$1m (Ke)		3 (K)	New Zealand; private (Sales, Farhi, Walker, McCaw)	1991	No website located
Milburn Apiaries	\$1m (Ke)		3 (K)	New Zealand; private (Walker, McCaw families)	1970	No website located Part owns, Otago Honey Products
Alpine Honey Specialties	\$1m (Ke)		7 (K)	New Zealand; private (Ward family)	1981	No website located
Cell Limited (Formerly Cellular Improvements)	N/A		N/A	New Zealand; private (Donnelly family)	1999	http://yhst-56964562438721.stores.yahoo.net/ Potentiated pollen
Zeal Extracts	N/A		N?A	New Zealand; private (Butler)	1998	Websites down; Active Zealax UMF honey





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### **NEW ZEALAND HONEY – SWOT ANALYSIS**

Manuka honey has strong potential for continued growth; however, major emerging issues need to be addressed swiftly

Strengths	Weaknesses
<ul> <li>Unique/defensible product</li> <li>Strong position in a handful of countries (UK, AU, HK &amp; Singapore)</li> <li>New Zealand trusted country and products with secure food source</li> <li>Able to leverage favourable opinion of New Zealand in key markets (e.g. China, Korea, Japan)</li> <li>Phytosanitary barriers protecting domestic market</li> </ul>	<ul> <li>Fragmented; most NZ firms have low/no economies of scale</li> <li>Lack of industry cohesion; infighting</li> <li>Multiple standards creating confusion for consumers</li> <li>High cost of robust scientific validation of claims (e.g. clinical trials)</li> <li>Significant exports of bulk honey for repackaging elsewhere</li> </ul>
Opportunities	Issues/Threats/Risk
<ul> <li>Huge pool of potential consumers (e.g. people with colds) who have not yet tried or been exposed to manuka honey</li> <li>Further scientific research building on medical credibility of manuka honey</li> </ul>	<ul> <li>Bee diseases destroying bee population</li> <li>Counterfeiting</li> <li>Exaggerated claims (e.g. non-active being sold as active)</li> <li>False claims bring disrepute on the industry</li> <li>Increasing amount of regulatory restrictions; could be classified as medicine</li> <li>Backlash, negative publicity in sector with products with unproven claims (e.g. cancer)</li> <li>Other countries launching "active" honeys (e.g. Chile's Ulmo active honey)</li> <li>Scares/contaminations/disease damaging consumer image of New Zealand</li> </ul>

#### **SUMMARY**

### Uniting manuka honey standards seems to be the key

- Despite having a virtual monopoly on supply of the product, New Zealand has not trademarked or protected the term "active" as it relates to honey. This is reminiscent of past lack of action to protect "kiwifruit" (chinese gooseberry) and "vintage" cheese (aged cheddar).
- Various forms of active manuka honey are currently being sold under a plethora of quality standards, including UMF, MGO, MGS and OMA, for example.
- Products purporting to be manuka honey, or active or bio-active often have no recognised assurance of ingredient integrity or testing regime to support their health claims.
- The Unique Manuka Factor Honey Association (UMFHA) is attempting to establish their UMF rating system as the industry certification standard. However, as yet, there has not been any standardisation of the UMF logo and label terminology.

### ISSUE 1 – POOR CONTROLS – "ACTIVE" MANUKA HONEY

### There is no common definition or certification for "active" manuka honey at present

Examples of New Zealand "active" manuka honey with no clear certification (2012)



"Active 15+"



"Active"

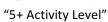




"Active 5+"

"Active 10+"







"Active 20+"



"Active 5+"

- All honey is "active" at some level
- New Zealand has not trademarked or protected the phrase "active" as it relates to honey
  - Similar to failure to protect
     "Kiwifruit" (Chinese Gooseberry) and
     "Vintage" cheese (aged cheddar)
- Therefore anyone anywhere can call their honey active

### ISSUE 1 – POOR CONTROLS – MULTIPLE STANDARDS

Active manuka honey is being marketed to consumers under a confusing range, some dubious, of certification systems

Examples of on pack certification systems for activity levels in New Zealand manuka honey (2012)





















- Imagine you are a consumer that has heard about "Manuka honey" and you are presented with these four products on the shelf of your pharmacy or supermarket
  - Which is better: UMF 10+, MGO 250, MGS 16+ or OMA 16+
- The Unique Manuka Factor Honey Association (UMFHA) was formerly the Active Manuka Honey Association (AMHA)
  - To increase confusion there are numerous different executions on the "UMF™" logo/word
- As far as we can tell Wedderspoon (a US firm) appears to have invented it's own standard [OMA]; if other retailers and manufacturers do the same, confusion will reign



### **ISSUE 1 – POOR CONTROLS**

The New Zealand honey industry has an ongoing problem with fake, mislabelled and counterfeit manuka honey, particularly the labelling of non-active honey as active

- "The [New Zealand Commerce Commission] is considering whether to investigate a complaint from Peter Bray, managing director of Airborne Honey, about the labelling and marketing of premium honey flavours such as manuka and rata. Bray claims that some honey varieties in supermarkets contain little of the honey type they claim to be. Despite much discussion, the industry has yet to adopt its own labelling standards and debate rages about the science of identifying honey types." New Zealand Herald, May 2003
- "Eight out of 20 different pots of "manuka honey" tested for the Consumers Institute were blends rather than just the manuka honey that had been claimed, the institute said today. "Producers of high-priced 'manuka' honeys which are simply blends are ripping off consumers and being unfair to producers of true monofloral manuka honey," the institute said in the February issue of its magazine, Consumer, released today." New Zealand Herald, Feb 2004
- "Lots of products marketed under labels such as Active, Bio-active or even fake manuka honey have no accurate testing regime to support their health claims." MGO Manuka website, Jan 2012
- "The increasing popularity and public demand have led to a flood of products on the market. Many of these so called active Manuka honeys are not what they seem. Manufacturers and distributors want to gain financially by promoting their products as being active, healing, special and unique. While the cold truth is that a lot of these products are not tested for their antibacterial activities and consequently do not have the unique traits of genuine active Manuka honey." Squidoo.com, accessed Jan 2012
- "Almost 70% of the Manuka honey harvested is not active. The temptation for many companies is to try and sell untested Manuka Honey as though they have an activity certificate in order to get a higher price. Every drum of Manuka honey must be tested and every pot should have a batch number relating to the drum it came from. Some of the less reputable honey producers will only test 1 out of every 5-10 drums for activity. Others will heat their Manuka to get a short-lived activity reading for the time of testing, however after about 10 −15 days, this honey will lose all of its activity. A current trend to make money is to ship Manuka honey in bulk out of New Zealand and package it in another country to avoid the export testing regulations and sell non-active Manuka as active. There are currently 3 brands in the US that claim activity but cannot or will not produce a Certificate of Analysis for their honey for every barrel. One company even packs their Manuka honey in clear glass jars that allows light to destroy the activity." New Zealand Manuka Honey website, Jan 2012

### ISSUE 1 – POOR CONTROLS – SCOTTISH WHISKY

The New Zealand Government does not protect New Zealand manuka honey in contrast with, for example, the UK Government's protection of Scottish Whisky

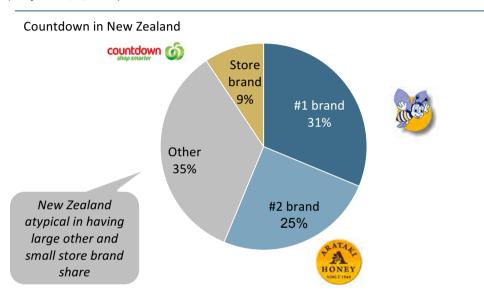
Comparison of legal rules surrounding Scottish Whisky and New Zealand manuka honey (As of 1/2012)

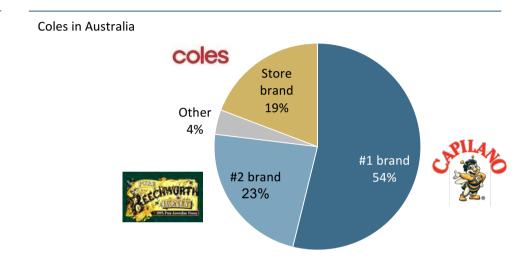
	Scottish Whisky	New Zealand manuka honey
Product defined in law	- Five categories of Scotch Whisky are defined: Single Malt Scotch Whisky, Single Grain Scotch Whisky, Blended Malt Scotch Whisky, Blended Grain Scotch Whisky, and Blended Scotch Whisky. These compulsory category sales terms will be required to appear clearly and prominently on all labels.	No
Specific product formulation and production	<ul> <li>A whisky produced in Scotland that</li> <li>(a) has been distilled at a distillery in Scotland from water and malted barley (to which only whole grains of other cereals may be added) all of which have been—</li> <li>(i) processed at that distillery into a mash;</li> <li>(ii) converted at that distillery into a fermentable substrate only by endogenous enzyme systems; and</li> <li>(iii) fermented at that distillery only by the addition of yeast;</li> <li>(b) has been distilled at an alcoholic strength by volume of less than 94.8 per cent so that the distillate has an aroma and taste derived from the raw materials used in, and the method of, its production;</li> <li>(c) that has been matured only in oak casks of a capacity not exceeding 700 litres</li> <li>Requirement that Scotch Whisky must be wholly matured in Scotland; illegal to mature Scotch Whisky outside Scotland</li> </ul>	None; left to competing private sector certifiers
Prevention of misleading labelling	<ul> <li>Rules to prevent the misleading labelling and marketing of Single Malt Scotch</li> <li>Ban on the use of a distillery name as a brand name on any Scotch Whisky which has not been wholly distilled in the named distillery.</li> <li>Protection of five traditional whisky regions of production; Highland, Lowland, Speyside, Islay, and Campbeltown.</li> <li>When any age is mentioned on a label, it must only be that of the youngest whisky in the blend.</li> <li>Bans the use of the term "Pure Malt"</li> </ul>	No manuka specific requirements
Packing/bottling requirements	<ul> <li>Illegal for Single Malt Scotch Whisky to be exported from Scotland other than in a bottle labelled for retail sale</li> <li>Illegal to export any type of Scotch Whisky in an oak or other wooden cask</li> </ul>	Bulk exports allowed
Advertising requirements	- Illegal to label, package, advertise or promote any Scotch Whisky in a way which is likely to deceive the public into thinking it has been distilled at any distillery other than the true distillery	
Specific legal protection	<ul> <li>UK Law</li> <li>European Union geographic indicator</li> <li>World Trade Organisation level as a recognised 'geographical indication'</li> </ul>	No protection for manuka as geographic indicator

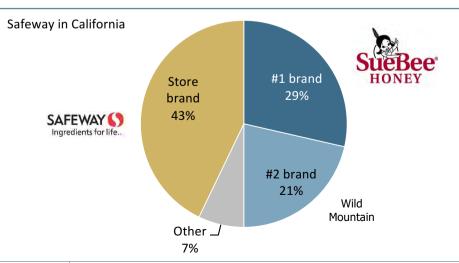
## ISSUE 2 - RETAIL BECOMING CHALLENGING - RETAIL MARKET SHARE/STRUCTURE

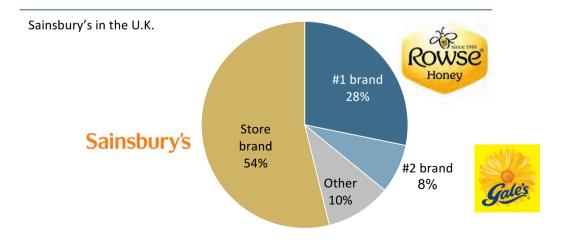
The honey market at retail is typically structured as a market dominated by a strong #1 and #2 brand and the retailer's own store brand; this industry structure presents challenges for new market entrants

Estimated retail honey market share in specific select retailers (% of value; 1/2012)









### ISSUE 2 – RETAIL BECOMING CHALLENGING – MANUKA BECOMING A FLAVOUR

The success of manuka in the UK and Australia has triggered leading honey firms in those countries to launch manuka products that are winning the battle for shelf space, leaving NZ as a supplier rather than brand owner

Examples of manuka honey products launched by in-market market leaders (presence; 1/2012)



#1 honey co. in the UK...



... launches range of manuka honey products, both "numbered active" and regular



#1 honey co. in Australia...



... launches range of manuka honey products, both "numbered active" and regular



Gourmet jam co. in the UK



... launches range of manuka honey products

- Is this the ultimate outcome or endgame for the manuka honey industry? Manuka honey becomes a "flavour" sold globally by the leading honey companies in each market with New Zealand reduced to being a low value added supplier of commodity ingredients?
- Manuka honey exports to the US and Canada are growing; how long before we see SueBee and BeeMaid active manuka honey
- What is required for New Zealand brands and firms to get, keep and control the manuka honey shelf space in key markets
- Beevital is a Capilano sub-brand
- Building on previous points, the Rowse honey package and website claim no specific certification standard for their activity number claims

### ISSUE 2 – RETAIL BECOMING CHALLENGING – EMERGENCE OF STORE BRANDS

The success of manuka in the UK has triggered Sainsbury's, a mid/upmarket supermarket, to launch a range of "store brand" New Zealand numbered active manuka honey

Examples of New Zealand honey products being sold in the UK under supermarket store brands (presence; 1/2012)

Numbered "active" manuka honey from New Zealand

## Sainsbury's







- Sainsbury's is often the leader in store brand development in the UK and globally; we expect that other retailers will follow
- While there is nothing inherently wrong with supplying retailer store brand, this will directly lead to strong downward pricing pressure on manuka honey and the commodification of the product
- Again, there is no certification for the scored levels of activity given here; the consumer must trust the retailer
  - However, we note that the jar is clear glass not dark (therefore the activity will degrade due to light)



### ISSUE 3 – COMPETITORS EMERGING – AUSTRALIA ENTERING THE GAME

Australian firms are now selling active jellybush (a manuka relative) honey rated according to its "Unique Leptospermum Factor" [+ULF]; research suggests this is more active than manuka

Examples of Australian Jellybush honey being sold as active with a numerical rating (presence; 1/2012)



"Active Jelly Bush Honey - Australia's Manuka comes from the pristine coastal forests surrounding Byron Bay on Australia's East Coast. Jelly Bush trees belong to the Leptospermum group of plants, of which 85 different species can be found growing throughout Australia, including the well known Manuka (Leptospermum scoparium).

Some Leptospermum or Jelly Bush plants are known to produce a unique type of honey that not only has hydrogen peroxide releasing enzymes but also a non - hydrogen peroxide antibacterial property termed the Unique Leptospermum Factor, +ULF. Active Jelly Bush Honey is tested at independent laboratories for ULF activity and is equivalent to the Unique Manuka Factor rating given to New Zealand Manuka."

Nourished Magazine, Sep 2008



"A native honey may well be the most powerfully antimicrobial honey ever discovered, say Queensland researchers.

The honey, cultivated at undisclosed locations in northern NSW and southeast Queensland, is made by bees that have fed on Leptospermum polygalifolium, also known as jelly bush or the lemon-scented tea tree.

The researchers tested 100 jelly bush honeys from a range of areas and found that some had 1750mg/kg of the antibacterial compound 'methylglyoxal' – the highest concentration yet found in this kind of honey. This is higher even than the concentration found in New Zealand's famed manuka honey, made from Leptospermum scoparium, a cousin to the myrtle tree."

Australian Geographic, Mar 2011

- Australian jellybush (Leptospermum polygalifolium) is a relative of Manuka (Leptospermum scoparium)
- The Leptospermum plant family has ~86 members and originated in Australia. One member has spread to New Zealand (Manuka) and one to Malaysia
- Manuka appears to have been originally native to Australia and spread to New Zealand only in the Miocene era
- Question: If Australian jellybush honey is more potent/effective than New Zealand manuka honey, can the activity of New Zealand manuka be increased?



### ISSUE 3 – COMPETITORS EMERGING – COMPETITORS LAUNCHING COPYCAT PRODUCTS

Success breeds imitation; Chilean producers have launched "active" honey products based on honey from the Ulmo tree and ranked on a 5-20 active score

Examples of "active" Chilean Ulmo honey being sold in the UK market (presence; 1/2012)



Duerr's Ulmo active 10+ Honey 340g £4.79 at Waitrose (UK)

Eucryphia cordifolia (Ulmo)



The Active Honey Co.
Active Chilean Rainforest Honey 20+ 227g £18.99 at Boots (UK)

This product is harvested from the Valdivian rainforest in Chile where bees produce honey from a variety of the world's oldest trees including Quillay, Tineo and Ulmo.

Eucryphia cordifolia (Ulmo)
Quillaja saponaria (Soapbark)
Weinmannia trichosperma (Tineo)

- All honey has some level of activity
- In economics, Gresham's Law says: "Bad money chases out good"; are we about to witness the bastardisation of the active honey market and the destruction of consumer faith in the concept?
- Chile is often a fast follower of New Zealand product innovation; how long until others follow? Should we expect a tidal wave of "active" honeys from around the world all arbitrarily ranked on a 5-20 scale? Icelandic +15 Active Heather Honey?
- We are unable to identify any scientific support for the claimed activity of these Chilean plant derived honeys
- While it is possible to scoff, these products are on the shelf at two major UK retailers



### ISSUE 3 – COMPETITORS EMERGING – OTHER NON-MANUKA "ACTIVE" NZ HONEYS

In New Zealand a number of firms have launched a range of non-Manuka honeys with rankings similar to those used on active manuka

Examples of non-manuka New Zealand honeys being marketed as having numbered "activity" (presence; 1/2012)

#### Beech Forest Honeydew



New Zealand Honey Co. Beech forest Honeydew "Pre-Biotic 10+"



New Zealand Honey Co. Beech Forest Honeydew "Bio-Active" "P-AXC 100 Antioxidants"



Airborne Beech forest Honeydew "Active A+H"



Wedderspoon Beechwood Honey "Active" "Certified Organic"

#### Comments/notes

- All honey has some level of activity
- Claims of activity are designed to create a premium hence it is imperative that there is a robust and valid recognised standard

### Thyme Honey



New Zealand Honey Co. Thyme honey "Antioxidant 10+"



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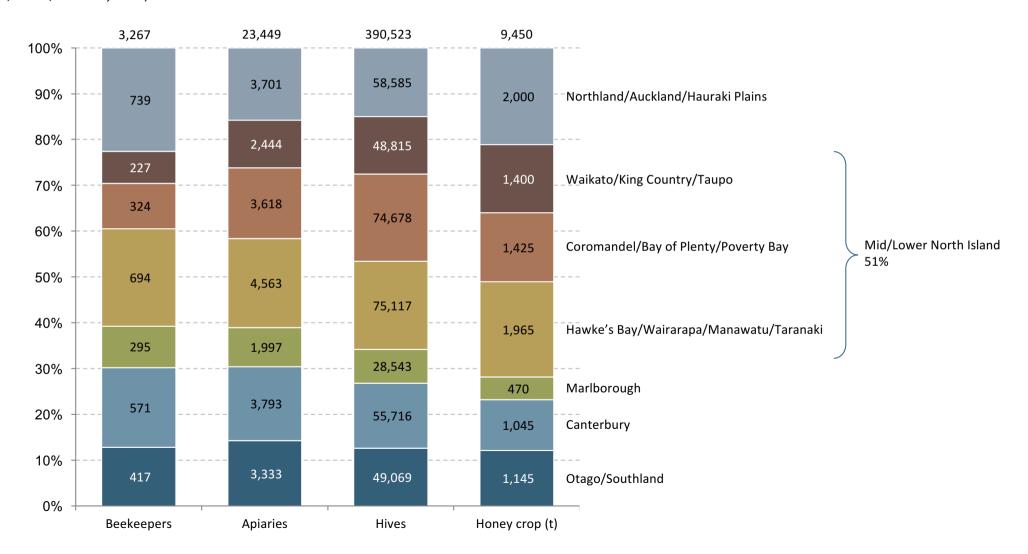


### **NEW ZEALAND – PRODUCTION METRICS BY REGION**

## Beekeeping and honey production is spread across New Zealand

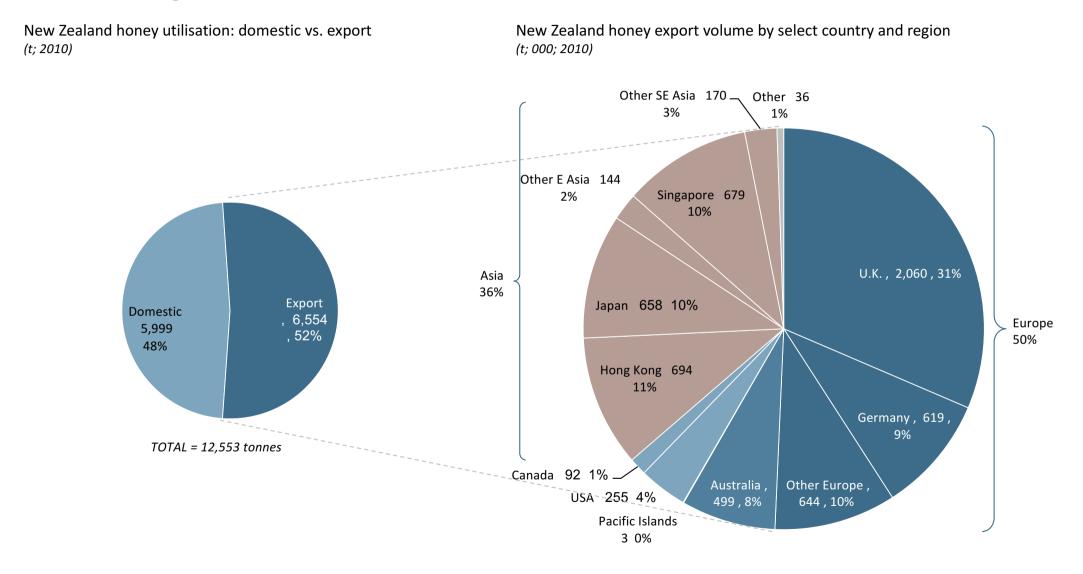
### New Zealand apiculture statistics

(various; actual; as at May 2011)



### **NEW ZEALAND – HONEY EXPORTS**

About half of New Zealand's honey production is exported; roughly a third goes to the UK, half goes to Europe as a whole, a third goes to Asia and the remainder to Australia, the US and Canada

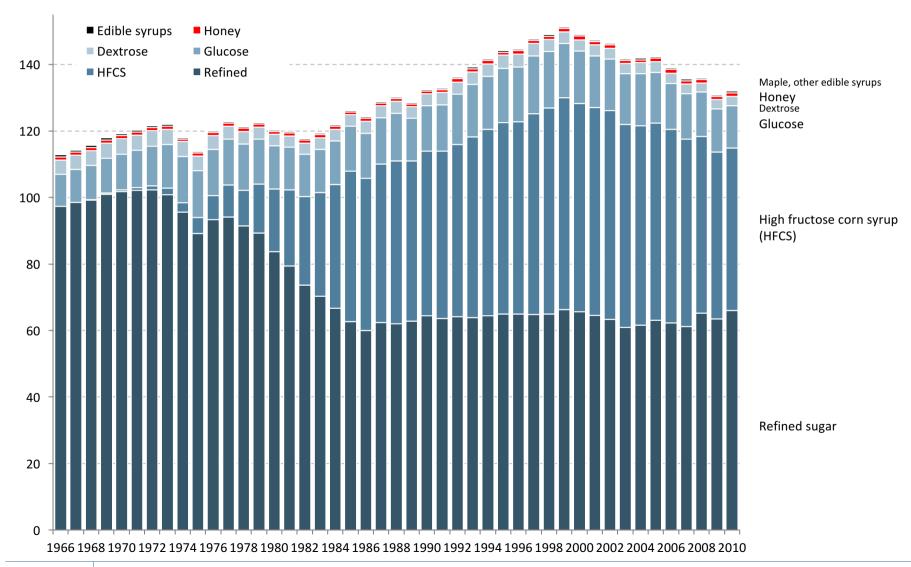


TOTAL = 6,554 tonnes

### PER CAPITA SUGAR/SWEETENER CONSUMPTION

## Honey is a relatively minor sugar/sweetener in the modern diet

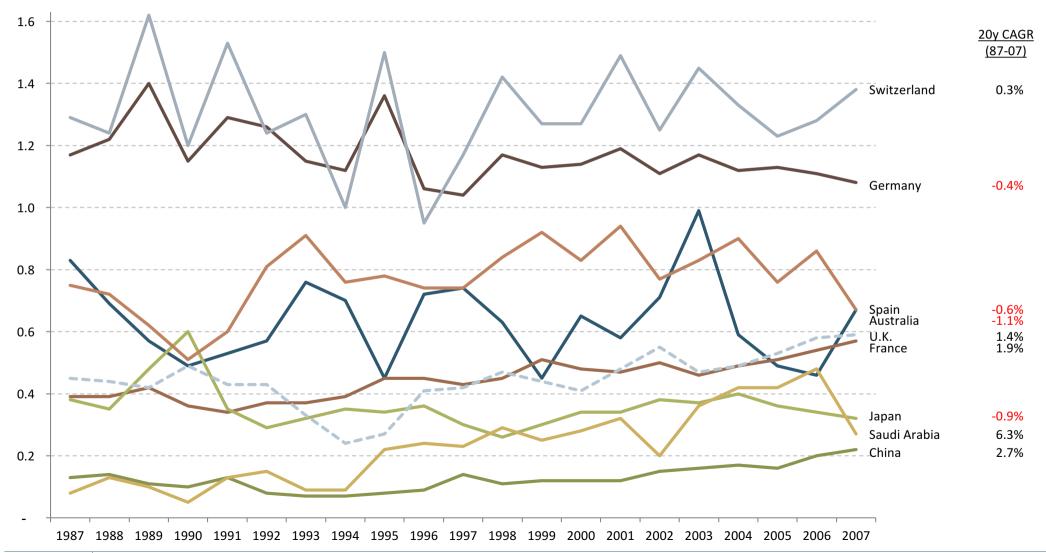
EXAMPLE: Annual apparent per capita consumption of sugars/sweeteners in all forms in the United States by type (lbs./person; 1966-2010)



### **HONEY – PER CAPITA BY COUNTRY OVER TIME**

Per capita honey consumption flat to down in high consumption markets; mixed growth elsewhere; growing consumption in China

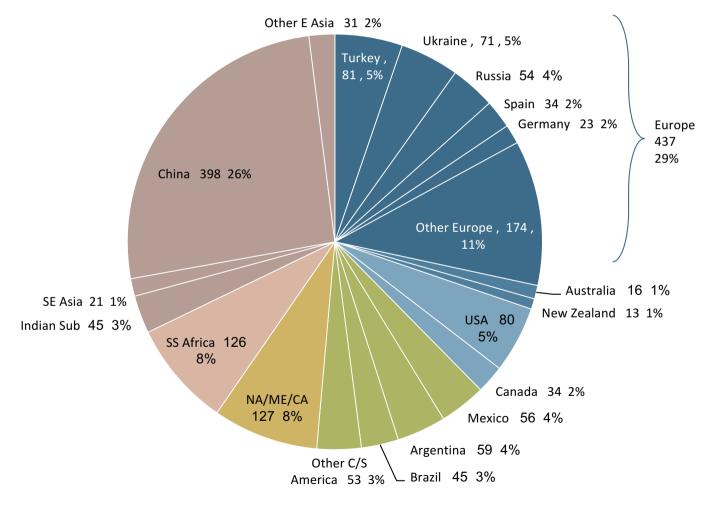
20 year apparent per capita honey consumption in all forms by select countries (kg/person; 1987-2007)



### **HONEY – GLOBAL PRODUCTION**

Honey production is spread throughout the world; China is the largest single producer while Europe is the largest producing region; New Zealand accounts for ~1% of global production

Global honey production by select country and region (t; 000; 2010)

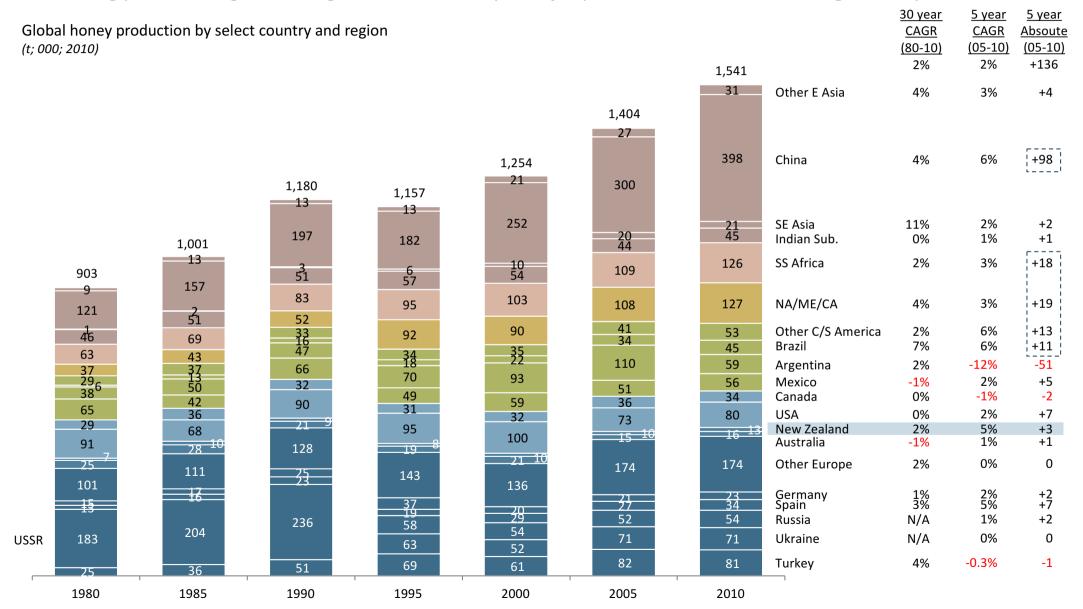


TOTAL = 1,541 tonnes (000)



### **HONEY – GLOBAL PRODUCTION OVER TIME**

Global honey production is growing relatively slowly (2% CAGR/30 years); China and other developing countries are driving production growth; Argentina, historically a major producer, has been shrinking recently

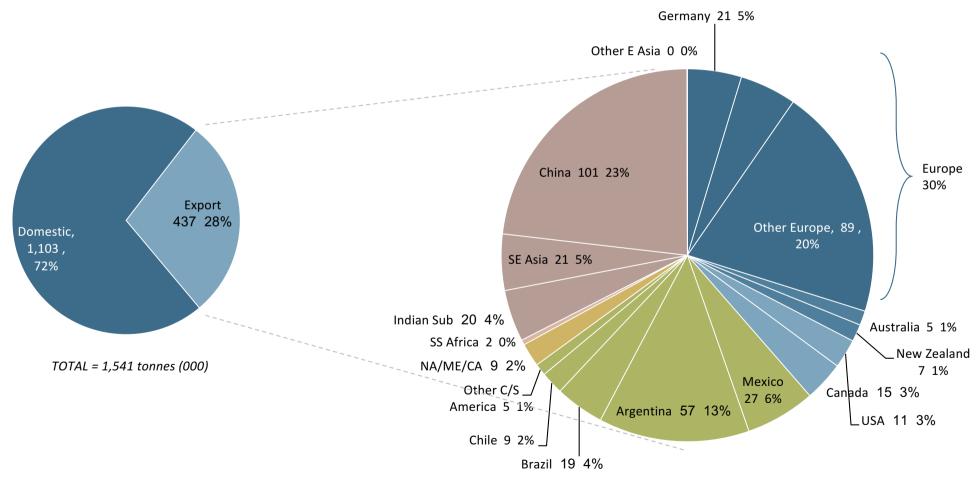


### **HONEY - EXPORT VOLUME**

Most (72%) honey is consumed in the country of production; China and Argentina are strong in cross-border trade; inter-EU trade is 30% of global trade; New Zealand accounts for 1% of global honey export volume

Global honey utilisation: domestic consumption vs. export (t; 000; 2010)

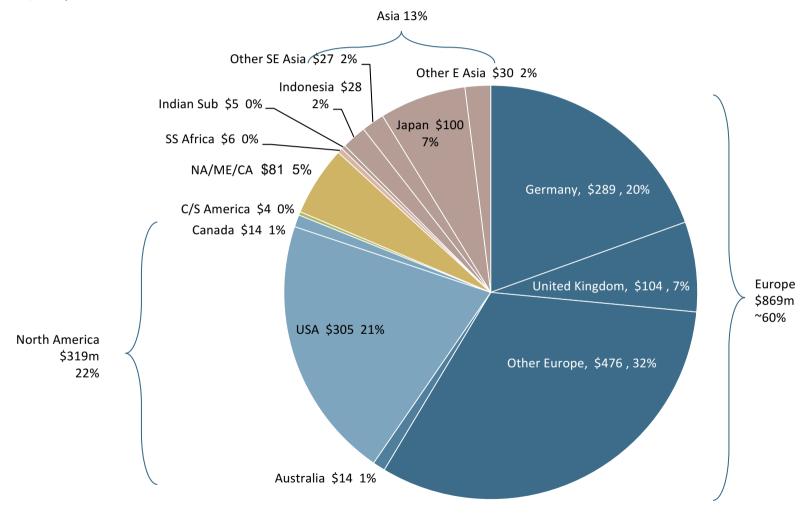
Global honey export volume by select country and region (t; 000; 2010)



### **HONEY – GLOBAL IMPORT VALUE**

The high consumption western/European countries are the major importers of honey; Europe accounts for ~60% of global import value; North America 22% and Asia 13%

Aggregate global honey import value by receiving country/region (US\$m; 2010)

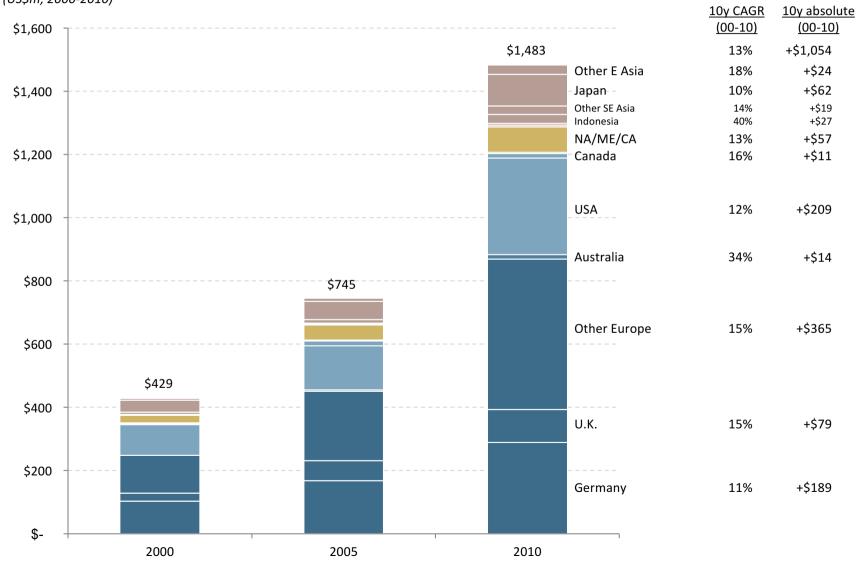


TOTAL = US\$1,483m

### **HONEY – GLOBAL IMPORT VALUE**

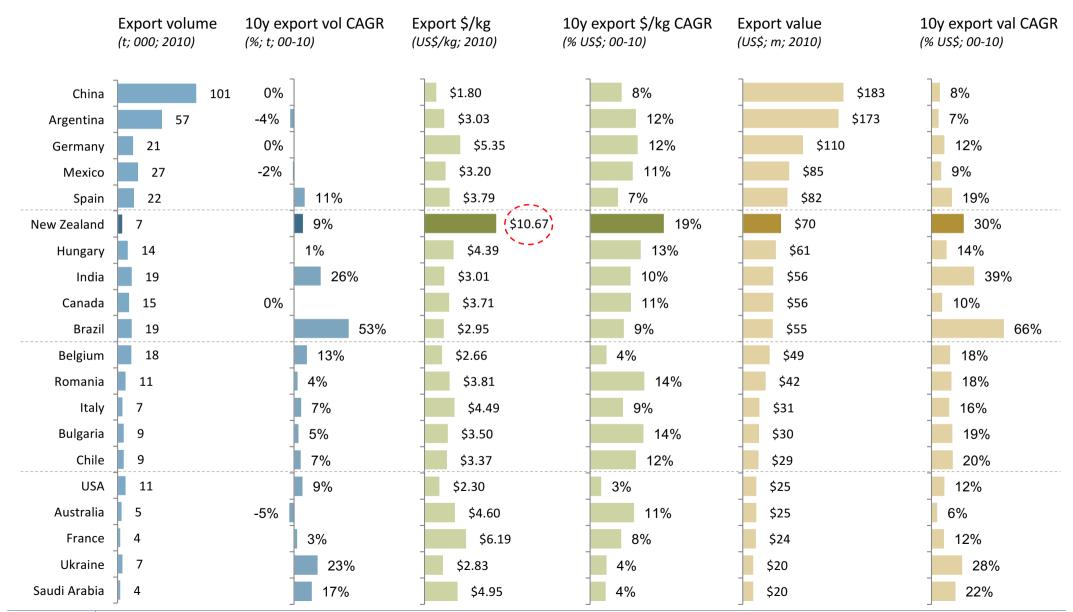
Honey is a growing global market; the value of global honey imports is showing double digit growth across all major market and regions of the world

Aggregate global honey import value by receiving country/region (US\$m; 2000-2010)



### **HONEY - TOP 20 EXPORTERS METRICS**

New Zealand stands out from other honey exporters for its high value per kilogram leading to the country being the 6<sup>th</sup> largest exporter globally by value

















### www.foodandbeverage.govt.nz

