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AUSTRALIAN RAMBUTANS

Market opportunity and analysis of the domestic market

A report for the Rural Industries Research and Development Corporation

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Foreword

Presented in this report is a detailed analysis of the domestic market for Australian rambutans and a marketing plan to assist the industry to expand and improve its current market position.

Rambutans are an exotic fruit introduced from South-East Asia. Commercial production was 600 tonnes in 2000, and continues to grow. This publication investigates the current market for rambutans, and potential new market segments.

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Contents

Executive summary

Presented in this report is a detailed analysis of the domestic market for Australian rambutans, together with a marketing plan to assist the industry to expand its markets. A similar analysis has been done for the Australian longan industry.

Rambutan is a tropical fruit originating in South-East Asia, and in 2000 production in Queensland and the Northern Territory reached 600 tonnes. Almost all fruit is sold to ethnic Asian consumers in Sydney and Melbourne, although producers gained access to the attractive Japanese market late in the 2000 Queensland season, a development that will affect future supply to domestic markets. Most fruit is supplied by two marketing groups, one with quality control systems, to wholesale market agents specialising in exotic and tropical fruits. More coordination of supply would support the development of new markets, avoid competition among suppliers for the same market, and improve market feedback to the industry.

The main market for rambutan is ethnic Vietnamese and Chinese consumers, who use it in a variety of ways: as a fresh snack; as a palate cleanser after meals at home and in restaurants; as a religious offering; as a gift; or in canned form as a dessert. This market is served by both ethnic and non-ethnic retailers. Demand for rambutans remains strong, although they compete with longans, lychees, stonefruit and grapes.

There is also a less defined market of ethnic consumers originating from other rambutan-producing countries, mainly in southern Asia, who are served by the same retail distributors as the Chinese-Vietnamese market.

Consumption by the mass market is minor, consisting mainly of small occasional purchases for decoration when entertaining. The main reasons for low uptake of the fruit in this market are low awareness and high prices. Demand for rambutan is likely to develop as prices fall, as has occurred with other fresh products. Apart from price and low awareness, factors limiting purchases of rambutans by Caucasian consumers appear to be lack of knowledge of how to eat or use them; their unappealing appearance to some; a reluctance to try new foods; and the 'expensive luxury' image attached to exotic fruits. All major retail chains offer rambutans, in bulk displays if they cater for large numbers of ethnic Asian consumers. Otherwise, retailers usually display rambutans with tropical and/or exotic fruits or delicate fruits such as berries.

The primary target identified for expanding the market is high-income Caucasian consumers who eat out and entertain. These consumers should be targeted directly, or through their children, or through the food service industry, by positioning rambutans as an attractive, new and different seasonal fruit to provide variety. As this high-income segment is socially influential, demand should trickle down to the large middle-class Caucasian market as industry growth lowers prices. Awareness of rambutans among high-income Caucasians is moderate, and is mainly a result of having seen the fruit in Asia while travelling. Acceptance by this market is likely, as first-time Caucasian consumers like the appearance and flavour of rambutans and would use them for fresh snacks, desserts, fruit platters and decoration, and as a snack for children. Intention to purchase (as evaluated by a consumer survey conducted for this report) is fairly strong, although probably only in small volumes for special occasions.

Prices are higher around Christmas and Chinese New Year. Outside this period prices drop because of competition from other seasonal fruits. High retail prices in the Caucasian market are exacerbated by store mark-ups to cover stock losses from low turnover; as a result purchases are small and retailers perceive rambutans as risky and unprofitable, usually stocking them only to provide a greater product range for higher-income consumers.

Specialist fruit and vegetable stores with extra sales service can promote rambutans to the high-income consumer. Retail chains reach a wider market and will mount promotions of a new product provided they have coordinated and reliable supply.

The main competitors of rambutans are lychees and longans. Rambutans have the advantage of more decorative appearance, a longer supply season and more successful packaging than those two fruits, and unlike the longan industry they have the benefit of quality controls. However, they are disadvantaged by fragile spinterns (soft spines covering the fruit) that are easily damaged and blackened and make the fruit bulky, as well as by their thicker skin, an adherent seed in some varieties, and generally higher prices.

While the current ethnic market is well aware of rambutans, 'reminder' promotion via the ethnic media at the start of the season, and by participation in trade promotions (such as Chinese New Year events), is recommended to maintain demand and improve competitiveness, and retain younger consumers.

As awareness and experience of rambutans among the Caucasian population are low, promotion needs to concentrate on educating consumers and store staff about the fruit. The main recommended activities are:

- demonstrations with tastings,
- informative recipe cards for when tastings are not available;
- labelling;
- information kits for the trade;
- participation in industry promotional activities, including those directed at schoolchildren;
- media publicity through specialist food writers and television chefs, and through the Internet;
- possibly joint promotions with other exotics such as lychees and longans.

The food service industry can be targeted through provedores, food festivals attended by chefs, chef training institutions, restaurant promotions, chef competitions, and the food industry's trade press.

Key weaknesses and opportunities identified by the marketing research, which the industry needs to consider, include:

Weaknesses:

- low awareness, adoption and demand outside the ethnic Asian market;
- the fragility and perishability of the fruit in a market where appearance is a key purchasing criterion;
- lack of uniform quality and grade standards across the industry;
- lack of a lower-priced grade;
- the fact that the bulky spinterns, thick skin and adherent testa (the skin over the seed that in some varieties adheres to the flesh) make rambutans inconvenient to handle and eat;
- some quality and grading problems;
- inconsistent supply;
- high retail margins as a result of stock losses;
- difficulty for retailers to maintain the appearance of loose fruit;
- consumer resistance to high prices compared with those of substitute fruits;
- lack of product information for trade or consumers;
- little communication between producers and retailers.

Opportunities

- development of markets outside the ethnic Asian segment, starting with higher-income consumers who readily use new foods when entertaining;
- research, development and variety selection that concentrate on thin skin, low adherence of testa, colour consistency, and longer shelf life;

- introduction of grades and packaging to target different markets, including sample packs of exotics;
- education of the supply chain about storage, handling, and product options;
- provision of a reliable supply to pro-active trade who are prepared to promote rambutans;
- reduction of grower costs to allow lower retail prices;
- tighter grading to secure higher wholesale prices;
- the use of promotion to create awareness and consumption in new markets.

The marketing plan in this report focuses on markets with the most potential, with the aim of providing affordable products to meet the specific needs and expectations of each target market. This would require developing a competitive position for rambutans with each consumer group, on the basis of product attributes and quality, and prices within the consumer's capacity and willingness to pay. The plan also recommends suitable promotional activities and distribution channels to maintain current markets and profitably develop the Caucasian market, by creating awareness among consumers and influencing them to adopt rambutans. Underlying all activities is the need to develop communicative relationships among participants in the supply chain in order to modify the marketing effort where necessary.

1. Introduction

This report presents the findings of a research study into the domestic market for Australian rambutans, conducted in 2000. Its purpose was to identify potential new markets for rambutans, particularly undeveloped ethnic markets to target, as the current market matures, and to provide the Australian rambutan industry with a detailed analysis of the potential of these domestic market segments, together with possible market development strategies.

The field research was conducted in Sydney and Melbourne, the main metropolitan markets for rambutans in Australia. Sources of information were wholesalers, retailers, provedores, consumers and food marketing specialists in both cities; published literature about rambutans and the rambutan market; and a steering committee of rambutan growers.

The research was carried out on behalf of the rambutan industry of Australia.

Background

Rambutan (*Nephelium lappaceum* L.) is a tropical tree fruit that originated in Malaysia and Indonesia. It is from the Sapindaceae family, and related to lychees and longans. (Watson, 1988)

Rambutans were introduced to Australia from South-East Asia in the 1890s. They were first grown commercially in Queensland in the 1970s following the introduction of clonal material. (Lim & Diczbalis, 1998)

The main production areas are Queensland's tropical north coast between Ingham and Mossman and the Northern Territory coastal region around Darwin and Adelaide River (Lim *et al*., 1998). Most growers from both regions belong to the FNQ Rambutan Marketing Group, and some Northern Territory growers are also members of the NT Horticultural Association. Both groups have marketing coordinators managing sales, distribution and quality control, and the FNQ Rambutan Marketing Group imposes quality standards on members' product.

World production

Thailand, Malaysia and Indonesia are the world's largest producers of rambutan; with small quantities grown in a number of other countries for domestic consumption and export (Market Asia agribusiness information, 'World Market for Rambutan' (see Appendix 2). Large volumes are processed as canned peeled rambutans in syrup, and as canned rambutan de-seeded and stuffed with pineapple. Minor products include rambutan jam and chilled dried rambutan.

Asian countries are the main importers of the one million tonnes of fresh and processed rambutan traded internationally. However, demand from Asian immigrants and expatriate workforces has led to growing rambutan imports to North America, Europe and the Middle East (Market Asia agribusiness information, 'World Market for Rambutan').

Australian production

Table 1. Australian rambutan production and exports, 1996–2000 (tonnes per annum)

	1996	1997	1998	1999	2000
Production	300	150	100	400	600
Exports					36

Source: FNQ Rambutan Marketing Group

The industry is in its growth phase, with small but expanding production volumes. Fluctuating yields from year to year reflect biennial bearing, weather patterns and other factors.

A product description, which includes the seasons of supply, is provided in Appendix 2.

Most Australian rambutans are sold through the Sydney and Melbourne central wholesale markets. Minor volumes have been exported in recent years, mainly to Europe, the Middle East, Hong Kong, Singapore and Brunei. Late in the 2000 season, Australian began exporting rambutans to Japan. The relatively higher prices available in the potentially very large Japan market are likely to attract suppliers away from the domestic market, reducing domestic supply.

Research issues

The Australian rambutan industry has been concerned that expanding production will outstrip demand from the current Asian ethnic market segment, and that it therefore needs to develop new markets.

Research objectives

This research had the following objectives:

- to identify a market segment or segments with requirements that could be satisfied by rambutans;
- to evaluate awareness in the segment/s of the capacity of rambutans to satisfy those requirements;
- to determine whether such segment/s would be likely to purchase rambutans, and if so in what quantities;
- to determine the distribution changes needed to reach the segment/s;
- to identify the communication channels by which the industry could promote rambutans to the segment/s.

Methodology

A preliminary study of the rambutan industry was carried out through desk research and interviews with rambutan producers, the trade and consumers.

Desk research involved reviewing industry journals and data from the Australian Bureau of Statistics (ABS).

Trade interviews were conducted with wholesalers, supermarket buyers, independent fruit and vegetable retailers, hotel buying managers, provedores, a marketing consultant, and marketing managers from the Sydney and Melbourne Wholesale Fruit and Vegetable Markets and Melbourne's Prahran Market. Altogether 146 consumers were interviewed and given tastings of rambutan – 84 in fruit and vegetable stores in Sydney and 61 in fruit and vegetable stores, supermarkets and a fresh produce market in Melbourne.

The research findings were used to produce a marketing plan to develop current and potential market segments (see Chapter 4 — Marketing Plan).

2. Research findings

Market segments

Ethnic Asian market segment

Size and profile
The current market for rambutans in Australia, across all income levels and geographical areas, is almost entirely ethnic Vietnamese and Chinese (mainland/Hong Kong Chinese and Singapore and Taiwan Chinese), for whom rambutans are a traditional food. Rambutans are also consumed in Asian restaurants. In Queensland's peak season in a good year, Sydney wholesale agents handle an estimated 20 tonnes of rambutan a week.

The potential size of this market can be gauged from ABS 1996 census statistics, which show that Sydney had 190 559 people born in China (excluding Taiwan), Hong Kong, Singapore and Vietnam, and Melbourne had 109 234.

The typical shopper is a middle-aged to older middle income female, not in paid employment, buying for the family and buying small volumes frequently to use the same day. Her main shopping days are Thursday and Friday; the younger shoppers buy on Thursday and Friday nights and on Saturday.

Product usage
Rambutans are eaten as fresh snacks, and sometimes in canned form as a dessert. They are also one of the fruits traditionally eaten as a palate cleanser: acid fruits such as citrus are used to loosen any fatty foods, followed by juicy fruits such as rambutans and melons. The Chinese also use rambutans for religious purposes, offering them as prayer fruit at the altar and family graves at Chinese New Year. Rambutans are also a traditional gift.

Demand and seasonal trends
The strongest demand is in the period leading up to Chinese New Year, after which demand slumps as retailers and consumers take holidays. Demand then resumes for the remainder of the peak season, which for Queensland is February to April.

The trade sees no signs that current markets are saturated. Factors identified as likely to contribute to an increase in demand include:

- Australia has a growing ethnic Asian population, particularly Vietnamese.
- Most Australian cities have an Asian community, which is likely to be familiar with rambutans.
- There is room to develop the Chinese New Year market, which is attracting non-Chinese consumers.
- Demand is unsatisfied outside the peak season.

However, according to one retailer ethnic Chinese are not large fruit eaters, and are becoming very Australianised in their tastes, suggesting that demand from that segment is likely to decline.

Competitiveness
The main competitors to rambutans as an eating fruit are longans, lychees, and new season stonefruit and grapes, which are popular fruits with this market. Retailers to this market usually sell rambutans, longans and lychees at similar prices. Chinese consumers tend to prefer longans over rambutans. As a prayer fruit for Chinese New Year rambutans compete with longans, lychees, pomelo, soursop, custard apple and breadfruit, but rambutan panicles (bunches) have the advantage of leaf and stem to symbolise life.

The short peak season for rambutans was perceived by some to be an advantage, as wholesalers tended to promote it because of its limited supply period and its seasonality providing variety from year-round fruits. Others, however, said that today's consumer expects a fruit to be available all year round.

According to two major retailers, competition between rambutans, lychees and longans is lessened because their seasons peak at different times.

Potential new ethnic market

Size and profile
Other ethnic consumers familiar with rambutans are believed to be already buying them, usually locally but sometimes travelling to ethnic markets for a day out. Ethnic Indian, Malay, Sri Lankan, Filipino and Indonesian consumers tend to be more price-conscious than ethnic Chinese and Vietnamese, and while some shop in their local area, most generally seek out cheaper fruit, for example from Paddy's Markets at Flemington, Sydney and the Victoria Markets, Melbourne.

Desk research identified the countries and territories most likely to have substantial domestic markets for rambutans, outside Vietnam and the countries with a large Chinese population, to be Borneo, Brunei, Burma, Cambodia, Ghana, Hawaii, India, Indonesia, Laos, Malaysia, Madagascar, Mauritius, the Philippines, Sri Lanka and Thailand. Of these, the ABS reports that in 1996 122 080 residents of Sydney had been born in Malaysia, the Philippines, Indonesia, India, Singapore and Sri Lanka, and 190 559 residents of Melbourne (see Appendix 4).

Demand
According to the trade, demand in this segment is generally met by current distribution, so targeted market development is better directed towards the much larger Caucasian market. However, a Sydney fruit and vegetable retailer and a provedore suggested that the industry should concentrate on expanding this ethnic segment, as it is already familiar with longans, because current prices are too high to develop the Caucasian market.

Potential Caucasian market

Size and profile
Sydney and Melbourne represent large potential markets, with populations of 3 350 556 and 3 077 422 respectively (ABS, 1996 Census).

According to trade interviews, the recommended initial target, while volumes are lower, is high-income consumers, typically couples with two disposable incomes who like to eat out, entertain at home occasionally, and entertain corporate guests. Price would not be a barrier in this segment, where quality is more important. A consumer from this segment is likely to:

- live in Sydney's eastern suburbs (for example the lower and upper North Shore and inner west) or 'innovative' areas such as Balmain or East Sydney; or in Melbourne's south-east suburbs (including Toorak, South Yarra and Prahran), or other high income areas such as Preston or South Melbourne;
- have a lifestyle of keeping up with trends and wanting to be first with everything;
- shop at specialist retailers, such as boutique retailers on Sydney's wealthy North Shore and in Melbourne's inner south-east — for example Prahran Market, where the typical shopper is a female professional, English-speaking, aged 32 to 55, with a higher income; lives in one of Melbourne's wealthiest suburbs; buys fruit and vegetables at the market at least weekly; and wants higher quality food, variety and personal service (Prahran Market: 'A Profile of Prahran Market Consumers', 2000).

This segment is socially influential, so awareness of rambutans is likely to trickle down to the large middle-class Caucasian market as prices come down with increasing volumes. Appendix 8, based on the Australian Taxation Office's Top Ten postcodes for New South Wales and Victoria, indicates potential areas for initial market development (Australian Taxation Office, *Taxation Statistics 1997-98)*.

It was recommended that this segment be targeted through the eat-at-home and food service sectors. Also, children should be targeted because, according to marketing specialists, they like sweet fruit and generally like rambutans, tend to take food at face value, and are large fruit consumers, an aspect that parents encourage. According to wholesale agents, developing awareness and recognition in children would stimulate demand from their parents when shopping.

The recommended targets, as volumes grow and prices fall, are

- the younger and more adventurous shopper, who tends to shop in pairs and families on the weekend;
- middle-class families who would buy larger quantities for the family, in wealthier areas such as Chatswood in Sydney.

Because rambutan is widely available in Sydney, wholesale agents expected most Caucasians to be aware of them and to have tried them. Despite this, 'crossover' has in fact been limited. According to wholesale agents, while Melbourne consumers are very interested in rambutans, and many have tried them in Asia and liked them, they typically buy only a few, and rarely more than half a kilogram, except for a small wealthy and widely travelled Caucasian minority who already know and use rambutans. The survey of Caucasian consumers found that while 18% of Sydney respondents and only one Melbourne respondent recalled seeing rambutans when travelling in Asia (Borneo, Malaysia, Thailand, Singapore and Sri Lanka), and 34% had tasted them, only 3% buy or have bought them, and only one of these regularly. Reasons given for the low adoption were lack of awareness; lack of visual appeal to Caucasians; flavour with lower appeal than that of lychees, and perceived as foreign; clumsiness to eat; high prices; and lack of knowledge about rambutans and how to use them. Two Sydney provedores have experienced no demand for rambutans from restaurants or hotels.

Fifty-seven percent of Sydney respondents and 47% of Melbourne respondents recalled having seen rambutans previously. Sydney respondents had mostly seen them in fruit stores (29%) and while travelling in Asia, while Melbourne respondents had seen rambutans in Queensland and Asia. However, only 38% of Sydney respondents and 24% of Melbourne respondents could name them correctly, while 22% of Sydney respondents and 24% of Melbourne respondents thought they were lychees; 20% of Sydney respondents and 14% of Melbourne respondents could only say they were a fruit, and 19% of Sydney respondents and 40% of Melbourne respondents could not say what they were.

Of the respondents who had seen rambutans before, 64% had also tasted them, with no significant differences across age groups or sex.

The survey was conducted at the end of the 2000 peak season, when rambutans had been observed widely — in supermarkets, fruit and vegetable stores, ethnic stores, fresh produce markets, and fruit barrows in Sydney's central business district.

Demand trends

According to a retailer, while high rambutan prices have been a barrier the fruit has become more affordable, and will move from an exotic to a 'bread-and-butter' line. According to a wholesale agent, lychees started as a relatively unknown fruit like rambutans, but over a 15-year period have become a well-established line — well known, selling well and widely, and carried by every retailer. According to wholesale agents, other products that started the same way and are now well established include lychees, mushrooms, Gayndah Imperials, kiwifruit, sugar snaps and snow peas. As consumers will not buy an unknown food, education needs to raise their awareness of rambutans and knowledge of how to use them.

According to a food marketing specialist, seasonal fruits tend to push out regular fruits, and rambutans are still available in autumn when fruit is in short supply. According to a provedore, until recently consumers had an expectation that fruit availability would be seasonal; now they do not recognise seasons and expect fruit to be in stock all year round.

In 2000 Melbourne fruit and vegetable retailers with predominantly Caucasian customers were selling very small quantities: less than 2 kg a day (at prices of up to $18/kg), while a Melbourne provedore with retail outlets has experienced no demand for rambutans.

The main barriers to increasing rambutan consumption were considered to be high prices; lack of knowledge of how to eat or use them; unappealing appearance; consumer reluctance to try new foods; a younger generation unadventurous about new foods; a perception by consumers that exotics are expensive, because stores group them together in exotic sections; and finally a perception that rambutans are suitable only for decoration when entertaining (Trade interviews, 2000). Consumers' comments indicated no resistance to rambutan attributes, except the testa adhering to the flesh (5%), although some consumers were reluctant to taste rambutan because of its appearance, until told it was similar to a lychee. Six respondents suggested that rambutans would appeal to children, mainly because of their appearance and flavour. (Consumer survey, 2000)

A number of factors indicate that demand should grow:

- On tasting a rambutan, 15% of Sydney consumers and 48% of Melbourne consumers liked it strongly; and 48% of Sydney respondents and 41% of Melbourne respondents liked it. Only 7% of Sydney respondents and 2% of Melbourne respondents disliked it (Consumer survey, 2000).
- Following the tasting, 18% of Sydney respondents and 43% of Melbourne respondents said they definitely would buy rambutans (a potential market) and 50% of Sydney respondents and 38% of Melbourne respondents said they probably or maybe would (a possible market after further tastings and incentives). Of those who had tasted rambutans before, 21% said they would definitely buy rambutans, and only one (4%) definitely would not. Of those who had not tasted rambutans previously, 9% said they definitely would buy rambutans and 13% said they would not. This suggests that a liking for rambutans develops with repeated tastings.
- In the United Kingdom, imported rambutans have crossed over into the mass, as distribution has expanded from ethnic specialty stores to major supermarket chains (Vinning, 1997).
- The fact that more consumers are travelling and experiencing new foods such as rambutans.
- A desire on the part of wealthy consumers for 'trendy' new products like rambutans.
- Changing tastes, influenced by the increasing popularity of Asian (particularly Thai) cuisine, both in restaurants and for home cooking (Trade interviews, 2000).

The mass market tends to buy bananas, then apples and oranges, then stonefruit and grapes, and considers fruit a luxury, particularly exotics (Trade interviews, 2000).

Product usage
Consumers identified the following ways in which they would use rambutans: fresh (95%, most of whom said they would buy rambutan); as dessert (15%); as dessert with icecream (15% — usually respondents not planning to buy rambutan); in fruit platters (17%); in fruit salads (7%); and for decorating (10%) (Consumer survey, 2000).

According to a marketing specialist, Caucasians may consider rambutan too bland for a single dessert, as has happened with lychees (10% of consumers mentioned blandness of flavour — Consumer survey, 2000).

A food specialist suggested that its fresh non-acid taste made rambutan ideal as a palate cleanser — for example after seafood, spicy food and ethnic food such as Thai dishes.

As with other exotics, Caucasians generally appear to buy rambutans only a few at a time to decorate fruit platters, because they have an attractive appearance, are readily eaten, convey an exotic touch, and are perceived as too exotic and expensive to use except for decorating (Trade interviews, 2000).

Competitiveness
According to a wholesale agent, rambutan flavour appears to lack the appeal of lychees; so rambutan consumption is unlikely to reach similar volumes. Four consumers (3%) made the comment that they preferred lychees (Consumer survey, 2000).

Potential food service market

Size and profile
Provedores are supplying rambutans to cafés and local cruises, and are in a position to promote them to the wider food service industry. A high-profile city restaurant in Sydney puts rambutans on its dessert menu, using it in various forms including poached, in sorbets, with icecream, in pastries, and on individual fruit platters. However, observation of the dessert menus of several city hotels and restaurants in Sydney and Melbourne found little use of fresh fruit and no fresh rambutan. Two respondents had noticed rambutans in restaurants — one Chinese, one Thai — and a third had eaten a rambutan on a Thai Airways flight from Thailand to Australia (Consumer survey, 2000).

The food service industry tends to introduce consumers to new foods. Recommended potential markets are:
- large hotel restaurants with fruit platters, where some rambutan can be cut to demonstrate its characteristics;
- fashionable restaurants with innovative customers who seek new food experiences;
- institutions such as TAFEs that offer training courses for chefs;
- innovative stores such as Coles' 'Let's Eat' shop, wine bar and delicatessen in Prahran market serving the Prahran region's innovative and high-earning population;
- fashionable restaurants with regular and high-earning clientele in city areas of Sydney and Melbourne and upmarket suburbs such as Sydney's North Shore, Balmain and East Sydney, and Melbourne's Southbank, Chapel Street, and Brunswick Street;
- better-class restaurants, and large hotels with smorgasbords.

Demand trends
Factors indicating likely demand for rambutans are:
- a shift by consumers from traditional home-cooked dinners to regular eating out;
- a desire by consumers for new experiences when eating out, and the fact they often eat desserts at restaurants;
- the fact that chefs, though often unadventurous, are likely to use exotics;
- the growing number of Thai restaurants where rambutans could be offered to follow spicy food.

(Trade and marketing specialists interview, 2000)

According to a provedore and a city hotel food and beverage manager, price would probably prohibit widespread use of rambutans by hotels as an ingredient. This indicates that innovative restaurants and ethnic Asian restaurants are a better initial prospect for rambutans.

According to a marketing specialist city consumers, particularly females, tend to pass up rich desserts, and would be more likely to order fresh fruit.

Competitiveness
Rambutans will have to compete against lower-priced commonly used fruits such as melons.

Recommended positioning
'Exotic/novel'

- as a new, fashionable, interesting, different and novel fruit;
- as a seasonal alternative to mainstream fruits;
- as having eastern origins, and suitable to eat with Asian food, notably Thai dishes;
- as an exotic tropical fruit. (When asked whether 'exotic' was an apt description for rambutans, 72% of consumers liked it, describing it as appropriate, appealing, catchy and a powerful description, while 14% said it sounded expensive' and 20% preferred 'tropical' (Consumer survey, 2000));
- as giving an exotic touch to everyday foods such as salads;
- as an Australian fruit in Australian food settings, through restaurants selling kangaroo and crocodile, catering to tourists and visitors and their local escorts;
- as paired with a suitable food as a dessert — for example in a joint promotion with another product such as icecream, or with an already popular fruit such as melons. However, pairing rambutans with a luxury food should be avoided, as this can suggest that the pairing is essential, and convey an impression of expensiveness;
- as similar to the more familiar lychee. (Consumers frequently compared rambutan with lychee, particularly on similarities in flesh (12%), flavour (5%), and external appearance (2%). Two per cent of respondents suggested describing rambutans as similar to lychees (Consumer survey, 2000).

'Palate cleanser'
- as delicious and refreshing; the ideal palate cleanser following a meal; (e.g. spicy food or seafood, for which many western fruits are too acidic); or between courses like a sorbet;
- as complementary to a fashionable alcohol such as gin, supported by a winemaker explaining how the palate functions and reacts to eating rambutans between drinks;
- for restaurant desserts and fruit platters (as long as prices are too high to use rambutans as an ingredient).

'Fruit for the family'
- as Australian-grown, clean and healthy;
- as nutritious;
- as convenient and simple to peel and eat, and versatile to use;
- as a sweet, juicy, and small fruit.

A food marketing specialist suggested renaming rambutans to improve recall by Caucasians, as has been done with other fruits, e.g. kiwifruit (formerly known as Chinese gooseberries).

Product

Preferred product attributes
The ethnic Asian consumer's main buying criteria are flavour and sweetness, so demand is lower for less sweet varieties such as *Rongrien*. According to a specialist retailer, Asian consumers are more concerned with flavour than attractiveness. Stretching the season results in early immature fruit and late old fruit, both of which reduce demand severely.

Colour is a priority for the ethnic market: retail buyers want pure red skin and spinterns (the soft spines covering the fruit) with no more than a tinge of yellow. Queensland fruit is usually brighter coloured than fruit from the Northern Territory. The market will downgrade an entire pack if it contains fruit with yellowing spinterns.

According to wholesale agents, there is some demand in the ethnic Asian market for all-yellow varieties, which some consumers consider sweeter than red. However, one Sydney retailer has experienced no demand for trials of yellow fruit. Four per cent of Melbourne respondents liked the appearance of yellow rambutans; 16% commented that yellow was less appealing than red, and looked immature, overripe, boring, dead, or ugly; while 20% had no preference for red or yellow (Consumer survey, 2000).

The shape of rambutans is a lower consumer priority; however, the market wants large, rounded, symmetrical fruit. The industry generally supplies this, although Northern Territory fruit tends to be smaller, and some growers are sending long misshapen fruit (possibly from seedling trees).

Ethnic Asian consumers prefer thin-skinned rambutans.

The ethnic Asian market wants fruit with a small seed, to ensure a high proportion of flesh to seed, similar to lychees, sales of which boomed with the introduction of small-seeded varieties.

According to one retailer, the market wants freestone varieties (low adherence of the seed coat to flesh) such as *Classic Red*, and when these are available clingstone types such as *Rongriens* and *R9s* have difficulty competing. Asian buyers know their varieties well, and whether they are clingstone or freestone. The industry is meeting these requirements by packaging and labelling varieties. However, consumers are not variety-specific and will switch between varieties.

Current consumers (particularly ethnic Chinese) and their buyers want only top quality rambutans, indicators being fresh appearance, bright colouring, and no blackening of skin or spinterns; darker colour and greenish spinterns are considered signs of ageing fruit.

At Chinese New Year panicles (bunches) of rambutans are used to symbolise life, so they need to look particularly fresh, and have some leaf. According to most wholesale agents the quality being supplied is very good to excellent, particularly from FNQ Rambutan Marketing Group members in both far north Queensland and the Northern Territory, with quality assurance standards being generally followed, and lower-grade fruit separated. However, according to one wholesale agent, quality fluctuates considerably and this drags down the top price across the whole domestic and export market; another agent noted some bruising of fruit; and one agent had received 5 kg bulk packs of mixed quality, which compete only at the lower end of the market, at 50% or less of the first-grade price. According to retail chain buyers quality has varied, particularly product freshness.

According to a retail chain, exotics such as rambutans have a strong future provided the supply chain understands the product and how to handle it, and it has food safety and quality assurance certification. Maintaining the cool chain is the main issue for retailers. The fruit's shelf life needs to allow for travelling time, one to two days at wholesale, then 48 hours in the store, so care is needed throughout the supply chain. According to wholesale agents, rambutans road-freighted to Sydney and Melbourne in peak season, when prices are down, usually arrive in satisfactory condition, with less damage than from air freight, which is used at the beginning and the end of the season. However, on occasion fruit has arrived blackened or with blackened spinterns, both by air and road, and container temperatures of up to 25 Celsius have sometimes been recorded on arrival.

According to wholesale agents and retailers, temperatures of coolrooms where rambutans are stored can range from 5° to 12°. Rambutans despatched by the FNQ Rambutan Marketing Group have the recommended storage temperature marked on all containers. The trade needs the industry to provide more technical information on cool storage and handling.

According to retail chains, rambutans are typically displayed in a general wall case at 6–12° where there is higher air flow; in the unrefrigerated tropical section at room temperature; or in pre-packs at 2–4°. According to a marketing specialist, retail rambutans often look hard and brittle, and this aspect of quality needs improving.

Grading generally is being done well, although some wholesale agents have been supplied punnets of mixed varieties, e.g. longer *R9*s with rounded *Rongrien*s, and want grading improved for all pack sizes.

In Sydney, lower-grade fruit is generally directed towards Paddy's Markets. According to some wholesale agents, there is no room for second grade in a good year. However, according to one agent, retailers want an identifiable second-grade pack for their price-sensitive market segments. Some growers distinguish second grade by using a 'tropical fruits' box. Another option is to colour-code the fruit — for example yellow for first grade, and a red dot for premium grade for buyers to recognise.

Major fruit and vegetable retailers in Sydney generally display loose rambutans in peak season. According to a supermarket manager, such displays attract customer attention and sell fastest, particularly for a colourful and attractive fruit like rambutans, provided sufficient volumes are available. Loose rambutans are also acceptable at Chinese New Year. According to a food marketing specialist, Asian consumers judge foods by texture, so they generally like to feel before buying. The consumer survey indicated that 52% of respondents from Sydney and 61% from Melbourne also would prefer to hand-pick loose rambutans — to feel the texture, and to select quality and quantity.

According to some wholesalers, demand for panicles is limited to Chinese New Year and special Buddhist occasions. However, according to one retailer panicles have wider potential, in line with the emerging demand for lychee panicles.

Packaging

The 2.5 kg tray is the preferred bulk pack because it looks attractive, retailers find it easy to handle, and it allows the fruit to be sold loose, either poured onto the shelf or left in the tray with the Vitafilm cover removed.

According to wholesalers, the 5 kg tumble pack (bulk pack) looks unattractive but some retailers prefer it for price-sensitive customers. According to a major retailer, 5 kg is too large for such a high-risk product, as fruit displayed with different shelf lives puts the customer off. A maximum size of 2 kg would allow stores to buy quantities once or twice a week and reduce the waste that sometimes occurs at present.

According to wholesalers, a special Chinese New Year gift or altar pack, such as a 2.5 kg box or special top-grade pack, would probably sell and command a price premium. Growers would need to consult with Asian retailers serving this market, for example at Cabramatta or Bankstown in Sydney, on design and size. Retailers had mixed views on the potential of a Chinese New Year gift box. One was prepared to trial it, following the success of a similar cherry box in stores in ethnic areas; however, according to another wholesaler a similar box for other tropical fruits, marked 'Happy New Year', failed to sell.

According to a provedore, punnets sell better than 5 kg trays because they keep fresher.

According to wholesale agents and retailers, the 850 g punnet is by far the most successful pack because:

- Asian retailers will repack bulk fruit into leftover or newly bought 850 g punnets if none are available;
- ethnic Asian retailers can use punnets to prevent their customers from sampling the fruit;
- the unit sale is larger;
- the size is ideal for supermarkets when the price is lower and turnover is high;
- it is the ideal size for consumers to take home, or when visiting as a 'present for the table' to be eaten after the meal;
- it displays well;
- its shelf life of up to a week is longer than that of other packs;
- retailers can reduce waste from exposure to air-conditioning by unwrapping single punnets for customers to select loose fruit, then returning unsold fruit to the coolroom at close of trading;
- it usually achieves the best price, for example $12–$22/kg in April 2000. However, it can be too expensive for small retailers;

- retailers find it is the easiest pack to handle and the 5 kg pack of six punnets a convenient size to buy, even if the punnets are poured onto a bulk display, as one retailer does regularly.

When a retailer checked the individual weights of a carton of 850 g punnets from Queensland, most were closer to 950 g, indicating some over-packing.

According to a wholesaler and a retailer, this size is likely to prove too large and too expensive for the Caucasian market. Five per cent of survey respondents preferred it, but 10% considered it too large and bulky (Consumer survey, 2000).

According to a wholesaler, the current 5 kg six-pack of 850 g punnets needs redesign to allow proper cross-packing to eliminate a gap that has caused pallets to collapse.

While 1 kg, 850 g and 500 g punnets were all observed in Asian stores, a retail chain recommended a single large punnet size, on the grounds that the similar appearance of the three current sizes can be confusing to the consumer.

Growers, supermarkets and independent retailers also pack 250 g punnets. According to a wholesaler, this size has sold well in Sydney supermarkets and should allow the Caucasian market to expand. Advantages include:

- good presentation, which is critical to the customer;
- longer-lasting quality, particularly where sales are slow, such as trials in new markets;
- the current trend for consumers to buy smaller volumes more frequently to ensure fresher food, e.g. strong demand for punnets, particularly for delicate products such as strawberries. Retailers can add value by doing the repackaging themselves. However, according to some retailers the cost of this raises the price, though customers might not recognise the added value;
- the distribution of rambutans by supermarket chains because consumers have accepted punnets;
- consumer perception that punnets are cheaper than bulk fruit (for example $9.99/kg appears expensive to the typical customer);
- customers can see the price;
- larger unit sales than from loose fruit;
- handling convenience.

However, some retailers doubt that the 250 g punnet would succeed in any markets, because of:

- poor appearance, particularly the square strawberry punnet because of the gap between fruit and lid (although the flatter 250 g Europunnet avoids this);
- lack of demand from Asian consumers;
- grower expectations of too high a unit price;
- the fact that very few fruits have succeeded in a small package: demand for lychee punnets dropped to a quarter of that for loose fruit because shoppers want to pick their fruit.

Of the survey respondents, 7% preferred the 250 g punnet. A few considered punnets to be more appealing and easier to handle, while some saw them as higher priced and a waste of packaging. According to a food marketing specialist, while retailers use packaging to give variety, consumers' consciences often trade off a desire for maximum freshness against use of packaging materials.

According to retailers, other pre-pack options include

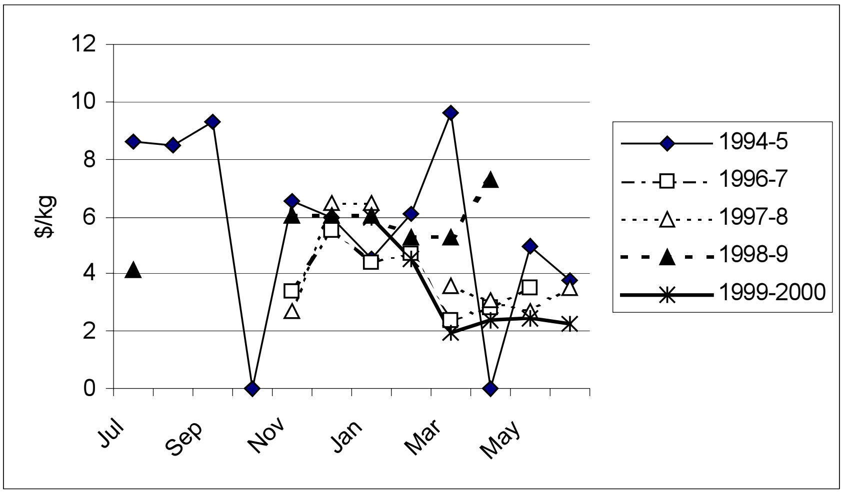
- styrofoam trays with Vitafilm, which successfully minimise dehydration and increase the fruit's unit value. However, other retailers doubted the potential of this packaging in their markets;
- plastic 1 kg bags, which have sold when prices were low;
- Netlong mesh bags labelled with swing tickets which have succeeded for products such as kiwifruit. (According to a marketing specialist, consumers prefer clear to coloured netlong.)

A food marketing specialist suggested sample packs of mixed exotics, e.g. for special occasions.

According to wholesalers, Krispybags (bags with perforations to regulate humidity) and Vitafilm protect the fruit satisfactorily, although two Krispybags per bulk pack would prolong shelf life better by allowing one bag to be opened at a time. While growers prefer punnets with holes to avoid condensation, properly cooled punnets without holes do not develop condensation and can keep for up to ten days.

Pricing

Figure 1. Average monthly rambutan prices, Sydney Wholesale Markets, 1994–95 and 1996–97 to 1999–2000



Source: Moody, T., *Fruit, Vegetables, Cut Flower, Asian & Exotics, Prices and Receivals*, Sydney Market, NSW Agriculture

As the graph shows, the wholesale markets have maintained price levels at around $6/kg from the Christmas season through Chinese New Year, but in most years the price then dropped to around $3/kg. Since the trade considers quality standards to be generally high, the price drop suggests either a fairly elastic market, with only a small proportion of consumers prepared to support high prices for rambutans, or a small market that is easily saturated when supply volumes peak in seasons with good yield.

According to the trade, price is usually high for the first week of the season, and at Chinese New Year, in response to strong demand. Wholesale prices in the 2000 peak season ranged from $4 to $12/kg, averaging $6/kg for loose fruit and $4 for an 850 g punnet.

According to a wholesale agent, 2000 prices fell to their lowest in 14 years because the industry reduced its control over market prices by supplying too many agents, and because of larger volumes, lower quality, and bulk packs supplied by non-specialist growers from both the Northern Territory and Queensland. As a result, ethnic retailers paid lower wholesale prices but maintained their retail prices, which resulted in lower prices to the growers. According to a retail chain, fruit prices in general were down 10% in 2000, as a result of competition from the bumper mango season, and lower demand for fruit, even the popular stonefruit, and for vegetables.

As the lychee industry has grown prices have fallen by 50%, with exponential sales growth as a result. According to the product life cycle theory (Kotler *et al*, 1988, p. 288) rambutans are likely to follow the same course as supply volumes increase.

Observation of various retail outlets in Sydney and Melbourne at peak season, March 2000 (see Appendix 5), found the price for loose rambutans ranging from $5 to $12 per kg, and around $8 to $9 per kg in larger stores with ethnic clientele. Loose rambutans were displayed with lychees and longans, at similar prices.

Prices are usually lowest at ethnic Asian retailers with high turnover, because non-ethnic specialist fruit and vegetable retailers tend to mark up prices of unfamiliar fruits such as rambutans to include a margin for losses from unsold ageing fruit. According to a provedore, current prices of $15–18/kg are too high for consumers to consider trying the fruit. This appears to be one of the main barriers to crossover into other markets, the high prices giving rambutans the image of a luxury fruit. Caucasian consumers rarely buy more than one or two for decoration. Also, retailers are reluctant to reorder a loss-making product, a fact that inhibits the development of retail distribution to other market segments.

Higher prices reflect stronger demand for:

- particular varieties with preferred fruit characteristics, such as Classic Red varieties. For example, Northern Territory rambutan prices in 1999 dropped from $7 to $5/kg when *R9*s reached the markets;
- consistent quality, e.g. size, colour, shape and variety; poorly graded packs are downgraded.

The ethnic Chinese market is prepared to pay higher prices at Chinese New Year, indicating relatively inelastic demand for rambutans as prayer fruit and gifts. However, Chinese consumers will pay high prices only for fruit that is edible, and will buy only very small quantities if a fruit is immature.

The Asian ethnic market is considered price-sensitive in all areas, and in recent years increasingly so in some segments, particularly Vietnamese and Malay, with shoppers substituting other fruits when prices are high. The point of consumer price resistance, at which most consumers switch to other fruits, appears to be around $7 to $8/kg. However, loose rambutans sell well at $8 to $9/kg, and according to retailers, consumers will generally accept price fluctuations for a short period; and some ethnic Asian consumers, particularly Vietnamese, are prepared to pay up to $12 /kg.

The consumer survey found some awareness of peak season rambutan prices among Sydney consumers, with 42% estimating prices of $5–$9/kg kg, and 12% assuming a price the same as that for lychees. There was little awareness amongst Melbourne respondents, with estimates ranging from $2 to $22/kg and only 5% close with $7–$9/kg. Similarly 36% of Sydney respondents predicted fairly realistic punnet prices of $3 or $4. Half the respondents felt unable to make an estimate.

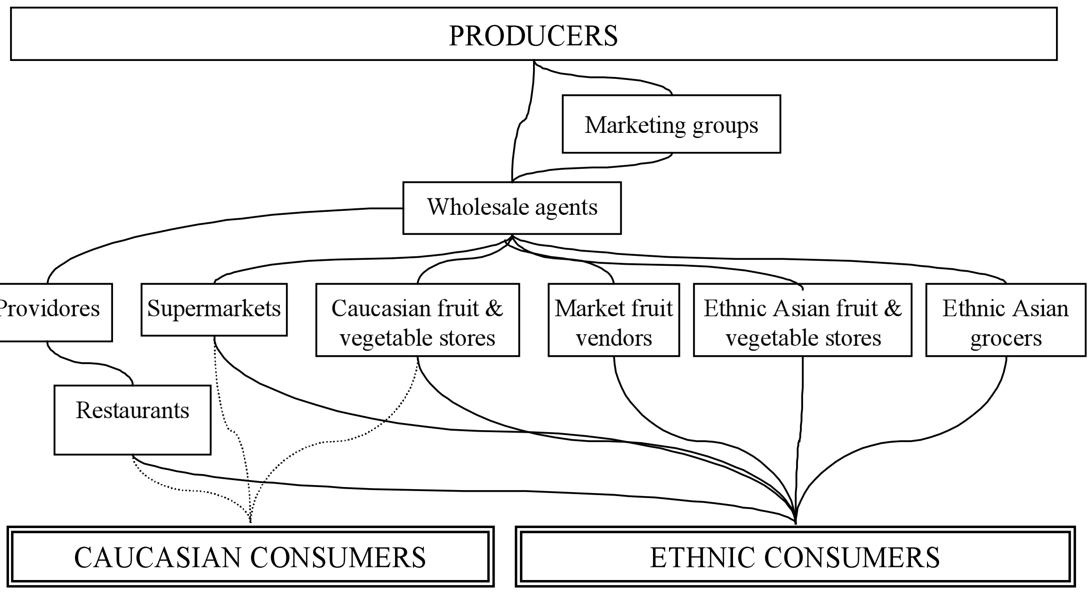
High prices and inconsistent pricing are barriers to market development for rambutans, particularly for supermarkets that need an everyday low price to attract new consumers. Rambutans should become more saleable as prices fall — for example through lower production costs from larger-scale farm production, as happened with lychees where retail prices fell from $23 to $10/kg and sales grew strongly as a result. Meanwhile, the trade recommends targeting consumers who have high incomes and value quality over price.

In the food service industry, use of rambutans has expanded little beyond ethnic restaurants. Relatively high prices are restraining some hotels and restaurants; for example a city hotel hosting ethnic Asian visitors will not include rambutans in its menus unless the price drops to a level similar to that of melons. However, according to a provedore, while price would probably prohibit use of rambutans as an ingredient, it would not prevent their use for desserts and fruit platters.

Distribution

The following diagram depicts a conventional indirect distribution channel for rambutans in Sydney and Melbourne in the 2000 season.

Figure 2. Distribution channel for rambutans in Sydney and Melbourne



All wholesale agents handling rambutans specialised in tropical and exotic fruits, including lychees, longans, mangosteen, durian, persimmon, breadfruit, jackfruit, and less well-known products, with rambutans from far north Queensland and the Northern Territory a major line for most. Some handle rambutans all season, others only in either the Northern Territory or the Queensland season, and some only in peak season. Some have arrangements with marketing groups; others buy from growers inside and outside the groups. More agents are seeking to handling exotics because of expected rising demand from Australia's growing Asian population.

Sydney Wholesale Markets distributes around 21 tonnes of rambutan a week in a typical season. Some wholesale agents sell 70 to 90% of their rambutan stock to independent Asian fruit and vegetable retailers and greengrocers, mainly in predominantly ethnic Vietnamese areas such as Sydney's Cabramatta and Bankstown and Melbourne's Richmond, and to Paddy's Markets in Flemington and Haymarket (Chinatown) and non-Asian fruit and vegetable retailers serving a mainly Asian clientele. The balance is sold mainly to supermarket chains, some also going to restaurants, provedores and exporters.

All the major retail chains offer rambutans, particularly in areas with ethnic Asian populations. According to retail chains, ethnic Asian shoppers will buy from supermarkets, but only when the fruit is on sale. The major retail chains have wide penetration into all market segments, through a total of 155 supermarkets in Sydney and 189 in Melbourne (Telstra white pages). The increasing number of agents and retailers selling rambutans, together with the expansion into the mass market, indicates an expanding distribution system.

With the shift to weekend trading, the main shopping times are now Thursday and Friday nights and Saturdays, so retailers buy in stock between Wednesday and Friday, in preparation. Large retailers aim at maintaining freshness, some preferring fruit to be distributed rapidly from grower to store rather than being stored in agents' coolrooms. While some chains are trying to move close to the producer, they are unlikely to source directly fruit with a short shelf life such as rambutans.

The on-line retailer greengrocer.com, which operates a home delivery service for fresh produce to Sydney and Melbourne consumers, trialed rambutans in the 2000 season, and sells lychees in punnets and in fruit packs. To stock a fruit it needs to be able to buy fresh fruit daily at the central markets.

Retail chains offer rambutans to all stores to meet their customers' requirement for variety, and upmarket stores retail exotics such as rambutans to ensure a good range of product to satisfy their customers' requirement for the convenience of one-stop shopping. To expand distribution of a new fruits such as rambutans, retail chains promote them to their buyers and offer introductory incentives for stocking them. However, rambutans remain a relatively minor and consistently unprofitable line providing poor return on investment for shelf space, because very low consumer awareness is resulting in low turnover, high waste and markdowns for 50% of stock. As a result, store buyers are reluctant to reorder rambutans except in affluent areas requiring a full range of fruits. For example, according to a major retailer, while there is potential to expand the ethnic market at Chinese New Year, store managers need to be educated to convince them to support any promotion and to order stocks. According to some retailers, rambutans are unlikely to provide satisfactory returns, and will continue to remain in the exotic range. According to others, rambutans do have the potential to become profitable eventually, through introductory pricing and customer feedback.

Recommended channels to target the upmarket Caucasian consumer include:

- specialist fruit and vegetable retailers who target upper-income consumers with a high level of personal service. According to a boutique retailer from Sydney's North Shore, such stores are more effective at introducing new fruits to the markets, as they are willing to handle them properly, particularly exotics, and provide sales service, so it is important that distribution systems support them as well as supermarket chains;
- fresh produce markets such as Melbourne's Prahran Market, which serves 70 000 to 100 000 customers a week, 40% of whom travel from several suburbs away, for its higher quality food, variety, personal service, and a market atmosphere, according to a recent survey (Prahran Market: *A profile of Prahran Market Consumers)*. The market includes Coles' new category store 'Let's Eat' (which stocked rambutans in the 2000 season), and is targeting the food service industry through developing food specialists, consumer information, and events for food innovators.

The consumer survey was carried out in stores and markets that carried a wide range of fruit and vegetables, including some stores retailing specialist Asian products. Ninety per cent of Sydney respondents, all of whom were interviewed in fruit and vegetable stores, would expect to find a new fruit like rambutans in such stores, 6% in fresh produce markets, and 5% in supermarkets. In Melbourne, 77% of respondents interviewed in fruit and vegetable store and 55% of those interviewed in supermarkets would expect to find rambutans in fruit and vegetables stores; 18% of those interviewed in fruit and vegetable stores, 33% of those interviewed in supermarkets and 17% of those interviewed in a fresh produce market would expect to find them in supermarkets; and 83% of those interviewed in markets and 5% of those interviewed in fruit and vegetables stores would expect to find rambutans in fresh produce markets.

Supermarkets usually display rambutans in dedicated tropical sections for seasonal fruit, where customers can locate them readily. They are unlikely to mount a dedicated exotic display until turnover is high enough to justify it. In the 2000 peak season observations of Sydney and Melbourne stores found rambutans either displayed loose near lychees, longans and grapes (usually where there was an ethnic Asian clientele); or in punnets amongst the berries and other expensive, delicate fruits (see Appendix 5).

According to a wholesale agent, while the industry needs to develop consumer awareness in new markets, it should first improve retail distribution to make rambutans easy for consumers to find. This would require maintaining continuous supply, with reasonable volumes of fruit every week. The agent recommended that growers and marketing groups serve and support a specific market and supply experienced agents, giving them several months trial before comparing their performance, rather than price-chasing from often inexperienced agents.

According to wholesale agents, more coordinated supply would make possible:

- better service of suppliers scattered across the top of Australia;
- avoidance of direct conflict between grower and market, and more effective feedback to growers from peers, brokers, etc.;
- sufficient volumes to maintain the price and allow an expansion of the market;
- a stronger brand with a premium image.

Retailers also need product information, particularly on how to cut and use rambutans, to answer their clients' enquiries. Retailers are relying on the rambutan industry to educate store staff on packing and handling, preferably through educational literature such as posters for packing areas and maybe in the store, and recipe cards, which inform not only customers but also store staff. According to retailers, one option is to supply the information with the fruit.

The industry needs to educate the whole distribution chain about rambutans. A wholesale agent wants product information, including specific terms such as 'spintern', so that agents can discuss the fruit with retailers with more authority. Some wholesale agents are using a marketing group's quality manual for this purpose.

Competition

Both lychees and longans are in close competition with rambutans. The relative strengths and weaknesses of the three fruits are summarised in the table below.

Table 2 Relative strengths and weaknesses of rambutans compared with lychees and longans

Competitor	Relative strengths	Relative weaknesses
Lychees	• more decorative appearance • longer supply season, although similar peak season • crisp, firm texture • can be de-seeded and stuffed • some small-seed varieties • successful packaging to reduce dehydration	• newer industry, fewer growers • fragile spinterns easily damaged • spinterns dry early, giving blackened appearance • variegated colour spinterns make colour inconsistent • thicker skin, harder to peel • adherent testa impedes eating in some varieties • spinterns make fruit bulky • less known • higher prices, e.g. \$8–\$9/kg while lychees are \$5–\$7/kg • share same ethnic Asian market • lack mass market of lychees • flavour appears to be less appealing
Longans	• more attractive appearance • successful protective packaging • export markets • more crossover into mass market	• loses fresh appearance more quickly as skin and spinterns blacken • coordinated marketing and supply • quality control by marketing groups • similar prices • longer season • thicker skin • larger seed • adherent testa impedes eating; worse in some varieties • share same ethnic Asian market

Promotion

Current ethnic Asian market
While existing consumers have high awareness and knowledge of rambutans, promotion is needed to maintain and increase consumption and compete against potential substitutes. For existing consumers the trade recommends that the industry alert consumers to the peak season for rambutans, using the media (see Appendix 6 for a list of the ethnic press) and through marketing staff of the wholesale markets. The industry could also participate in appropriate industry promotions: for example Sydney Markets Authority includes rambutans for ethnic schools in its children's program; and sponsors a dragon and snacks at a Chinese New Year promotion to promote Paddy's Markets.

Caucasian market
To consumers outside the ethnic Asian market, rambutans are generally a new and unknown fruit, and they will not buy an unknown food. However, according to a major retailer, promotion can establish rambutans as it has done for other once little-known foods including lychees, avocados, mushrooms, Gayndah Imperials, kiwifruit, sugar snaps and snow peas. According to a retailer, development of the rambutan market is being inhibited by lack of promotion.

According to a major retailer, consumers will try a new fruit once it is explained to them. Education should lead to consumption, through creating consumer awareness and providing literature on how to use and eat rambutans.

Promotional material should include information on nutritional content, particularly in a national campaign; and recipes and 'how to use' ideas (such as a fruit and cheese platter), showing rambutans as easy to eat, and depicting them against a colour that enhances their appearance (Trade interviews, 2000). Consumers want to know rambutans' nutritional content and health benefits (47%); ideas about how to use them (42%), and recipes (13%); a description of the taste (33%); general information (32%); background (8%); and how to peel, store, cook, eat and select rambutans (Consumer survey, 2000).

It was recommend that fruits be promoted by variety where possible, so that if consumers do not like one variety, they will not reject all rambutans.

According to a food marketing specialist, marketing should seek to remove specific consumer barriers to trial and purchase by considering the target market's specific shopping patterns, along with issues such as

- the amount of preparation needed (consumers often will not eat fruit unless it has been cut up): 8% of consumers said they thought rambutans would be difficult to peel (Consumer survey, 2000);
- concern with risk to their children's safety, particularly when a fruit has a seed: 5% of consumers suggested rambutan as a children's food (Consumer survey, 2000), although there could still be concern with the seed;
- whether a fruit is messy to eat (fruit is often perceived as messy): 6% of consumers were annoyed by the testa of *Rongrien* adhering to the flesh (Consumer survey, 2000);

These were also the main barriers identified by consumers (Consumer survey, 2000).

Point of sale
Labelling on cartons and pre-packs was considered an appropriate medium to distribute product information to consumers, store staff and others in the supply chain (Trade interviews, 2000). In addition, 13% of consumers suggested labelling as an information source for rambutan (Consumer survey, 2000). However, one wholesale agent said that customers do not read labels on packaging. Current labelling was considered satisfactory for the ethnic Asian market.

Recipe cards were recommended as effective for educating consumers on new fruits, and were the preferred information source suggested by Sydney consumers (12%) and Melbourne consumers (33%) (Consumer survey, 2000). According to a wholesale agent, they are often the only point-of-sale material necessary, customers buying the fruit after reading the cards. Wholesale agents considered that a product flyer supplied by a major grower has successfully educated Caucasian consumers, while improving the appearance of the box. Retailers recommended that information include nutritional content; whether rambutans are easy to cook; a description of the flavour; and innovative recipes, that could also include other seasonal foods such as strawberries and berries. A food marketing specialist recommended that recipe cards and posters depict cut fruit in a setting such as a fruit platter with other exotic fruits. Good quality black and white photographs or a duo-tone such as red and black were suggested as a cost-saving option, provided they were displayed with the fruit.

The industry does not have a standard recipe card, although a wholesale agent has supplied recipe cards in past years. Major retailers would welcome a generic rambutan recipe card, and could display it next to the fruit or on recipe boards to be accessible to the consumer. Its format and size should conform to the design standards of major retailers, and fit into cardholders and other display units. For fresh produce markets a food marketing specialist recommended suspendable pads, as counter cards would be too clumsy. Recipe cards are usually supplied by the individual industry, or until recently by the Sydney Markets Authority. The Melbourne Markets Authority will produce point-of-sale material, including recipe cards, in liaison with industry.

According to a retail chain, if the industry supplied recipe cards the chains would provide them to all stores retailing rambutans. However, according to wholesale agents recipe cards have proved easy to lose, and have not always reached the supermarket chains, so one option is to pack, say, five flyers in each box. Melbourne Markets Authority can include promotional literature in its monthly newsletter to 800 Victorian retail outlets, including 400 specialist fruit and vegetable stores. The industry would need to make arrangements pre-season, supply 1200 flyers, and pay the insert fee, and could have the Authority handle re-orders.

Personal selling

Regular customers expect to find new products in specialist fruit and vegetable stores, and ask the staff to recommend new foods and to explain how to use them. Some stores in wealthier areas maintain high staffing levels to provide this personalised service, and approach customers interested in rambutans and other new fruits to offer a tasting. In the survey 12% of Sydney consumers suggested store staff as the most likely source of information on rambutans (in Sydney the survey was conducted in fruit and vegetable stores), while no respondents suggested this in Melbourne (where survey venues also included supermarkets and fresh produce markets) (Consumer survey, 2000). Some retailers said they were reluctant to offer free tastings of rambutan, despite lack of sales, obvious consumer interest, and the belief that sampling increases sales, because of the high wholesale price. These factors indicate that retail staff need to be provided with information on any new fruit. According to major retailers, if the industry supplied information kits, supermarket buying offices would distribute them to their store buyers or advise managers that the kits were available.

Wholesale agents promote new fruits such as rambutans to retailers by giving buyers product tastings and taking growers on familiarisations to fruit and vegetable stores. Rambutans are featured in a Queensland Fruit & Vegetable Growers flyer, *Fresh Facts for Exotic Fruits*, which is available to the trade through the fresh produce wholesale markets.

According to a high-profile Sydney restaurant, chefs are not likely to look out for a new product such as rambutans, but rely on industry to introduce it, either through their provedore or by delivering a sample pack for the chef to trial.

Melbourne's Prahran Market, which is developing a positioning as a food information authority, suggested that the industry develop a vendor in the market as an authority on rambutans, similar to one of its vendors who has become a recognised authority on mushrooms.

Sales promotions
The trade consider product demonstrations and taste testings to be effective means of creating awareness, educating both consumer and retailer, and building sales in a new market, particularly for highly perishable fruits such as exotics where retailers need rapid turnaround. While 87% of the Sydney respondents were interviewed in their usual fruit and vegetable store, which in all cases sold rambutans, only 25% could recall noticing rambutans in such shops, indicating that an unfamiliar product needs attention drawn to it. When the consumer survey asked respondents if they would buy a new fruit such as rambutan without having tasted it first, 80% said they would not.

While one wholesale agent suggested the industry provide retailers with one tray in ten (depending on the size of the retailer) as giveaways for sampling, another recommended that retailers not be relied on to hand out the fruit.

Major retailers hire demonstrators or have their approved wholesale suppliers run an in-store promotion, and would readily support any externally organised demonstrations provided the industry committed to doing them properly — i.e. by buying quality fruit in the market; providing supporting point-of-sale material; planning the promotion with wholesale agents (not too many) to co-ordinate supply; and hiring skilled professional demonstrators to cut and discuss the fruit and offer tastings. (One agent recommended that the demonstrator be verified by the retailer's supplying agent beforehand.) According to a retailer, timing of a promotion needs to ensure consistent supply, but this can be difficult for rambutans, for example when rain reduces supplies.

Demonstrations should be timed for the main shopping days of Thursday, Friday and Saturday, and busy times such as Easter and school holidays, to reach children who are the most likely to want to try a new food. The following venues were recommended for demonstrations:
- According to one independent retailer, demonstrations should include independent fruit and vegetable stores, as these retailers are most likely to introduce new fruits. A food marketing specialist recommended leading independents, such as on Sydney's North Shore, supported by point-of-sale material and media publicity.
- According to a wholesale agent, demonstrations should be in supermarket chains where rambutans are better known, rather than in independent fruit and vegetable retail stores. According to another agent, supermarket chains need demonstrations if they are to increase their sales volumes.
- A food marketing specialist also suggested the Sydney Fresh Food Market, all day Saturday at Flemington Markets — a very multicultural market, where taste-testing could cross over into other ethnic markets and the Caucasian segment; Paddy's Market at Flemington Markets on Fridays for the bargain-shopper; Paddy's Markets at Haymarket (Sydney's Chinatown), from Thursdays to Sundays; and tourist venues.

Recent promotions for rambutans have included:
- a 2000 in-store promotion in Sydney specialist stores and supermarkets, with in-store demonstrations, taste sampling and point-of sale pamphlets and posters; it stimulated increased sales during the promotion;
- cooperative promotions between wholesaler agents handling larger volumes and retail stores, supported with information sheets and the occasional store display;
- a supermarket promotion in the peak 2000 season promoting rambutans as a special in selected Sydney stores, including the North Shore and city areas;
- in-store demonstrations of exotics, together with a media campaign, organised by a supermarket chain.

Similar mushroom industry promotions at events such as food exhibitions, food festivals, and food and wine shows created strong demand for mushrooms from both consumers and the food service industry. Opportunities for rambutan include the Prahran Market food festival, in which growers could take part if they chose, and the Melbourne Wine and Food Festival.

Advertising
A wholesale agent considers media promotions the most effective means of reaching the most consumers. However, only 2% of consumers recommended advertising for rambutans (Consumer survey, 2000).

A retail chain would advertise rambutans, probably in mid-week supermarket specials when prices are reasonable, similar to a recent lychee campaign that included full-page newspaper advertisements.

A Melbourne wholesale agent recommends targeting the 30-plus shopper with a campaign of daytime radio advertising (using copy produced by the station), television cooking programs and newspapers, timed for when high volumes are anticipated — similar to recent campaigns that were successful for bananas and Queensland strawberries.

Publicity
According to a food marketing specialist, regional food is topical, and food writers are always looking for new food story ideas. The consumer survey found that 2% of respondents would expect rambutans to be promoted in magazine features. According to a specialist retailer, magazine articles strongly stimulate demand from consumers, who then search to buy the product mentioned. A provedore recommended cooking shows as a cost-effective means of reaching female shoppers. Two per cent of consumers recommended television chefs as influential. The rambutan industry has generated publicity in trade media through media releases over recent years. Media options include:

- supplying media releases to food writers, e.g. inviting them on farm tours for 'producer to plate' stories (see Appendix 6 for consumer and trade publications and their target markets). Suggested content includes a chef's quote, for example on how eating rambutans affects the palate, like wine;
- supplying stories to Sydney Markets Authority to be included in its media releases, along with weekly radio talks where price fluctuations can also be explained;
- hiring a public relations company.

The trade recommends targeting the Caucasian market via:

- consumer magazines produced for retailers and sold in their stores, i.e. Coles' *Australian Table* and Woolworths' *Good Taste*;
- newspapers, for example 'Sydney Food & Wine' in Wednesday's *Daily Telegraph*, featuring new food lines; and Melbourne's *Herald Sun*, *Sunday Age*, and *The Age*'s 'Epicure' where chefs provide 'how-to-use' ideas to persuade consumers to explore new foods;
- women's magazines, for example food features in *Woman's Day*, for strong demand from mainly females;
- cooking shows as a cost-effective way to reach female shoppers.

A major fruit and vegetable retailer recommended introducing rambutans by first publicising the fruit through the food features in the 'Good Weekend' supplements to the *Sydney Morning Herald*, the newspaper's Tuesday edition and Melbourne's *The Age*, to position it as a 'trendy' fruit through food writers. The ensuring publicity would generate demand from retailers by their consumers; the retailers in turn would order in supplies, and conduct in-store taste-testings supported by basic information such as recipe cards. This in turn would stimulate an increase in production at lower prices because of improved economise of scale; then more consumers would trial the fruit at the lower prices.

The Internet
Sydney Markets Authority suggested that the rambutan industry link a stand-alone home page to the Authority's website, including its award-winning 'Kids Education' page — www.f&vforme.com.au. However, only one consumer suggested the Internet as a likely source of information for rambutans, indicating that the Caucasian market is not using the Internet to learn about new foods (Consumer survey, 2000).

Greengrocer.com can provide introductory information on a new fruit, such as rambutans, through its twice-a-week newsletters to customers, and recipes on its recipe site.

Branding
Rambutan growers are labelling packs and punnets with marketing group brands and individual grower brands, or use generic 'Australian Rambutan' or 'Australian Tropical Fruits' cartons.

Food service promotions
Restaurant promotions can create awareness in both consumers and chefs, and chefs often seek information on a new product. According to a major retailer this has been particularly successful for the mushroom industry. Rambutans could be promoted to the food service industry via:

- provedores;
- special events, such as food festivals attended by chefs;
- fashionable city cafés and restaurants such as Coles' 'Let's Eat' at Prahran and popular restaurant areas such as Melbourne's Southbank;
- a restaurant promotion with provedores distributing fruit, and industry mailing a flyer to every participating restaurant;
- a promotion to ethnic restaurants and caterers to increase awareness and use of rambutans;
- demonstrations by Melbourne Markets Authority and Prahran Market to food service training institutes;
- features in hospitality magazines and newspapers, e.g. 'Epicure' in Tuesday's Melbourne *Age*.
- Prahran Market features in Melbourne's *Age* food section, where chefs provide 'how to use' ideas to persuade consumers to explore new foods;
- Chefs organisations, to reach chefs and food service organisations;
- food writers targeted through the Prahran Market monthly food forum, where guest speakers, including television food celebrities, talk about food.

A food marketing specialist outlined a suggested restaurant promotion to develop awareness and trial in double-income consumers who eat out regularly at selected upmarket cafes and restaurants of Sydney and Melbourne, for a trickle down effect to the mass market. The promotion would start with a written proposal to the restaurants; then a media promotion at the start of season, publicising each participating restaurant in its local suburban newspaper and major dailies e.g. *Sydney Morning Herald* and Melbourne's *Age*. A co-ordinator would supply the restaurant with sampling fruit, storage and technical information, posters, and suggested recipes so rambutan could be included in the menu; co-ordinate distribution of rambutan to local fruit and vegetable stores; and gather feedback from those retailers. There is potential for a similar 12 month campaign by Queensland Fruit and Vegetable Growers, e.g. quarterly promotions of different fruits as their seasons start, for more lasting momentum and anticipation than one-off promotions.

Chef competitions also attract chefs' attention to new products. For example, a recent Prahran Market risotto competition attracted chefs Australia-wide, with entries including a highly decorated tropical fruit risotto.

Children's market
A children's campaign would educate children to consider rambutans as an everyday fruit. Sydney Markets Authority runs an ongoing children's program to increase fresh fruit consumption by linking it with health and sport to create awareness of and liking for fruit, so that children will ask their parents for it. Activities include demonstrations at primary schools (including rambutans at multicultural schools), working with school canteens, health breakfasts, and school sponsorships, and the industry could supply rambutans for events such as school sports carnivals.

Melbourne Markets Authority and the Dieticians Organisation of Australia are also promoting fruit consumption to children, while one retail chain is refocusing its fresh fruit and vegetable campaign towards children.

Integrated promotional campaigns
According to a major retailer, consistent promotion is the best means of creating social awareness — ideally an educational campaign of media publicity combined with product demonstrations and tastings, and supported by point-of-sale literature and display material.

According to a food marketing specialist, an industry-wide promotion would enable individual growers, wholesalers and retailers to work together without competing amongst themselves.

A major retailer invited the industry to tie into its ongoing promotional campaign for fruit and vegetables, which includes recipe cards, advertising, and a customer catalogue that already features lychees.

According to retailers, there are opportunities for a joint exotics promotion for rambutans, lychees and longans. According to one major retailer, this has succeeded with other products, e.g. a recent promotion of a large range of exotics in fruit baskets, and would assist promoting these fruits e.g. rambutans and longans for variety, and lychees for volume.

3. SWOT analysis

Table 3. SWOT analysis for rambutans in the Australian domestic market

Strengths	Weaknesses	Opportunities	Threats
• Strong demand from ethnic Asian market • General awareness by trade • Can supply Chinese New Year, when rambutan is a traditional ritual fruit • Traditional fruit for immigrants from mainly Asian countries • No competition from imports • Red cultivars resistant to papaya fruit fly • Most fruit good quality and well-graded • Quality and grading standards give one marketing group brand a good reputation • Attractive colour, variety of colours • Suitable for mechanical grading • Distinctive and decorative appearance • Juicy, refreshing • Can supply panicles • Current product attributes acceptable to current and potential market segments • Trade accepts bulk packs, large punnets • Caucasians link with better-known lychees • Price premiums for quality, preferred attributes • High prices compared to most fruit • Long supply season • Pre-packing extends shelf life • Specialised trade experienced in handling perishable exotics • Growing wholesale and retail distribution • Marketing groups • Some marketing group and trade promotion	• Low awareness and adoption by Caucasian market and trade • Lack of national quality and grading standards, few grades • Immature and overmature fruit at extremes of season • Consumers dislike colour variegation, testa • Short shelf life • Yellow variety more fragile • Seed • Spinterns easy to damage • Some fruit blackening in transit • Supply can be erratic • Prices lowered by market saturation • High retail margins because of stock losses • Consumer resistance to relatively high prices • Little product information for trade or consumer • Limited communication and cooperation with trade • Competition from lychees and longans	• Growing ethnic Vietnamese population • Asian community in most cities • Undeveloped markets outside Sydney and Melbourne • Undeveloped market outside ethnic Asian segment • Demand for new foods and variety • R&D for improved cropping, less adherent testa • More grades to target different markets, including low grade for price-sensitive markets • Potential for panicles outside Chinese New Year • Some variety awareness and preference • Possible demand for Chinese New Year gift pack • Retailers want smaller bulk pack • Consumers buy small frequent volumes, and pre-packs • Demand for smaller tray, improved punnet and box design • Sample packs of exotics to encourage trial of rambutans • Chains expanding their range of exotics • Improve quality by remedying cool chain breakdowns • Improve coordination of supply to avoid saturating individual markets • Reduced price margins through efficiencies in production, packaging, transport, etc. • Better returns from more grades and tighter grading • Potential to increase demand, accelerate sales and reduce waste for retailers to Caucasians • Opportunities to promote to target market, trade	• Low uptake by Australian-born ethnic Asians • Large exports will reduce domestic supply • Prices that have come down are difficult to raise • Cheaper substitutes and competitors, e.g. lychees, canned rambutan, apple • Retail display methods expose fruit to low temperatures and air-conditioning • Growing trade requirements for food safety certification • Inadequate air freight capacity in peak season • Current market requires high quality • Increasing price sensitivity and switching to substitutes • Lower prices arising from erratic supply • Retail buyer resistance to stocking product because of slow sales

4. Marketing Plan

Introduction

This marketing plan has been developed from the preceding marketing research. It sets out a strategic direction, and outlines specific activities that the rambutan industry can implement to meet the needs and expectations of both its current market and potential new markets.

Key issues

- main market is ethnic Chinese and Vietnamese, with consumers from other Asian nationalities also believed to be consuming rambutans;
- some awareness in the potential Caucasian market, but little adoption;
- some educational activity carried out in the Caucasian market, but lack of information throughout supply chain;
- rambutan attributes and current forms of presentation acceptable to potential market;
- lack of grades and lack of industry-wide quality standards for targeting specific market segments;
- current prices high compared with most fruits because of relatively inelastic demand from current ethnic Asian market;
- current high prices a barrier outside the wealthier segment of the mass market;
- marking up by retailers to cover stock losses from self-selection by ethnic Asian consumers and lack of sales to the mass market, exacerbating price-resistance, and causing resistance by retailers;
- various opportunities for low-cost promotions including point-of-sale material, media publicity, participating in existing promotional campaigns, and supporting in-store product demonstrations.

Marketing objectives

1. Maintain the current ethnic market through maintaining awareness, meeting quality requirements and offering lower-priced grades to counter price resistance.
2. Raise awareness and interest in the high-income Caucasian market to develop extra demand, and penetrate the mass Caucasian market.
3. Increase product acceptability by improving quality, packaging, and more quality-based grades to target various market segments, and by building cooperative relationships with supply chains.

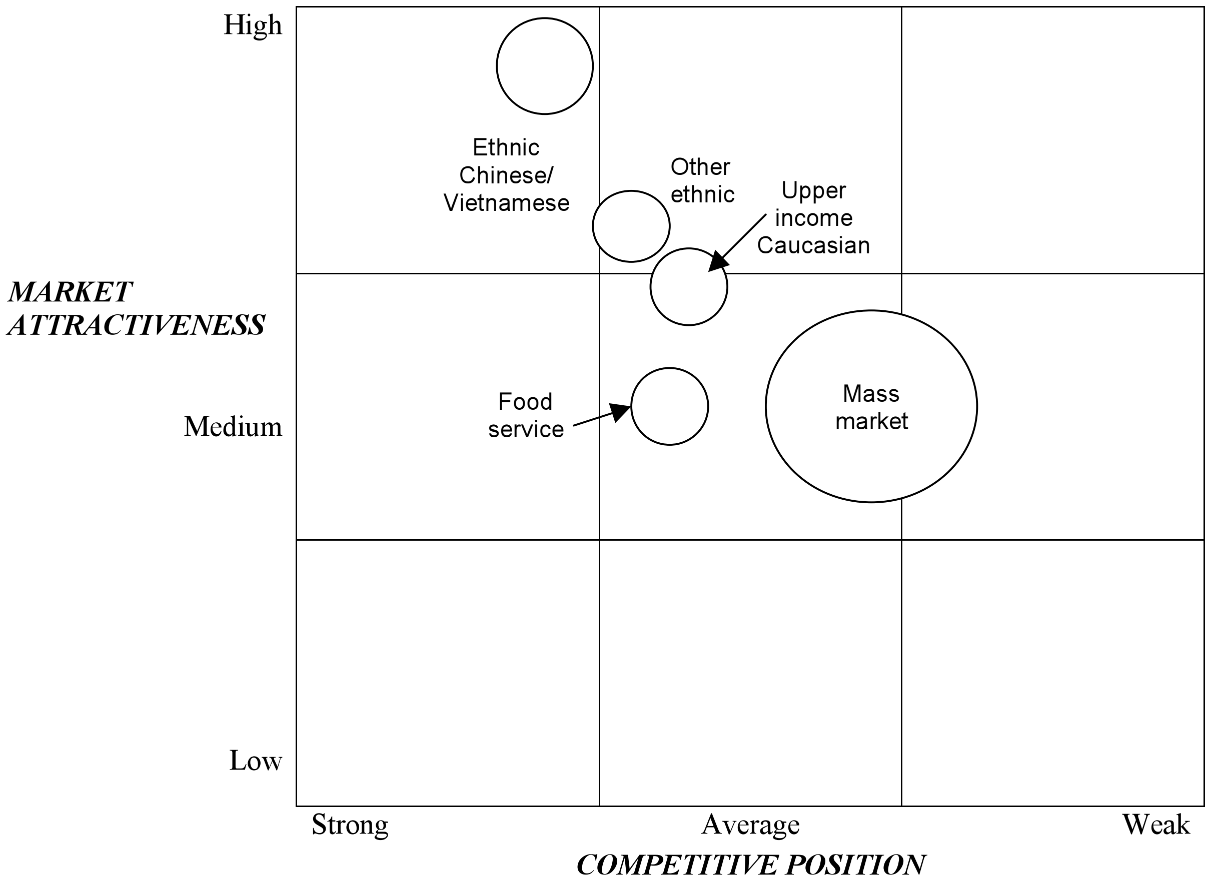
Target markets

The following target segments were identified from the market research:

Ethnic segment — Chinese and Vietnamese
Other ethnic segment
Mass undifferentiated market
Upper-income Caucasian market
Food service industry

The following matrix of market attractiveness and competitive position is based on the research data for each segment (see Appendix 7 for matrix criteria).

Table 4. Rambutans — matrix of market attractiveness and competitive position for current and potential market segments



The matrix indicates the rambutan industry has:

- a strong competitive position in the most attractive market segment of ethnic Chinese/Vietnamese;
- a reasonably strong competitive position in the attractive ethnic Asian market outside the previous segment.
- The likelihood of establishing a more competitive position in the moderately attractive upper income Caucasian segment and food service segment than in the mass market.

Note: Size of circle indicates size of market.

Marketing strategy and tactics

Any marketing strategy needs to meet the industry's requirements for profitable returns during its growth stage, by satisfying consumer needs in each sector. A concentrated marketing strategy would enable the industry to focus its resources on a few segments to expand the market.

MARKET POSITIONING
Goal: Focus on market segments where demand is strongest. Develop and maintain them with product, pricing, distribution and promotion strategies. As a segment matures, develop a new segment to keep pace with growing production volumes.

PRODUCT STRATEGIES	
Goals: Meet needs of target markets by defining consumer needs and wants and satisfying them Obtain a substantial share of the fruit market Make adequate profits, within means of industry to invest in improving product and packaging	
Strategies	**Activities**
Product quality	Establish quality benchmarks, and monitor to ensure that all product meets consumer's expectations, and can be used as the consumer intended.
	Implement a quality assurance program, e.g. SQF, to meet increasing retailer requirements for food safety certification
	Undertake an audit of the supply chain to monitor all stages of the cool chain; identify specific areas of current and potential breakdown (i.e. picking, packing, transport, storage and retail display); and develop remedial procedures and packaging
	Focus R&D on large size, symmetrical shape, longer shelf life, less adherent testa
	Avoid selling immature and overmature fruit at extremes of season
	Provide handling and storage information throughout the supply chain, e.g. handling manuals for wholesale agents and retail purchasing division, posters for retail backroom staff, and consumer information via recipe cards
	Provide only top quality fruit for sampling, to ensure that it provides the product benefits (usually appearance, flesh quality and flavour) that the target consumer would require if the fruit is to be used as intended (e.g. fruit platter for guests)
Increase product options to markets that will pay for them	Implement a grading system of several grades based on attributes that determine product performance — e.g. size, appearance, flavour, low adherence of testa — to target different market segments and enable the trade to establish price differentials. Options include: • Large, ovate–shaped, red, freestone for Asian segment; • Yellow varieties for specific ethnic Asian niches; • Red and maybe variegated varieties to develop Caucasian market
	Introduce lower-priced variations, e.g. variegated colour, smaller size, good flavour, for the most price-sensitive
Packaging	Use high quality packaging, of size, shape, material and colour to support marketing strategies to each segment, minimise damage, maximise shelf life, prevent pilfering and interference, allow inspection, and improve product performance through optimum appearance and internal quality, e.g. smaller bulk packs that retailers can display; punnets that avoid crushing of the fruit
Labelling	For buyers to identify the product and any brand
	To provide product information to trade and consumers, e.g. place of origin, date picked, form of contents, variety, storage information
Customer service	Distribute product and package range to retailers, e.g. product list
	Provide supply forecasts to wholesaler agents so they can plan promotion to buyers

Goal: Adoption by consumers of a preferred supplier through a branding strategy that they will recognise as associated with high quality product and service	
Strategies	**Activities**
Once quality benchmarks and controls are in place, develop a brand that assures consistent quality	Implement a brand with a name, symbol and design that are sufficiently memorable and distinctive to identify the supplier, indicate the product's benefits and qualities to buyers, add value, e.g. a price premium or sell first, and that can be registered. It is important that a consistent quality as required by the trade and consumers be deliverable prior to branding. Options include grower brand; grower cooperative brand; retailer brand and co-brand, e.g. grower and retailer.
	Supply quality-assured product (quality is usually a leading buying criterion, together with price) with consistent quality and sought-after attributes, i.e. colour, size, flavour, texture
	Support with brand and logo on the packaging, and marketing communications

PRODUCT POSITIONING	
Goal: Compete in each segment by targeting its consumers and positioning rambutans as an attractive product to that specific consumer group, on product attributes and product benefits, while ensuring that industry can deliver product of the required specifications	
Strategies	**Positioning**
Position on product attributes	• As colourful, sweet, juicy, small, nutritious, appealing to children, non-acid. • As attractive, different, nutritious, healthy, succulent flavour, and an easy-to-carry snack to Caucasian adults, and sweet and interesting to children • As a popular traditional fruit to the ethnic Asian market • As a fresh dessert adding variation and interest, to the food service market • As 'Australian-grown' to all markets
	Promote as 'similar to lychee' to encourage trial by overcoming lack of consumer knowledge
Position on product benefits from use	'A refreshing palate cleanser', to all markets
Position by usage occasions	As a summer fruit; as a 'non-acid palate cleanser' after spicy food to all markets; as 'an exotic touch to a fruit platter' for the upmarket Caucasian market; and as a 'traditional prayer fruit' for the Chinese New Year segment
Position by user class	Ideal for entertaining, trendy
Position as meeting specific needs	An entertainment solution — different, novel, a talking point, e.g. on a fruit platter
Position on competitive advantages against competing products	'Variety from everyday fruits', 'easy to peel'
Position as greater value than competing products (e.g. to de-emphasise price)	Promote as 'providing variety' rather than compete on price, etc. Don't risk being positioned as expensive
	Target the lifestyle of upmarket consumers — entertaining at home; social approval from introducing guests to a new food
	Promote as a fruit with similar potential to more established exotics (e.g. lychee) to convince retailers to push rambutans.
Position as different product classes	Fruit; decoration; health food; ritual prayer fruit

Identify a set of possible competitive advantages on which to build a market position	Differentiate on image, e.g. with a high quality brand.

PRICING STRATEGY	
Goal: Charge competitive prices that will return a profit to all members of the supply chain, through a retail price that is within the target consumer's capacity and willingness to pay.	
Strategies	**Activities**
Position on price only where price is important to the market.	Research the quality and price requirements of each target segment
	Target each segment with products and grades in each, to provide specific benefits that meet its particular need, indicate value for money, and allow the market to establish distinct price points (quality or presentation at each point, divided by price steps).
Reduce price margins.	Develop demand in new segments to accelerate sales and product turnover, so as to reduce waste of stock
	Reduce retailer mark-ups to recoup wholesale cost through encouraging trial by potential new consumers
	Use bulk packs to reduce packaging costs for price-sensitive segments
Stabilise pricing	Coordinate supply by industry and with trade to avoid oversupply of individual segments, price competition between suppliers, switching by consumers to substitutes when prices high, and the need to try to raise fallen prices
Differentiate between rambutan products to position each in product line to improve price:value perception	Research the quality and price requirements of target markets
	Where possible, provide high quality higher-priced product to maximise returns
	Promote lower-grade, lower-priced product to price-sensitive markets. Where value is more important, provide premium grade. Only position on price if price is important
By-product price	Price low-value product to dispose of in another market, e.g. small fruit with variegated colour as a cooking ingredient for the food service industry
Plan to steadily reduce costs to improve price competitiveness	Grower cooperatives to share packaging, freight and promotional costs
	Economic packaging, e.g. bulk packs, large punnets; avoid over-packaging and packing over weight
Satisfy consumer buying criteria	As price is a key selection criterion, support discounting to attract attention and encourage switching from other products
	Estimate demand and cost at each price
Maximise return on investment	Use premium products to obtain premium prices

DISTRIBUTION STRATEGIES	
Goal: Ensure an efficient low-cost distribution system that makes rambutans available to the consumer as and when required, where each activity in the distribution channel is performed by the most efficient and effective channel member for that role.	
Strategies	**Activities**
Ensure supply as new markets developed	Build production capacity
Push into more retail outlets, distributors channels	Support trade efforts to expand the market

Service to distributors	Coordinate product deliveries to wholesalers with main buying days
	Ensure supply to allow agents to supply retailers
Ensure efficient distribution with cost minimisation at each level of supply chain	Use group power to negotiate lower freight rates for larger volumes
	Use experienced wholesalers with established buyers.
	Periodically monitor chain costs to identify potential cost savings
	Coordinate supply, e.g. through a marketing cooperative, to match supply to demand and avoid saturating market segments
Supply current Asian ethnic market.	Supply agents who in turn supply: • Regular outlets for ethnic Asian consumers • lower-price, low-service, low-cost retailers, e.g. supermarkets, for the habitual rambutan consumer who knows enough to select from the display • low-price outlets, for the price-sensitive prepared to travel for a discount
Supply ethnic segment outside current segment	Supply agents who reach major ethnic markets, e.g. Paddy's Markets in Sydney, Victoria Markets in Melbourne
Supply potential Caucasian market	Supply wholesalers who serve high-service fruit & vegetable retailers who can educate potential consumers; and fresh produce markets where consumers expect to find new foods
	Consider home delivery services, e.g. greengrocer.com to target high-income Caucasians who dislike shopping or are time-poor
Supply to food service industry	Promote to provedores, and to restaurants that buy direct

PROMOTION (advertising, personal selling, sales promotions, public relations)	
Goals: Shift consumers from potential buyers with low awareness to rambutan consumers Communicate the benefits of rambutans to consumers in each target segment to establish appealing image and competitive. Influence all stages of the purchase decision towards adoption of rambutans by each segment	
'Push' strategic approach: Direct activities at wholesalers, retailers and provedores, using personal selling, promotion and publicity. They in turn can target the consumer with selling, advertising, promotion.	
'Pull' strategic approach: Direct promotion at consumer to create awareness and demand from wholesalers and retailers who will in turn order product from the industry.	
Strategies	**Activities**
Promotional message	Demonstrate how rambutans will deliver specific benefits identified as important to each target segment, e.g. practical benefits, such as flavour, shelf life, freshness, decorativeness; and emotional appeal — 'be the first', 'surprise your guests'
	Liken to similar products, i.e. lychee, to encourage trial
	Adopt a common theme for all promotional literature — posters, recipe cards, packaging, labelling, etc.
Public relations	Identify key media that reach and influence target markets, wholesalers, retailers and their staff, provedores and the food service industry; develop a media list, including trade magazines and in-house consumer magazines of supermarket chains
	Develop relationships with food writers, TV chefs, and promotion staff of wholesale market authorities who provide media stories
	Issue regular media releases, including start of season and before peak season, and to mark any newsworthy event

	Supply media releases to Market Authority marketing staff to include in their promotions
	Offer articles to supermarket chain's promotions staff for their consumer magazines
	Develop a media kit to hand out at promotions and events, and sample packs for key media
	Supply TV chefs with samples and information
	Ask chefs to develop recipes using rambutans, e.g. for chef competitions, and supply them with fruit to use
	Maintain current consumers through news stories, TV food programs and new 'how-to-use' ideas
Sales promotion (reduce as demand develops)	Develop and distribute point-of-sale material with product and how-to-use information, e.g. recipe cards and posters, in consultation with the trade
	Attract attention and provide information through product demonstrations at stores, food fairs, chef competitions
	Use restaurant promotions targeting influential consumers to build demand through word of mouth; supply information kits; coordinate promotional fruit through wholesale agents
	Engage specialists in product demonstrations; coordinate demonstrations in stores, at food events, etc., with agents supplying demonstration fruit and sufficient stock, choosing venues and times to reach the target consumers
	Liaise with wholesalers to ensure that optimum quality product is used for sampling
	Repeat product trials until rambutans are adopted by consumers
	Offer short-term incentives, e.g. product demonstrations
Personal selling	Develop one-on-one interaction with trade to attract attention and persuade it to carry rambutans; support (e.g. with sampling material, push to retailers), and access market feedback.
	Supply trade with product information kits — product list, storage information, package options, nutritional profile, handling and storage information
Advertising	Target mass market via media — probably for store discounts only, and for reminding current consumers
Cooperative promotions	Run cooperative campaigns with wholesalers, retailers and provedores
	Provide free high quality fruit for demonstrations, store giveaways and promotions
Goal: Establish awareness and understanding of any branding strategy	
Strategies	**Activities**
If a brand can assure quality, promote strongly	Associate brand with any promotion, event, promotional material
Goal: Evaluate effectiveness of promotion in achieving objectives	
Strategies	**Activities**
Evaluation and control	Establish clear objectives for promotion
	Compare results with expected performance as stated in objectives
	Evaluate overall effectiveness and revise strategies as needed, to ensure that all promotion is both effective and cost-effective
	Before campaign, establish clear objectives for promotion
	After campaign, compare results with expected performance as stated in objectives
	On-going evaluation overall effectiveness and revise strategies as needed, to ensure that all promotion is both effective and cost-effective

MARKETING INFORMATION	
Goal: Develop a continuous mechanism within the supply chain for feedback on sales and marketing	
Strategies	**Activities**
Internal data	Develop systems within the industry to obtain market and production data, e.g.: • production forecasts • a database of key information — production volumes and costs, labour costs, transport used and fees, sales per agent for each product line, prices received. Analyse to monitor consumption and demand trends in each market segment. Assess profitability; and identify opportunities to improve cost efficiencies. • establish a report system with wholesale agents, e.g. feedback sheets for each consignment, and digital photos showing product quality, where possible, to track and remedy quality problems • record all problems — product quality, transport, client service, price slumps, backlogs, etc. • Conduct end-of-season interviews with agents and major retailers to determine whether product is meeting the requirements of each target segment
Marketing intelligence	Develop relationships with wholesalers and with supermarket and other chains, through market visits, grower meetings and regular phone contact
	Seek information on competitive issues, market developments, supply issues (e.g. quality), etc. from growers, the trade and consumers
	Distribute market information to all members of marketing groups via group coordinators
	Participate in local food promotions to obtain feedback from customers and the food service industry
	Commission research into the quality and price requirements of target markets every one to two years
	Monitor issues such as food legislation, e.g. food safety requirements, quality assurance
	Monitor potential imports

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6. Appendices

Appendix 1. Case studies – lychees and mushrooms

These case studies for lychees and mushrooms have been prepared to identify the strategies that new fresh food industries have used to develop their markets, and determine the success of those strategies. Their experiences may provide a useful guide for the rambutan industry in developing new markets.

Both lychees and mushrooms were available to the Australian consumer only as canned imports for many years before domestic production was established, and consumed mainly by immigrants from countries where they were traditional foods – South-East Asia for lychees and Europe for mushrooms.

Industry structure
Both industries have strong industry associations. Most mushroom producers belong to the Australia Mushroom Growers Association (AMGA) which represents the industry in wider industry issues, and allocates a voluntary grower levy across research and development, marketing, representation, education and training.

The Australian Lychee Growers Association (ALGA) spends levies collected by Queensland Fruit & Vegetable Growers on activities to further the wider industry, i.e. research and development, international market access, chemical registration, promotion and agripolitics. Most lychee growers also belong to one of two main marketing groups, which administer tight quality controls and co-ordinate supply to markets.

Supply and production
Lychee is a small developing industry, with production recorded at 3000 tonnes in 1997, and a harvest of around 5000 tonnes anticipated for the 2000-2001 season. Lychees are grown from Far North Queensland to northern NSW, with the variety of climates, together with early mid and late season varieties, extending the season to five months. However, according to the industry, erratic and biennial cropping and pest incursion have resulted in fluctuating supply volumes which have restricted the industry's ability to service existing markets and develop new markets, and resulted in funds and industry attention being concentrated on research and development at the expense of marketing.

The mushroom industry has grown over 40 years to become Australia's third largest vegetable industry. It is able to maintain year-round stable supply by producing mushrooms in an enclosed controlled environment, independent of seasonal fluctuations. Production costs are raised by the need to handpick each mushroom. AMGA provides industry training packages to educate new and regular staff on picking, grading and packing.

Markets and competition
The main market for lychees continues to be ethnic Asians, with some use by restaurants and hotels. Findings from a 1990 market research study in Sydney, Melbourne and Brisbane indicate that while 57% of consumers had heard of lychees, only 9% of consumers interviewed had tasted (and bought) fresh lychee, mainly 26-35 year olds with higher incomes (Greer & Smith, 1990). Since then, consumption has expanded into the mass market with lychees now widely known and bought. The trade attributes this to the expansion of volumes and distribution, together with falling prices. Nevertheless, the market continues to class lychees as an exotic fruit, because of their relatively short season and high prices. In the Caucasian market retailers perceive lychees as meeting consumer requirements for new and interesting products, and retailers' need to offer variety.

According to the lychee industry, annual growth in domestic lychee sales indicates that consumer demand is broadening beyond the ethnic markets, but that the market's potential is not being realised because of insufficient promotion.

In contrast, fresh mushrooms have become a standard household vegetable in Australia, with industry research showing that 55% of Australians eat mushrooms every week.

Product strategies
Both lychees and mushrooms are highly perishable, so packaging is aimed at maintaining product quality by protecting it from water, air, heat and pressure in order to retain colour, weight, flavour and freshness. Both pack on-farm directly into display boxes to minimise bruising from handling and prolong shelf life.

Lychees
Lychees are mainly supplied loose, with leafy panicles at Chinese New Year. In Asian markets they are generally sold on the panicle, and are an option worth trialing for local markets. According to retailers, preliminary trials of panicles in the Australian domestic market have met with a good response and a price premium. First Class lychees are usually packed in a branded box, with a generic box for Second Class. The ALGA provides a minimum grade standard, with growers and groups often grading higher.

As dehydration turns lychees skin brown or black, reducing shelf life, appearance and saleability, they are usually packed in Krispibags within a bulk box, to allow retailers to open a single bag for display, and protect the rest from air-conditioning. Although research trials have found low density polythene bags to better enhance shelf life, retailers prefer to display perforated condensation-free bags such as 'krispi' so consumers can see the fruit.

Retail chains prefer 5kg boxes, although smaller packs, e.g. 2kg, have proved suitable for take-home packs. 250g punnets have not succeeded outside smaller specialty shops, because retailers are reluctant to absorb the extra costs from labour and packaging, consumer acceptance has been low, and fruit presentation has been affected by condensation. Although a 15kg acrylic retail dispenser developed for lychees has proved successful at maintaining skin colour, its use has not expanded beyond some self-serve retail stores because large retail chains prefer to have bulk displays, and rely on speedy turnover to avoid fruit deterioration.

The lychee industry has had on-going cool chain problems. Many stores are selling lychees with low quality and poor appearance, which has lowered consumer expectations and made it difficult for the industry to establish a premium-price market position for high quality fruit. According to retailers, these problems are caused mainly by transportation with incompatible fruits requiring different temperatures, such as mangoes; insufficient pre-cooling on-farm; and air freight containers left standing in the heat. Consignments need to be co-ordinated between grower and distributor to avoid fruit being left in uncooled locations, e.g. overnight.

Over the past ten years, the major lychee marketing groups have developed quality assurance standards which incorporate food safety, interstate certification and cold chain standards, with compliance procedures. These are reviewed annually to address the entire supply chain from orchard to market floor.

The industry is continually looking to improve quality standards, improving efficiency and reliability, and find opportunities to value-add. Other options being considered include cluster packing sheds, computer-aided marketing, training of specialist contract service providers, bulk purchasing, group record-keeping, and promotion of an industry standard fruit description.

The industry is considering adopting environmental and social standards (fair wages, safe working conditions, etc.) to use in promotion, together with Australia's ' Clean Green' image, to compete for market share against international competitors, not only on the International market but on the domestic market, should fresh imports be permitted. The industry is following the lead of a European company 'OK BANANAS', which sells 'Bananas With A Social Conscience' at a premium price.

Mushrooms
The mushroom industry is based on common white mushrooms, 95% being consumed fresh with the rest processed. They are graded as 'buttons' (small and unopened); 'cups' (cap opening to reveal some gills); or 'flats' (fully open); with out-of-grade mushrooms classed as 'factory'.

Mushrooms are picked by hand and packed directly into the box to minimise handling and bruising.

The mushroom industry has been implementing a national grading standard to assure consistent product descriptions across the industry. This is based on consumer requirements, with several grade categories so retailers can display a range of boxes of loose mushrooms of varying size, but with size consistent within each pack.

As the mushroom industry matures, exotic mushroom varieties have been introduced. This product differentiation has provided a premium priced product, that meets consumers' requirements for variety and interest. Also, exotic varieties enable the industry to develop market segments, e.g. Shitake, for the growing Asian food market. These are retailed by variety, size, form (whole, sliced), in pre-packs that include punnets and trays.

For mushrooms, continuing variable quality at the retail display has resulted in the industry carrying out a research study of the cool chain, from grower to wholesaler to supermarkets and independent retailers. Datalogging has identified temperatures that are too high, and which are variable.

Pricing strategies

Lychees
Lychee prices are usually highest for the first fruit in November. When volumes peak and prices drop in December, growers tend to export.

Price premiums are obtained through meeting ethnic Asian consumers' requirements for strong red skin colour, firm flesh, aromatic flavour, sweetness, symmetrical shape, high proportion of flesh to seed, and small seed; and through meeting wholesalers' and retail buyers' requirements for packs of high quality fruit of consistent size and appearance. Some growers differentiate their product, e.g. by laying a lychee branch over the fruit. The marketing groups rely on their quality assurance and recognition of their single brand.

Lychees are usually more expensive than other seasonal fruits such as stonefruit, and are perceived by consumers as exotic. However, costs are increased by the comparatively high costs of production packaging, and the need for continuous refrigeration.

Mushrooms
Because the industry can stabilise mushroom supplies, prices are relatively stable year-round. Prices are highest for buttons, averaging $4.80 to $4.00 per kilogram in recent years, and lowest for flats. Small margins require substantial on-farm efficiencies.

Distribution strategies

The lychee industry sells most product through its marketing groups to wholesalers, usually specialising in exotic fruits, and retail chains.

Most mushrooms are distributed via wholesale market agents; with the rest through secondary wholesalers supplying independent retailers and food service outlets: direct to supermarket chains; and direct to processors. The bulk of its production is retailed through supermarket chains.

Promotional strategies

Lychees

The lychee industry has used some promotion, mainly recipe cards. However, because most levy funds have been allocated to research and development, there has been no generic promotion, although the marketing groups have established brand awareness with the trade as a quality assured product. The industry is planning to review this situation and consider promotional funding.

When supply volumes have allowed, retail chains have used advertising and sampling to generate strong demand and sales from non-Asian consumers.

Mushrooms

The mushroom industry, from its early growth stage, has run a consumer educational campaign to build on the awareness and taste established by canned mushrooms. It continues to run generic promotions through the AMGA, and co-operative promotions with supply chain partners and other industries such as the Australian native food industry. Advertising, recipe cards, and product labels have positioned mushrooms as:

- A nutritious and versatile food, and value for money' (rather than price). Usage suggestions including salads and barbecues;
- A convenient food for the time-poor with the 'Mushrooms make the meal … in minutes' campaign;
- A traditional food from Tuscany in Italy (taking advantage of current interest in Tuscany, fuelled by cookery and travel books), with a 'Taste of Tuscany' tag on exotic lines such as porcini and Portobello.

Exotic mushrooms are labelled with descriptions of texture and flavour and suggested uses.

Consumer promotions are aimed at increasing individual usage and purchase size, e.g. consumer in-store and live cooking demonstrations, sometimes by hotel and celebrity chefs, at stores, and markets.

- Integrated advertising and publicity campaigns, using television, including TV chefs; radio; and print media, including women's magazines; and maintaining a network of food and cookery writers;
- Chef competitions between guest chefs and media personalities;
- Restaurant promotions, featuring menu dishes, cooking classes and tastings;
- A mushroom feast at the Adelaide Festival Centre;
- Mushroom Month annually across Australia, including television advertising and cooking segments, cooking demonstrations and sampling, farm walks, and menu promotions;

Results are tracked through market research, including consumer surveying.

Food service industry promotions include chef demonstrations to the Food Media Club of Australia, chef training schools, and a Chefs' Association conference.

The AMGA website www.oz.mushrooms.com.au targets consumers and chefs with production information, seasonal recipes, product and handling information, and recipes and usage ideas.

According to a major retail chain, the mushroom industry has been exemplary in its market development, particularly in the use of promotion to overcome lack of awareness, through consumer promotions and food service industry activities including education of chefs and featuring of mushrooms in restaurant promotions.

Appendix 2. Product description

Rambutan is a small ovate-shaped fruit, with a thick skin, densely covered in spinterns or soft spines. Outer colour ranges from red through pink to yellow, and can be a single colour such as the 'Classic Red' group of varieties, or variegated such as *Rongrien*. Its flesh is thick, pearl white, crisp-textured and high in vitamin C, calcium and phosphorus (Vinning, 1997). The flesh adheres to the seed in clingstone varieties, but in freestone varieties it detaches cleanly, with the brown paperlike testa that covers the seed still attached to it.

The Australian industry produces mainly 'Classic Red' varieties, with *Rongrien* and *R9* leading the variegated cultivars. Small quantities of yellow fruit, mostly *R156* (yellow) and *R163*, are sold mainly in local markets, because their thinner skin makes them susceptible to papaya fruit fly, so they fail to meet Interstate Certification Assurance (ICA) requirements allowing access to some states. Also their particularly fragile spinterns are more difficult to clean and they dehydrate more quickly than red.

Several of these varieties are particularly popular in major producing countries:

Malaysia — *R9*, *R134*, *R156*
Thailand — *Rongrien*, the leading variety (followed by *Chompoo*, *also called Seechompoo*)
Singapore — *Jit Lee*

Indonesia and Malaysia also produce yellow varieties — *Rambutan rapiah* in Indonesia) where it is preferred because of its flavour, and *Muar Gading* in Malaysia, (Market Asia Agribusiness Information 'Postharvest Handling of Rambutan').

Unless stored at 10–15 degrees Celsius, and in humidity of no less than 95%, rambutans have a very short shelf life, with dehydration causing blackening of the skin, drying and hardening of the spinterns, and breakdown of the flesh. This is accelerated by removal of the stem (Alexander *et al.*, 1982). Also, the storage life of the fruit declines with increasing maturity (Landrigan, 1994*)*.

Quote from "Superficial Browning of Rambutan (*Nephelium lappaceum* L.)" M. Landrigan, PhD submitted to the University of Western Sydney, Richmond, Australia, 1994.

In Australia, the main presentations packed on farm are:

- loose fruit, pattern-packed into 2.5 kg single-layer trays lined with polythene wraps, overwrapped with Vitafilm;
- loose fruit, pattern-packed into punnets overwrapped with Vitafilm;
  - square 850 g punnets, packed six to a 5 kg box;
  - square 250 g strawberry punnets, packed ten to a 2.5 kg pack;
  - some square 500 g punnets — usually smaller fruit;
  - some square 1 kg punnets.

  A 250 g Europunnet, a longer, flatter and recyclable punnet that takes a single layer of rambutans, is being trialed.
- panicles with leaf in bulk box for Chinese New Year.

Fruit is generally sold loose in the Philippines and Thailand, and on the panicle in Malaysia and Indonesia (Alexander *et al.*, 1982).

Table A2-1. Australian supply season

REGION	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
Far North Queensland												
Northern Territory												

Note: Bold shading indicates peak supply volumes
Source: Y. Diczbalis, Department of Primary Industries, Queensland.

Table A2-2. Characteristics of main rambutan varieties produced in Australia

Variety	Size (mm)	Pericarp (rind) colour	Spintern colour	Rind thickness	Mean weight (g)	% of aril (flesh)	Flesh	Brix (sugar)	Clingstone/ freestone	Testa
Binjal	48/40	Orange/red	Green tips	Thin	32–41	41	Crisp	18–21	Clingstone	None
Jit Lee (Deli)	60/40	Crimson/red	Green tips	Thick	30–55	35	Crisp, juicy	20–22	Freestone	Slight
Rongrien	53/36	Bright–dark red	Yellow with green tips	Thin	32–37	41	Crisp, sweet	19–21	Freestone	Moderate
R9	65/40	Pink/Crimson	Red	Very thick	40–51	36	Crisp, Juicy	20–23	Freestone	Slight
R134	56/40	Red/orange	Red with green tips	Thick	34–46	45	Very juicy	20–22	Freestone	Slight
R156 (red)	48/40	Pink/red	Green tips	Thin	34–43	43	Very juicy	20-22	Medium	Slight
R156 (yellow)	50/45	Yellow/orange	Slightly green tips	Thick	38–47	54	Crisp, juicy	29–22	Freestone	Moderate
R162	46/40	Yellow/red	Red with green tips	Thick	31-56	47	Crisp, juicy	18-21	Freestone	Slight
R167	58/42	Crimson	Red with green tips	Thick	37–46	34	Crisp	20–23	Freestone	Slight

Sources: Lim, T.K. & Diczbalis, Y, 1998: 'Rambutan' in *The New Rural Industries— a handbook for farmers and investors*, Rural Industries Research & Development Corporation.
Diczbalis, Y., 2001.

Appendix 3. Countries/territories/regions with domestic markets for rambutans

Country	Domestic production	Annual production	Comments
Borneo	✓	n.a.	
Brunei	✓	n.a.	Imports from Sabah, Sarawak and occasionally Australia
Burma	✓	n.a.	
Cambodia	✓	n.a.	Has imported small volumes
Canada	✗	nil	Imports for ethnic Asian market, and some hotels and caterers for festive decoration
Central America	✓	n.a.	Probably for export
China	✓	n.a.	Imports rambutans, including canned
France	✗	nil	Imports canned rambutan from Thailand for ethnic Vietnamese, Cambodian and Thai populations
Hawaii	✓	n.a. (small, but growing)	Consumes most of domestic product; is exporting irradiated rambutan to USA, to circumvent phytosanitary ban
Hong Kong	✓	nil	Imports rambutans
Indonesia	✓	340 000 tons in 1996	Much of production consumed domestically; also exports
Japan	✓	nil	Imports small volumes of canned and frozen; started fresh imports from Australia in 2000
Laos	✓	n.a.	Imports, also re-exports
Madagascar	✓	n.a.; small industry	Exports to Europe
Malaysia	✓	120 000 tons in 1996	Also a major exporter and importer
Mauritius	✓	n.a.; small industry	
Netherlands	✓	nil	Imports fresh and canned mainly for ethnic Indonesian market
Philippines	✓	Approximately 500 tonnes in 1998	
Middle East	✗	nil	Import fresh and canned for expatriate South-East Asian communities
Singapore	✓	n.a.; small and declining	Major importer for Chinese and Malay consumers
Sri Lanka	✓	n.a.	Some exports
Taiwan	✓	nil	Imports fresh; rambutans considered a poor substitute for lychees
Thailand	✓	668 000 tonnes in 1995	Large domestic market
United Kingdom	✗	nil	Imports canned rambutan
USA, excluding Hawaii	✗	nil	Imports canned rambutan, some covert fresh imports of fresh product for ethnic Asian consumers, recent fresh irradiated imports from Hawaii
Vietnam	✓	n.a.	

n.a. = not applicable.

Source: Vinning, G., ‘A Market Compendium of Tropical Fruit’, *TPMN Market Survey: Rambutan*.

Appendix 4. Selected ethnic distribution by geographic region — Sydney and Melbourne

In 1996 the ABS census showed that 122 080 people living in Sydney had been born in India, Indonesia, Malaysia, the Philippines and Sri Lanka, and 190 559 people had been born in China (excluding Taiwan), Hong Kong, Singapore and Vietnam — all countries where rambutans are a traditional fruit. The second group is considered the main market for rambutans, while the first group is not so well recognised. The graph below aims to determine whether the first group would have access to rambutan distribution through living in the same localities as the second group.

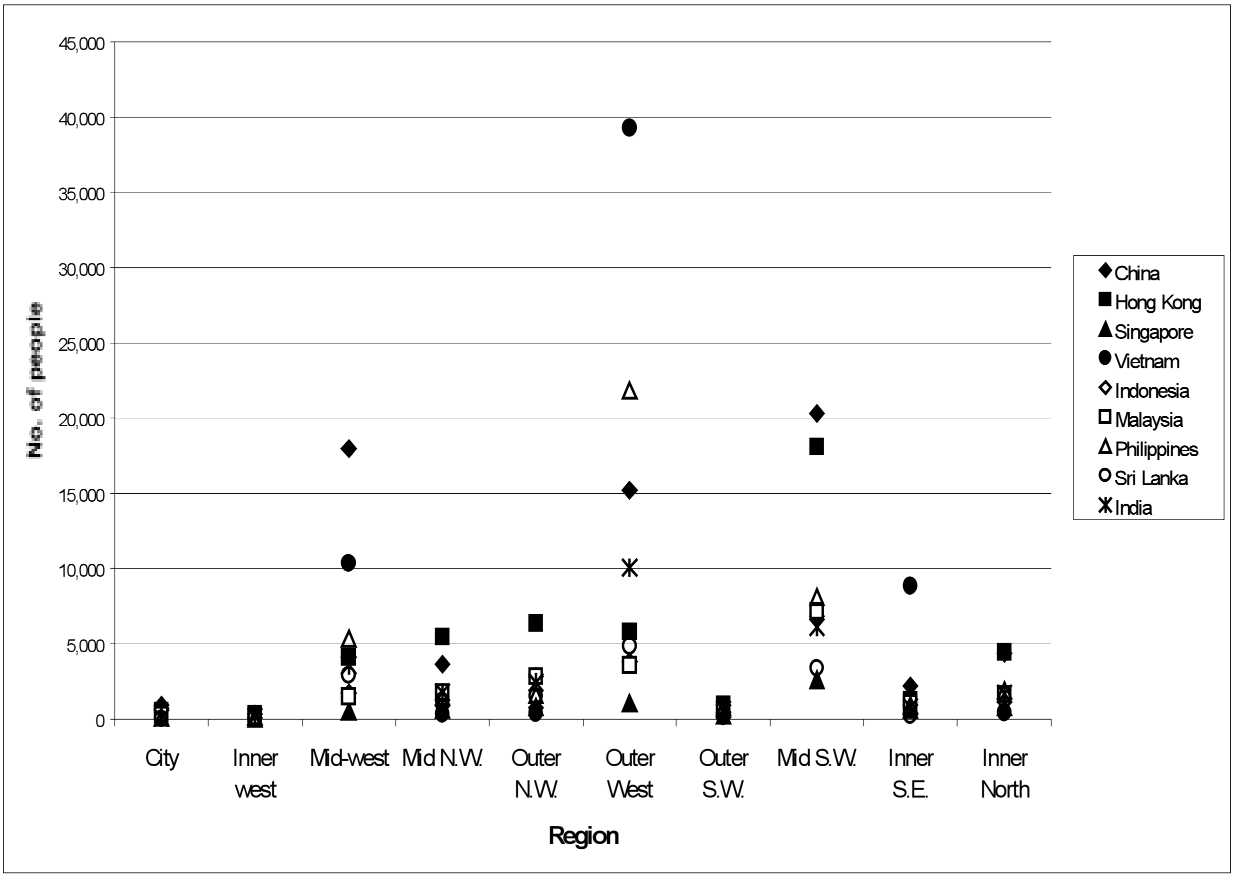


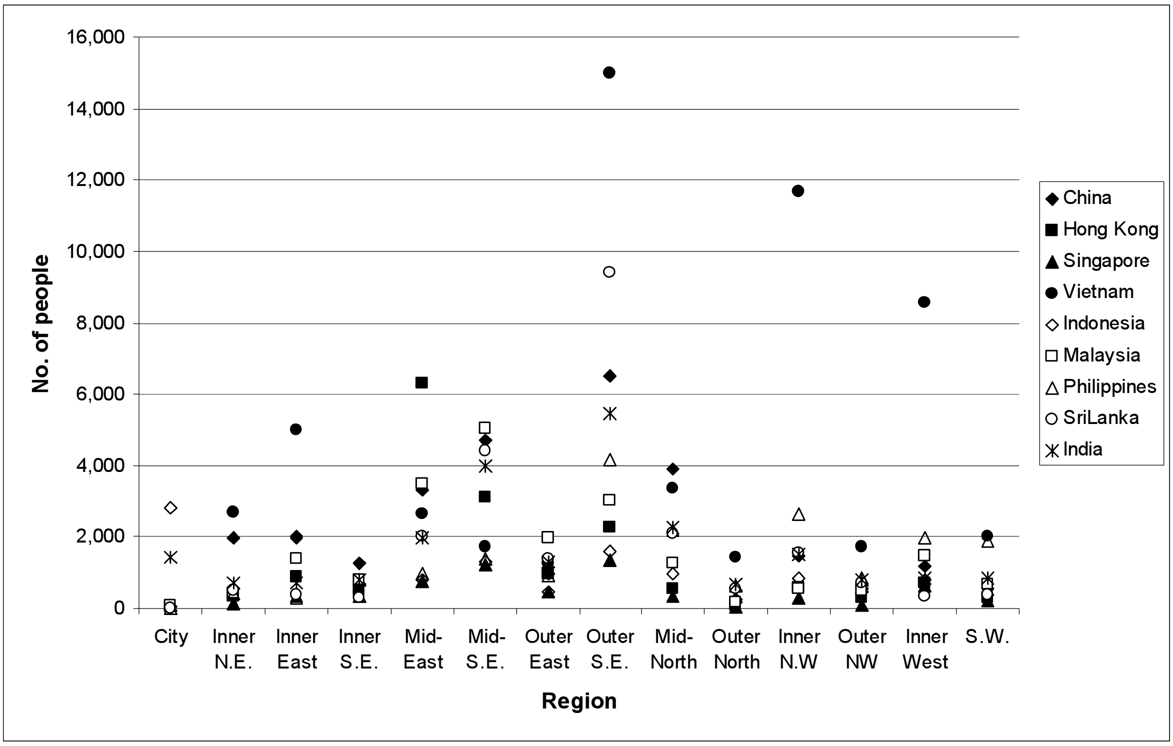
Figure A4-1. Selected ethnic distribution by Sydney regions

Legend to Sydney region
City
Inner west — Drummoyne, Hunters Hill
Mid-west — Ashfield, Auburn, Burwood, Canterbury, Concord, Strathfield
Mid north-west — Ku-ring-gai, Ryde
Outer north-west — Baulkham Hills, Hornsby
Outer west — Bankstown, Blacktown, Fairfield, Holroyd, Liverpool, Parramatta, Penrith
Outer south-west -— Camden, Sutherland Shire
Mid south-west — Botany, Hurstville, Kogarah, Leichhardt, Marrickville, Randwick, Rockdale
Inner south-east — South Sydney, Waverley, Woollahra
Inner north — Lane Cove, Manly, Mosman, North Sydney, Pittwater, Warringhah, Willoughby

The graph confirms the presence in Sydney of substantial numbers of people born in China, Hong Kong, Singapore and Vietnam wherever there are significant numbers of people born in the Philippines, Sri Lanka, Malaysia, India and Indonesia.

In 1996 the ABS census showed that 120 207 people living in Melbourne had been born in India, Indonesia, Malaysia, the Philippines and Sri Lanka, and 109 234 people had been born in China (excluding Taiwan), Hong Kong, Singapore and Vietnam. Again, the graph aims to determine whether the first group would have access to rambutan distribution through living in the same localities as the second group.

Figure A4-2. Selected ethnic distribution by Melbourne regions



Legend to Melbourne regions
City
Inner north-east — Essendon, Northcote
Inner east — Hawthorn, Kew, North Yarra, Richmond
Inner south-east — Prahran, St Kilda
Mid-east — Box Hill, Camberwell, Nunawading, Heidelberg
Mid south-east — Glen Eira, Sandringham, Brighton, Caulfield, Waverley, Monash, Malvern
Outer east — Croydon, Knox, Ringwood
Outer south-east — Kingston, Frankston, Dandenong
Mid-north — Brunswick, Preston, Coburg, Moreland
Outer north — Broadmeadows
Inner north-west — Keilor, Mooney Valley, Maribyrnong
Outer north-west — Whittlesea, Sunbury
Inner west — Sunshine, Flemington
Outer west — Craigieburn
South west — Altona, Werribee, Williamstown, Port Phillip West

Again, the graph confirms the presence of substantial numbers of both groups living in the same localities.

Appendix 5. Retail store observations, 2000

Store description	Rambutan display	Display position
SYDNEY		
Fruit & vegetable store, Northbridge (North Shore)	250 g punnets	Amongst loose lychees, mangosteens, berries, and other high-priced fruits
Chain of large fruit and vegetable stores, various areas	Bulk displays of loose at $8.99/ kg, some 850 g punnets	Usually with lychees, longans at $7.99/kg, grapes at $2/kg, stonefruit, fujifruit
Strip of small Vietnamese greengrocers and mini-supermarkets, Flemington	Mainly 850 g punnets; some loose at $4 to $5/kg	With loose lychees and longans
Supermarket, central business district	Bulk display at $12.99/kg	Tropical section, next to loose lychees at $7.99/kg
Paddy's Market, Haymarket (Chinatown)	Bulk display at $5/kg in trays with Vitafilm pushed back; one tray labelled 'very sweet'	With loose lychees, longans @ $7--$8/kg grapes, stonefruit
Paddy's Market, Flemington, Friday morning	Bulk displays	With lychees, longans @ $8/kg, other Asian fruits, stonefruit, grapes
Asian supermarket, Haymarket	850 g punnets @ $8	Longans @ $8/kg
Fruit barrows in central business district	250 g punnets @ $3.99	Lychees
MELBOURNE		
Fruit & vegetable store, Essendon, near railway station	None	Some lychees
Fruit & vegetable store, Carlton	Single open 850 g punnet of rambutans at $15/kg (price not advertised)	With traditional fruits
Fruit & vegetable store, Toorak (main road)	250 g punnets @ $3.50	With bags of lychee at $7.50/kg, custard apples, fujifruit, mangosteens
Prahran Market	Only one stand had rambutans - a ingle open tray of loose fruit, with some blackening of exposed spinterns, at $15/kg	With lychees @ $10/kg (the same price as other stands throughout the market)
Market stalls, Victoria Market, Tuesday morning	Loose trays, Vitafilm removed, at $8/kg A tray with half rambutans, half lychees, with the skin of a rambutan torn roughly to reveal the flesh @ $8/kg 250 g punnets	With longans and lychees
Market stall in organics section, Victoria Market, Melbourne	Tray of very fresh-looking rambutans, certified organic, at $16/kg	
Two department stores, Melbourne city	250 g punnets in small fruit and vegetable sections of food halls	
Supermarket, near Prahran Market	Mainly trays of loose fruit; some punnets at $1.99	With longans at $8/kg, lychees

Organic fruit and vegetable store, Malvern	Tray of certified organic rambutans, displayed with Clingwrap partly pulled back, at $15/kg	
Vietnamese fruit & vegetable stores and greengrocers, Victoria Street, Richmond	850 g punnets of large fruit at $6.99 to $9.99/kg 500 g punnets of smaller fruit at $5/kg 850 g punnets, roughly packed, some in a flower pattern Box of elongated rambutans All had loose rambutan, usually at $8/kg	With longans @ $9.99/kg, lychees @ $8/kg, stonefruit, grapes, etc.
Let's Eat, Prahran Market	Small display box. Rambutans and small pumpkins decorating the dessert bar in the takeaway food section.	Wide array of fruit in similar small boxes.

Appendix 6. Media list

ETHNIC PRESS

Chinese

The Australian Chinese Times, circulation 10 000 National weekly Chinese newspaper. Target: Australian Chinese community. Publisher: AC Media, Sydney, phone 02 9211 7555; fax 02 9211 7580.

The Australian Chinese Age, circulation 10 000. Weekly Melbourne suburbs & metropolitan areas, community & local news. Publisher: The Australian Chinese Age Group, phone 03 9663 8181; fax 03 9663 3696.

Australian Chinese Daily, circulation 25 000. National, Monday–Saturday. Phone 02 9261 3033; fax 02 9261 3525.

The Chinese Australian, circulation 11 300. Includes community news, leisure. Phone 03 9663 1833; fax 03 9663 1033.

Chinese Herald, circulation 23 000. News, entertainment, restaurant guides, etc., free translation service. Publisher: The Chinese Herald, phone 02 9281 2966; fax 02 9281 8328.

Chinese Post, circulation 13 800. Weekly, includes news, entertainment, etc. Publisher: Chinese Post, phone 02 9267 6288; fax 02 9267 6818.

Melbourne Chinese Post, circulation 13 000. Fortnightly, Melbourne metropolitan area, Chinese community. Publisher: Melbourne Chinese Post, phone 03 9663 8455; fax 03 9663 8209.

Philippines

The Philippine Community Herald, circulation 6 000. Monthly, community news and events. Phone 02 9725 7722; fax 02 9725 7722.

The Philippine Community News, circulation 3000. Publisher: Sampaguita Publications, phone 02 9637 6474; fax 02 9682 4062.

Indian

Hindi Samchaar Patrika, circulation 20 000. Monthly, all capital cities, with news, entertainment etc. Publisher: Asia Pacific Times, phone 02 4736 1904; fax 02 4736 8074.

Indian Post, monthly, distributed Sydney, Melbourne, Canberra, in English. Circulation 10 000. News, reviews. Publisher: Consolidated C. Holdings, phone 02 9742 6106; fax 02 9642 1117.

Indonesian

Warta Berita Aquila, circulation 15 000 General news, communities issues. Fortnightly, national distribution. Phone 02 9560 8510; fax 02 9564 0454.

Japanese

J.A. News (*The Japan Australia News*), circulation 15 000. Bilingual, includes general interest topics and information. Free distribution monthly. Publisher: J.A. Net, phone 08 9355 0111; fax 08 9355 0333; e-mail janews@wantree.com.au

Southern Cross Times, circulation 24 000; national distribution monthly. News, day-to-day information, shopping, lifestyle. Publisher: The Southern Cross Times, phone 07 3221 2551; fax 07 3221 1472.

Vietnamese

Chieu Duong (*The Sunrise Daily*), circulation 98 000. Daily news, art and culture. Publisher: The Sunrise Daily Newspaper Pty Ltd, phone 02 9725 6444; fax 02 9725 6446.

Viet Luan (The *Vietnamese Herald*), circulation 20 000. Tuesday & Friday. Publisher: Vietnamese Pty Ltd, phone 02 9796 3922; fax 02 9707 1572.

Vietnam News Today, circulation 15,000. National weekly. Phone: 02 9600 6846; fax 02 900 8085.
MAINSTREAM PRESS

Upmarket

Australian Financial Review, phone 02 9282 2822. Contact Food Writer.

Australian Gourmet Traveller, monthly magazine — food, wine and travel. Readership: 25 to 49 year olds, 47% AB (the top 20% in terms of education, income and job status). Circulation: 87 422+ (Australian Bureau of Circulation —ABC). Publisher: ACP Publishing, phone 02 9282 8000. Contact Food Editor.

marie claire lifestyle, bi-monthly — interiors, food, wine, gardening, travel. Readership: women 25–49, AB&C quintiles (higher education, income, job status). Publisher: Murdoch Magazines, phone 02 9692 2000.

New Woman, monthly magazine — lifestyle, fashion, health, beauty, career, money, food, relationships, travel, self-development. Readership: "30-something women". Circulation: 106 944 (ABC). Publisher: Murdoch Magazines. Contact Food Editor, 02 9692 2000.

The Australian, phone 02 9288 3000. Contact Food Writer, Cherry Ripe.

Vogue Entertaining & Travel Guide, monthly magazine, culinary and entertaining lifestyle guide. Circulation: 61 370 (ABC). Publisher: Conde Nast Publications, phone 02 9964 3888. Contact Food Director.

Mass market

Australian Good Taste, monthly magazine — lifestyle and food; distributed nationally through Woolworths and by subscription. Circulation: 150 897 (ABC). Publisher: Text Media Group, phone 02 9952 4611. Contact Food Editor.

Australian House & Garden, phone 02 9282 8000, contact Food Writer, Geoff Jansz.

Australian Table, monthly magazine, national distribution — food, wine, lifestyle. Associated with Coles and distributed through Coles and select newsagents. Publisher: ACP Publishing, phone 02 9282 8000. Contact Food Editor.

Australian Women's Weekly, monthly magazine — women's general interest, food, fashion, craft, family. Circulation: 963 626 (ABC). Publisher: ACP Publishing, 02 9282 8107. Contact Food Editor.

Daily Telegraph, phone 02 9288 3000, contact Food Writer.

Family Circle — family, food. Publisher: ACP Publishing, phone 02 8220 2000. Contact Food Editor.

Family Living — interviews, home, leisure, healthy living, fashion & beauty, travel, entertainment, children, 60+. Free distribution, Greater Sydney area. Publisher: Family Magazines, phone 02 9353 0700.

Herald Sun, phone 03 9292 2000, contact Food Writer.

New Idea, weekly magazine — women's general interest. Circulation: 570 418 (ABC). Publisher: Pacific Publications. Contact Margaret Fulton, Cooking Editor, 03 9320 7405.

Sunday Telegraph, phone 02 9288 3000, contact Food Writer.

Sun-Herald, phone 02 9282 2822, contact Food Writer.

Sydney Morning Herald, phone 02 9282 2822, contact Food Writer.

The Good Weekend, The Age, Sydney Morning Herald — current affairs and lifestyle topics. Publisher: John Fairfax Group, 02 9282 1380 (editorial).

Woman's Day, weekly magazine — women's interest, celebrities, food, fashion, gardening, cooking. Circulation: 892 155 (ABC). Publisher: ACP Publishing, 02 9282 8000. Contact Food Editor.

Diana Todd-Banks, dtoddb@ozemail.com.au (food writer for various publications including *The Cairns Post).*

Sources:

Rann, J., 1998: *Margaret Gee's Australian Media Guide — November 1998–March 1999*, 59th ed., Information Australia, Melbourne.

Peden, J., "Media People", Media Monitors, Sydney, August 2000 Edition.

Appendix 7. Indices for matrix of market attractiveness and business strength

MARKET ATTRACTIVENESS

Index of business strength, based on:

Evaluative criteria	**Ethnic — Chinese/ Vietnamese**	**Other ethnic**	**Mass market**	**Upmarket Caucasian**	**Food service**
Market size	Medium	Medium	High	Medium	Medium
Market growth rate	High	Low	Low	Medium	Medium
Demand	High	Medium	Low	Low	Low
Industry profit margin	High	High	Medium	High	Low
Seasonality	High	High	Low	Low	Low
Price tolerance	High	Medium	Low	High	Medium
SCORE	17	13	9	12	9

Scoring:

High = 3
Medium = 2
Low = 1

BUSINESS STRENGTH

Index of business strength, based on:

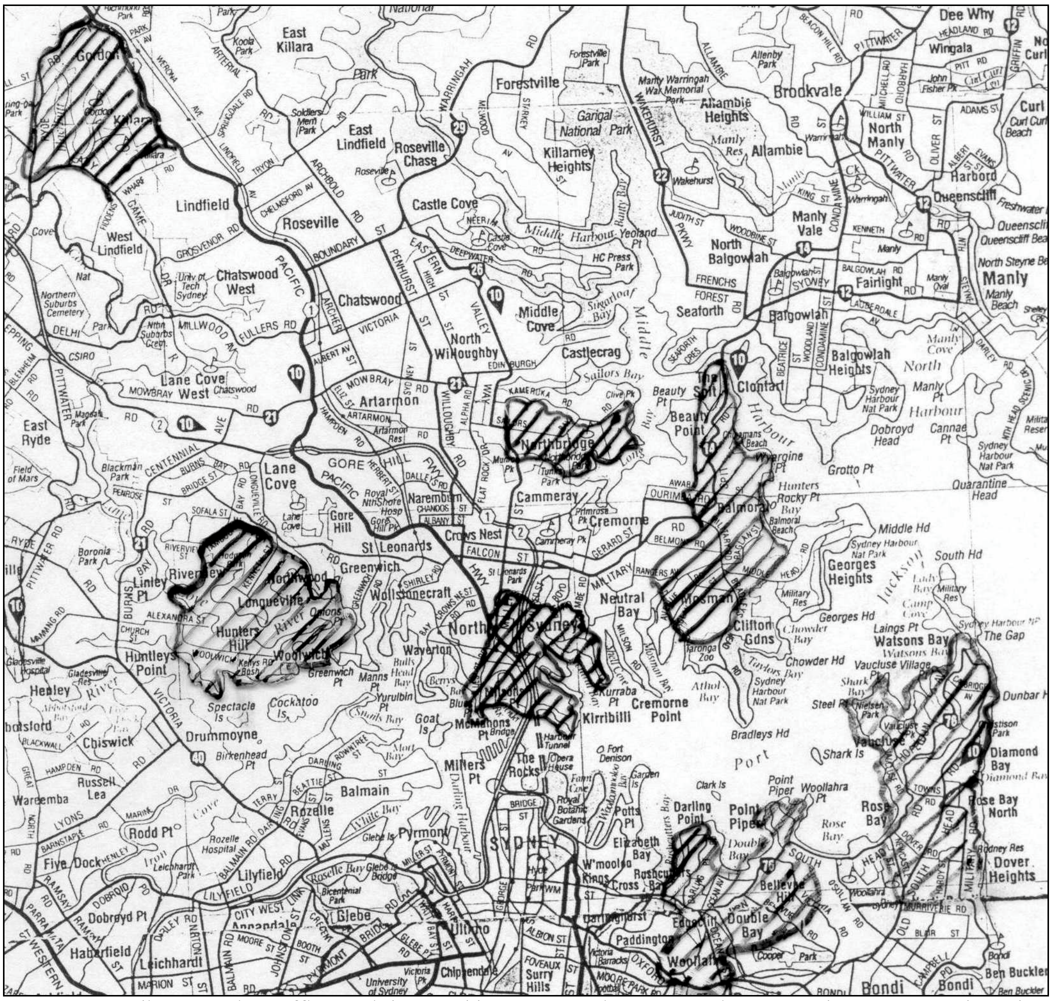
Evaluative criteria	**Ethnic — Chinese/ Vietnamese**	**Other ethnic**	**Mass market**	**Upmarket Caucasian**	**Food service**
Relative market share	Average	Average	Weak	Weak	Weak
Price competitiveness	Average	Average	Weak	Average	Average
Product quality	Strong	Average	Average	Average	Strong
Customer and market knowledge	Strong	Average	Weak	Average	Weak
Sales effectiveness	Weak	Weak	Weak	Weak	Weak
SCORE	11	9	6	8	8

Scoring:

Strong = 3
Average = 2
Weak = 1

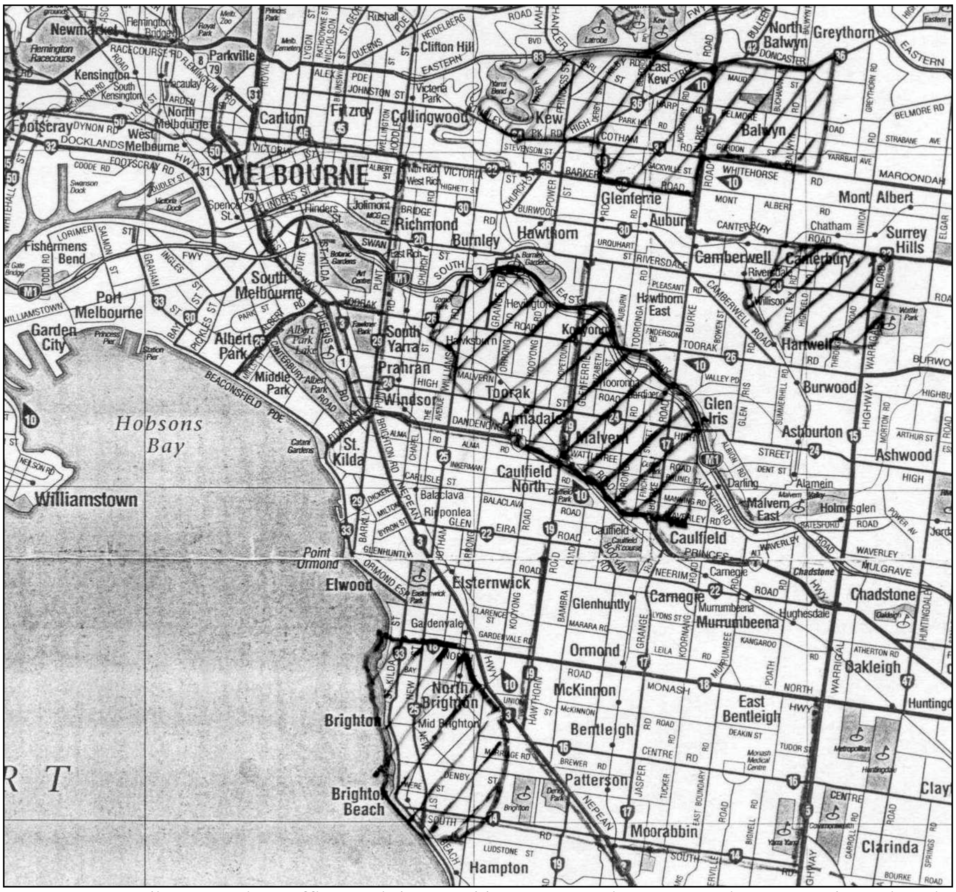
Appendix 8. Highest-earning suburbs of Sydney and Melbourne, 1997–98

Figure A8-1. Highest earning suburbs of Sydney, 1997–98



Source: Australian Taxation Office, 'Highest and lowest mean income earning postcodes, New South Wales', *Taxation Statistics 1997-98, a summary of taxation, superannuation and child support statistics*

Figure A8-2. Highest earning suburbs of Melbourne, 1997–98



Source: Australian Taxation Office, 'Highest and lowest mean income earning postcodes, Victoria, *Taxation Statistics 1997-98, a summary of taxation, superannuation and child support statistics*

Appendix 9. Photographs

Picking rambutans

Packing 850 g punnets of rambutan on farm

Mixed box of blackening rambutans and lychees,
Victoria Markets, Melbourne

2.5 kg trays of organic rambutans, Victoria Markets,
Melbourne

250 g rambutan punnets (fourth from left) in boutique fruit
and vegetable store, Sydney

Appendix 10. Consumer survey findings from interviews in Sydney and Melbourne

CONTENTS

Table A10-1. Degree of recognition
(Closed question. Response: Sydney = 82; Melbourne = 56; total = 138)

'What do you think these are?'	**Sydney**		**Melbourne**		TOTAL	
	No.	%	No.	%	No.	%
Rambutan	31	38	15	27	46	33
A fruit	16	20	7	12	23	17
Lychee	18	22	13	23	31	22
Don't know; no idea; not sure	16	19	21	38	37	27
Something Chinese	1	1		0	1	1
TOTAL	82	100	56	100	138	100

Table A10-2. Recognition as rambutans, by interview location

Retailer outlet	**'What do you think these are?'**						
	Yes		No		Not sure		TOTAL
	No.	%	No.	%	No.	%	
Sydney							
Fruit & veg. store, Ashfield	5	38	8	62	0	0	13
Fruit & veg. store, Pennant Hills	9	60	6	40	0	0	15
Fruit & veg. store, St Ives	12	92	1	8	0	0	13
Fruit & veg. store, Ultimo	6	50	6	50	0	0	12
Fruit & veg. store, Mossman	6	50	3	25	3	25	12
Fruit & veg. store, Willoughby	9	50	8	44	1	6	18
Melbourne							
Fruit & veg. store, Forrest Hills	6	100	0	0	0	0	6
Fruit & veg. store, Greensborough	7	44	9	56	0	0	16
Supermarket, Templestowe	1	13	7	88	0	**0**	8
Supermarket, Prahran	5	33	10	67	0	0	15
Prahran Market	9	60	6	40	0	0	15

Table A10-3. Recall of having seen previously
(Closed question. Response: Sydney = 83; Melbourne = 38; total = 141)

'Have you seen rambutans before?'	**Sydney**		**Melbourne**		TOTAL	
	No.	%	No.	%	No.	%
Yes	47	57	31	53	78	55
No	32	38	26	45	58	41
Not sure	4	5	1	2	5	4
TOTAL	83	100	58	100	141	100

Table A10-4. Previous tasting of rambutan
(Closed question. Response: Sydney = 83; Melbourne = 58; total = 141)

'Have you ever tasted rambutans before now?'	**Sydney**		**Melbourne**		TOTAL	
	No.	%	No.	%	No.	%
Yes	31	38	18	31	49	35
No	51	61	40	69	91	64
Don't know/not sure	1	1	0	0	1	1
TOTAL	83	100	58	100	141	100

Table A10-5. Previous tastings

Retailer outlet	'Have you ever tasted rambutans before now?'				
	Yes		No		TOTAL
	No.	%	No.	%	
Sydney					
Fruit & veg store, Ashfield	3	23	10	77	13
Fruit & veg store, Pennant Hills	6	43	8	57	14
Fruit & veg store, St Ives	4	31	9	69	13
Fruit & veg. store, Ultimo	4	33	8	67	12
Fruit & veg. store, Mossman	5	42	7	58	12
Fruit & veg. store, Willoughby	9	50	9	50	18
TOTAL	31	38	51	62	82
Melbourne					
Fruit & veg. store, Forrest Hills	5	83	1	17	6
Fruit & veg. store, Greensborough	4	27	11	73	15
Supermarket, Templestowe	0	0	10	100	10
Supermarket, Prahran	5	33	10	67	15
Prahran Market	4	29	10	71	14
TOTAL	18	30	42	70	60

Table A10-6. Respondents who had seen rambutans before by those who had tried them before
(Cross-tabulation)

'Have you seen rambutans before?'	'Have you ever tasted rambutans before now?'							
	Yes		No		Not sure		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Yes	30	64	16	34	1	2	47	100
No	0	0	31	100	0	0	31	100
TOTAL	30	38	47	60	1	2	78	100

Table A10-7. Respondents who had tried rambutans before, by age
(Cross-tabulation)

Age category	'Have you ever tasted rambutans before now?'						
	Yes		No		Not sure		TOTAL
	No.	%	No.	%	No.	%	No.
Under 18	0	0	11	100	0	0	11
18–24	10	37	17	63	0	0	27
25–44	25	34	50	66	0	0	75
45–65	12	32	24	65	1	3	37
TOTAL	47	31	102	68	1	1	150

Table A10-8. Respondents who had seen rambutans before, by sex
(Cross-tabulation)

Sex	'Have you ever tasted rambutans before now?'						
	Yes		No		Not sure		**TOTAL**
	No.	%	No.	%	No.	%	No.
Male	15	34	26	63	0	0	41
Female	16	38	25	59	1	1	42
TOTAL	31	37	51	62	1	1	83

Table A10-9. Places where rambutans seen and tried previously

(Cross-tabulation. Response: Sydney = 83; Melbourne = 58; total = 141.)

Place	Sydney		Melbourne	
	Seen	Tried	Seen	Tried
	No.	No.	No.	No.
Fruit shop	24			
Queensland			5	
At work			2	
Supermarket	1		1	
Markets			1	
In a fruit pack			1	
Thai restaurant with icecream			1	
Friends' house			1	
Chinese restaurant on fruit platter	1			
Thailand	5		1	1
Malaysia	3	1	1	
Asia, overseas	2			1
Singapore	2			
Borneo	1			
India	1			
Sri Lanka	1		1	
Bali			1	1
Thai Airlines			1	1

Table A10.10 Reaction to rambutan tasting

(Open question. Response: Sydney = 82; Melbourne = 61; total = 143)

'What did you think of it?' (after tasting)	Sydney		Melbourne		TOTAL	
	No.	%	No.	%	No.	%
Liked strongly	12	15	26	43	38	26
Liked somewhat	45	55	25	41	70	50
Neither liked nor disliked	18	22	9	15	27	19
Disliked somewhat	6	7		0	6	4
Disliked strongly	1	1	1	2	2	1
TOTAL	82	100	61	100	143	100

Table A10-11. Comments following taste-test

(with *Rongrien* — a variegated colour variety)

Exterior:	'Off-putting appearance' (1 respondent)
Flavour:	'Different/interesting' (4); 'bland/mild' (11); 'nice and sweet' (4); sweet, very sweet, not very sweet, less sweet than previous tastings, too sweet (2); not too strong; refreshing (2); 'beautiful', 'exquisite', 'exotic'; 'these ones are particularly tasty'; 'a lot better than the ones I tried in Asia'
Texture:	Good/firm (2)
Juiciness:	'Juicy'; 'very juicy'; 'not juicy' (2); 'somewhat dry'
Convenience:	'Seed sticks to fruit, makes it hard to eat, less enjoyable (8); 'hassle to peel'
Comparisons to lychee:	Similar flesh appearance (17); similar taste (7); similar outer appearance (3); 'less juicy than a lychee' (2); 'less sweet than lychee (2); 'husband likes lychees, would love rambutans'; 'tastes like almond and lychee; 'bland, expected to be as juicy as lychee'; 'bland, prefer lychee'; 'fruit tastes somewhat green, prefer lychee'; 'less flavour than lychee, but same texture'; 'prefer lychee'; 'somewhat mild, similar to lychee'

Comparisons to other fruit:	'Flavour like a grape' (6); 'texture like a grape'; 'looks like a grape'' 'like a melon'; 'flavour like coconut, with a distinctive aftertaste'; 'very different, mild but slightly tangy, like kiwi fruit'; 'tastes good like coconut with an aftertaste like date'
Appeal to children:	'Children love them'; 'kids love the look, taste an added bonus'; 'children might like them'; 'children would love them because they look appealing, taste good'; 'kids would love them with icecream'; 'not a big fruit eater but would buy for the kids'
Other:	'Unusual, interesting'; 'cheaper in Singapore'; 'likes the fact that Asian fruit is grown here' (female from Hong Kong, not included in formal survey)
Consumption:	'Loves and usually buys' (Melbourne consumer); 'used to buy regularly' (2); 'has bought in Thailand'; 'likes and has bought before for entertaining'

Table A10-12. Likelihood of purchase

(Closed question. Response: Sydney = 88; Melbourne = 50; total = 138)

'Could you see yourself buying them?'	**Sydney**		**Melbourne**		TOTAL	
	No.	%	No.	%	No.	%
Definitely	16	18	20	46	36	26
Probably	27	31	14	28	41	30
Maybe	23	26	8	16	31	23
Don't know/can't say	4	5	1	2	5	4
Maybe not	11	12	5	10	16	11
Definitely not	7	8	2	4	9	6
TOTAL	88	100	50	100	138	100

Comments

'Depends on price, and if kids were with me and wanted to try them'
'Only if I wanted it for a recipe'
'Maybe, but they are a lot of work'
'Depends on what the kids think of them'
'Husband would like to eat them. He lived in India and loved lychees there, so would love rambutans also'

Table A10-13. Likelihood of purchase, by tried before

(Cross-tabulation. Response = 74)

'Could you see yourself buying rambutans?'	**'Have you ever tasted rambutans before now?'**					
	Yes		No		TOTAL	
	No.	%	No.	%	No.	%
Definitely would	6	21	4	9	10	14
Probably would	9	32	17	37	26	35
Maybe would	5	18	13	28	18	24
Don't know/can't say	3	11	1	2	4	6
Maybe not	4	14	5	11	9	12
Definitely not	1	4	6	13	7	9
TOTAL	28	100	46	100	74	100

Table A10-14. Attitudes to yellow variety
(Open question. Response: Sydney = 41; Melbourne = 9)

'What do you think of the yellow variety?'	Sydney	Melbourne	TOTAL
Good		4	4
Likes because different		1	1
No preference	10		10
Disliked	12	3	15
Looks overripe and not appealing	1		1
Red is more appealing and attractive	5	3	8
Looks dull, boring	5		5
Looks immature	2	1	3
Looks dead	1		1
Looks dirty and green	1		1
Ugly	1		1
Marks easier	1		1

Table A10-15. Potential uses for rambutans
(Open question. Response: Sydney = 81; Melbourne = 63; total = 144)

'How could you see yourself using rambutans?'	Sydney		Melbourne		TOTAL	
	No.	%	No.	%	No.	%
Fresh, fresh snack	53	65	24	30	77	95
Decoration	6	7	2	2	8	10
Fruit platter	7	9	7	9	14	17
Dessert	7	9	5	6	12	15
Fruit salad	5	6	1	1	6	7
Dinner party		0	1	1	1	1
Dessert with icecream, fresh with icecream	11	14	1	1	12	15
Fruit and cheese platter			3	4	3	4
Fruit bowl	1	1		0	1	1
Curries	1	1				
Children's school lunch	2	2				

Table A10-16. Likelihood of purchase by likely usage
(cross-tabulation)

Likely use	Likelihood of purchase						
	Definitely	**Probably**	**Maybe**	**Don't know/ can't say**	**Maybe not**	Definitely not	TOTAL
Fresh/fresh snack	20	23	18	2	9	6	78
Fruit platter	4	5	3	2	1		15
Fruit salad	2	7	2				11
Dessert/after meal	3	4	3				10
Decoration		1	3	1			5
Fruit &cheese platter	2		1				3
Dessert with icecream	3						3
In cooking	3				1		4

Table A10-17. Attitudes to punnets — 850 g punnet, 250 g square punnet, 250 g flat punnet

'How do you feel about each of these presentations?'	Sydney	Melbourne
850 g punnet		
Prefer	5	3
Maybe	3	
Looks expensive		1
Too large, bulky	5	5
Attractive, shows fruit		1
250 g square punnet		
Better size	1	2
The most appealing presentation		3
For odd occasion	1	1
Fruit looks squashed	1	2
250 g flat punnet		
Prefer	3	7
Maybe	1	3
Wouldn't buy	2	
General comments on punnets		
Appearance		
More appealing	6	2
All punnets look appealing		1
Neater	2	
Choice		
Less reliable quality than loose	1	
Would depend on quantity in punnet	1	
Too large to buy small volumes	1	
Convenience		
Buy all small fruit in punnets — easier	1	
Prefer, as easier to handle	4	
Packaging		
Protects the fruit	1	
'Everything should be in punnets to protect the fruit from being damaged. Not so much these but they look better in a punnet.'	1	
Waste of packaging, protection not necessary for this fruit	4	
Prefer less packaging, less plastic		3
Should have them in a loose-fit bag, as for oranges	1	
Price		
Packaging is usually more expensive	2	
Doesn't matter, whichever is cheaper	1	
Depends on price		1
Too much packaging makes things too expensive	1	

Table A10-18. Attitudes to loose fruit in tray
(open question, response = 115)

Attitudes to loose fruit presentation	Sydney		Melbourne		TOTAL	
	No.	%	No.	%	No.	%
Prefer	52	66	25	61	77	67
Maybe	8	12	0	0	8	7
Wouldn't buy	13	22	17	39	30	26
TOTAL	73	100	42	100	115	100

Table A10-19. Comments on loose fruit by Sydney and Melbourne respondents

Comments on loose fruit	Sydney	Melbourne
More attractive than punnet	2	2
Looks messy	8	
Can hand-pick fruit	5	6
Buy all fruit loose, so that can choose quality, feel fruit and texture	14	
Can choose quantity, buy one or two to try	5	
Could damage fruit by handling	1	

Table A10-20. Expected price of rambutans in peak season
(Open question. Response = 73)

Estimated price/kg in peak season	Sydney	Melbourne	TOTAL
	No. of respondents		
Loose fruit			
$2		1	1
$4		2	2
$5	4	2	6
$6	9	0	9
$7	4	0	4
$8	7	2	9
$9	2	1	3
$10		1	1
$14		1	1
$22		1	1
250 g punnet			
$2		1	1
$2.50	3	1	4
$3	14	1	15
$4	9	2	11
$5	1	1	2
$6	1		1

Comments on price

'Would buy depending on price' (8); 'Would expect them to be around the same price as lychee' (8); 'four fruit for $2 would be a reasonable price'; 'would buy at 30c each'; 'not too expensive so would encourage people to try'; 'expect expensive, as exotics'; 'just because exotic doesn't mean high price'; 'have to compete with strawberries'; 'more appealing if discounted'; 'a lot of waste in the weight of the fruit'; 'wouldn't buy, as would be too expensive'; 'same price as apples'

Table A10-21. Information requirements

(Response: Sydney = 75; Melbourne = 35; Total = 110)

'What information would you need if you were to use rambutans?'	Sydney		Melbourne		TOTAL	
	No.	%	No.	%	No.	%
Ideas on how to use	31	40	16	47	47	43
Taste description	33	13	4	18	37	34
General information	35	45	1	3	36	33
Nutrition, health benefits	18	23	16	47	34	31
Recipes	11	14	4	18	15	14
Origins, where grown, industry background how it is grown			11	32	11	10
Complementary foods to cook and eat with	5	6			5	4
What is inside?	3	4	1	3	4	4
How to peel	2	2	1	3	3	3
How to store	2	2	1	3	3	3
How to cook	1	1	2	6	3	3
How to eat	1	1	2	6	3	3
How to tell if ripe	1	1			1	1
Serving suggestions	1	1			1	1
How to select			1	3	1	1
Shelf life			1	3	1	1

Table A10-22. Recommended information medium

(Response: Sydney = 82; Melbourne = 36; total = 118)

'What would be the best way to provide you with that information?'	Sydney		Melbourne		TOTAL	
	No.	%	No.	%	No.	%
Recipe cards, leaflets, brochures	10	12	12	33	22	19
Labelling	11	13	4	11	15	13
Store displays, signage	12	15	5	5	14	15
Informative sales staff	6	12			6	5
Store sampling, demonstrations	3	7	2	5	5	4
Describe flavour			5	14	5	4
TV chefs			3	8	3	2
Magazine features			2	5	2	2
Advertising			2	5	2	2
Compare to lychee	2	2			2	2
Word of mouth	1	1			1	1
The Internet	1	1			1	1
Store catalogue			1	3	1	1

Table A10-23. Expected retail outlet for rambutans — Sydney consumers

(Response: Sydney = 81)

'If you decided to buy some rambutans, where would you expect to find them?'	No.	% of respondents
Fruit and vegetable store	50	90
Fruit and vegetable market	5	6
Exotic fruit store	2	2
Ethnic store	2	2
Supermarket	4	5
Health food shop	1	1
Don't know/not sure	1	1

Table A10-24. Expected retail outlet for rambutans — Melbourne consumers
(Response: Melbourne = 38)

Place of interview	'If you decided to buy some rambutans, where would you expect to find them?'							
	Fruit & vegetable store		Supermarket		Fresh market		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Fruit & vegetable store	17	77	4	18	1	5	22	100
Supermarket	10	56	6	33	2	11	18	100
Market	0	0	2	17	10	83	12	100
TOTAL	27	52	12	23	13	25	52	100

Table A10-25. Usual source of fruit and vegetables — Sydney consumers
(Open question. 73 responses)

'Where do you usually buy your fruit and vegetables?'	No.	%
Fruit & vegetable store	65	89
Supermarket	8	11
TOTAL	73	100

Table A10-26. Usual source of fruit and vegetables — Melbourne consumers
(Open question. 57 responses)

Place of interview	'Where do you usually buy your fruit and vegetables?'							
	Fruit & vegetable store		Supermarket		Fresh market		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Fruit & vegetable store	21	37	1	2	1	2	23	41
Supermarket	4	7	15	26	0	0	19	33
Market	0	0	0	0	15	26	15	26
TOTAL	25	44	16	28	16	28	57	100

Table A10-27. Likelihood of buying without pre-tasting
(Closed question. Response: Sydney = 79; Melbourne = 52; total = 131)

'Would you buy such a fruit without tasting it first?'	Sydney		Melbourne		TOTAL	
	No.	%	No.	%	No.	%
Definitely	5	6	11	21	16	12
Maybe	10	13	7	14	17	13
Don't know/not sure	9	11	0	0	9	7
Maybe not	9	11	0	0	9	7
Definitely not	46	59	34	65	80	61
TOTAL	79	100	52	100	131	100

Comments
'If it had a description, yes; otherwise no'
'Maybe, if it looks good and appeals' (2)
'Yes, maybe take a gamble'
'Maybe, but looks funny'

Table A10-28. Suggestions for introducing consumers to rambutans
(Open question. Response: Sydney = 83; Melbourne = 53: total = 136)

'What do you think is the best way to introduce people to new fruits such as rambutans?'	Sydney		Melbourne		TOTAL	
	No.	%	No.	%	No.	%
Store sampling	75	90	45	85	120	88
TV chef	8	10	3	6	11	8
Recipe cards			2	4	2	1

Note: Some respondents gave more than one suggestion.

Table A10-29. Attitudes to using 'exotic' to describe rambutans
(Response: Sydney = 48; Melbourne = 33; total = 81)[

'What do you think of the word "exotic"?'	Sydney	Melbourne
	No.	No.
Good description, appropriate, attractive, catchy	34	22
'Looks are exotic'		1
'Describes the flavour'		1
'Exotic Australian' would be a good description		1
'Exotic' is a very powerful word		1
They are exotic fruit, so call them that	1	
Sounds expensive, usually means expensive	11	
Sounds foreign, imported	1	4
Scary word — most people are conservative		1
Suggests it is an acquired taste		1
Prefer 'tropical', 'Queensland tropical'	5	11
Suggests tropical island		1
Promote for visual features, exotic, exquisite		1
Dislike word 'exotic'	1	
Very old-fashioned fruit eater, dislike the term 'exotic fruit'	1	

Note: Some respondents gave more than one suggestion.

Table A10-30. Whether main food shopper for the household
(Closed question. Response: Sydney = 83; Melbourne = 62)

'Are you the main shopper for your household?'	Sydney		Melbourne		TOTAL	
	No.	%	No.	%	No.	%
Yes	51	60%	40	66%	91	63%
Share	5	6%	15	24%	20	14%
No	28	34%	6	10%	34	23%
TOTAL	84	%	61	100%	145	100%

Table A10-30. Children at home

Age category of children	No. per household
1–3 years	12 with one child, 3 with two children
4–6 years	10 with one child, 1 with two children
7–12 years	10 with one child, 6 with two children
13–18 years	9 with one child, 12 with two children, 3 with three children

Table A10-31. Sex of sample

Sex	Sydney		Melbourne		TOTAL	
	No.	%	No.	%	No.	%
Female	42	51%	38	61%	80	59%
Male	41	49%	24	39%	65	41%
TOTAL	83	100%	62	100%	145	100%

Table A10-32. Age category (estimate) of sample

Age category	Sydney		Melbourne	
	No.	%	No.	%
Under 18	1	1	0	0
18–24	16	19	12	19
25–44	42	51	37	60
45–65	24	29	13	21
Over 65		0	0	0
TOTAL	83	100	62	100

Appendix 11. Consumer survey questionnaire

RAMBUTAN CONSUMER SURVEY Date: /6/00 Number Store: ………..

"What do you think these are?" *Rambutans* ☐ *Lychees* ☐ *A fruit* ☐
A flower ☐ *No idea* ☐ *Other* ………………………….…………………

"Have you seen rambutans before?" *Yes* ☐ *No* ☐ *Not sure* ☐
If yes, where? This store ☐ *Other* ……………………………………………….
"Have you ever tasted them? *Yes* ☐ *No* ☐ *Not sure* ☐
If yes, where? This store ☐ *Other* ……………………………………………….

AFTER TASTE TEST "What did you think of it?"

Liked strongly	*Liked somewhat*	*Neutral*	*Disliked slightly*	*Disliked strongly*
☐	☐	☐	☐	☐

Comments:

Comparisons to lychee: *Similar outside appearance* ☐ *Flesh appearance* ☐ *Taste* ☐ *Texture* ☐
Prefer to lychee ☐ *Prefer lychee* ☐ *Other*

"Could you see yourself buying them?"

Definitely	*Probably*	*Maybe*	*Neutral*	*Maybe not*	*Definitely not*
☐	☐	☐	☐	☐	☐

Comments:

"How could you see yourself eating rambutans?"
Fresh ☐ *Fresh snack* ☐ *Fruit platter* ☐ *Fruit and cheese platter* ☐
Dessert ☐ *After meal* ☐ *Dessert with icecream* ☐ *Decoration* ☐
Other

"How do you feel about each of these presentations?" (free comments) 850G PUNNET
250G Europunnet 250G square punnet Loose

"What price would you expect them to be?" … $………. per kg … $…..…. Per punnet

"Would you want information about rambutans if you were to use them?

"What would be the best way to provide you with that information?"

"If you decided to buy some rambutans, where would you expect to find them?"

"Would you have ever bought rambutans without having tasted them?"

"What do you think is the best way to introduce people to new fruits such as these?"

"Which suburb are you from?"
"
Where do you usually buy fruit?" *Here* ☐ *Other fruit & veg store* ☐ *Supermarket* ☐ *Market* ☐
O*ther* ☐ ……………
Are you the main food shopper for your household? *Yes* ☐ *No* ☐
Do you have children at home? *Yes* ☐ *No* ☐ *Number & ages*:
Gender M ☐ F ☐ **Age category** (estimate): *under 18* ☐ *18-25* ☐ *25-45* ☐ *45-65* ☐
Ethnic origin (estimate): … *Australian* ☐
Caucasian ..☐ *Other* ……………………………..