AUSTRALIAN NUFFIELD FARMING SCHOLARS ASSOCIATION

REPORT OF STUDY TOUR TO THE UNITED KINGDOM AND EUROPE

By Phil Smith
1989 NSW Nuffield Scholar

SUBJECT: HORTICULTURAL PRODUCTION AND MARKETING

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(CCAREC)

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FRUIT

Fruit is strongly associated with the idea of sun and holidays. It corresponds with the reality of life in as much as it is warm, pleasant and relaxed. Symbolically, fruit is considered to contain life which is capable of regenerating the vital forces which are sapped during a day, a year or a lifetime. Symbolically, it represents the capacity to regenerate a person's vital body and mental energy.

Fruit provides satisfaction for pleasures which are not only sensual, but also associated with the feelings and even the emotions. As everything about it is light fruit provides a major source of energy and a good investment in terms of time and motion. It is also appreciated at the end of a meal: 'it slides down easily, and aids digestion of the meal'.

Fruit is loaded with promise of pleasure, sensations and taste. Disappointing fruit which does not satisfy these various expectations is a very important vulnerability factor. Unfortunate experiences with fruit which looks attractive, but which turns out to be tasteless, fibrous or chalky leave the consumer with a nasty taste in the mouth and turn him progressively away from the whole category.

Reproduced from a paper entitled "Internal Product Quality as a Marketing Instrument" by Pierre Monnot, Cofremeca, France, presented at a Quality Assurance Seminar in Wageningen, The Netherlands, July 1989. Seminar title 'Internal Product Quality of Horticultural Crops'.

INTRODUCTION

Before embarking on the Nuffield Scholarship, Jenny and I took the time to canvas some of the people who have supported us, in order to ensure that what we intended to investigate was worthwhile.

We summarised our objectives then always tried to keep this in mind:

'WHAT STEPS ARE THE EUROPEAN PRODUCERS TAKING IN ORDER TO GUARANTEE THEIR ECONOMIC SURVIVAL'

In view of the current unrest and dissatisfaction within the wholesale market system in NSW we decided to concentrate our reporting on the flow of produce through the wholesale system.

Our study has taken us from the small and sometimes not so small individual farmers in Italy, France and The Netherlands to the researchers who are working to ensure the viability of their country's horticultural producers. We have followed the produce from the farm, through the co-operative packing houses and provincial markets to the major wholesale markets and distribution centres of Northern Europe.

In order to complete the chain we have spent considerable time in the retail outlets speaking with management and with their customers.

We noted on our travels a growing awareness and interest in organic and biological production of fresh produce. For this reason we have included a small section towards the end of the report, specifically devoted to this subject.

I hope that the information following is of use to horticulturists in Australia and that we can improve our position in the international market place.

GLOSSARY OF TERMS

CCAREC	Central Coast Agricultural Research & Extension Committee
NFU	National Farmers Union
CTB	Central Bureau for the Fruit and Vegetable Auctions
NIM	National Interest Market
UK	United Kingdom
MULTIPLE	Supermarket Retail Store
CA	Control Atmosphere
Dfl	Currency - Dutch Gilders or florins
CAV	National Centre for Certification and Premultiplication of Nursery Material
EEC	European Economic Community

Original member countries 1957

- Belgium
- France
- Italy
- Luxembourg
- The Netherlands
- West Germany

then joined in 1973 by

- Denmark
- Ireland
- United Kingdom

1981 Greece

1986 Portugal

- Spain

Consorv	Italian fruit packing and trading company
HGF	Home grown fruit.
FF	French francs.

STONEFRUIT INDUSTRY IN EUROPE OVERVIEW

The stonefruit industry in Europe is clearly influenced by EEC economic policy. This is particularly the case for Italy and France.

The peach is the main product to benefit from EEC price support subsidies. During the years 1981 to 1985, between 250-300 thousand tonnes per year were withdrawn from the market.

While improvements have been made in variety, quality and seasonal distribution of stonefruit, the supplies well exceed the levels of demand.

Consumption has increased considerably over the past 15 years, but this has not kept up with the increase in production.

Even with acreage static or decreasing, yields are still on the increase. Italy has shown a 30% increase in the last decade with an average of 10-15% for France, Greece and Spain. These four countries produce in excess of 3 million tonnes compared with a total of 850,000 tonnes for all other European and Mediterranean countries. The main increase is due to the introduction and improvement of nectarines which have added to and in some cases replaced yellow and white peaches, particularly in the areas of Northern Italy and Gard in France.

Over 50 varieties of nectarines are produced. Peach production is almost all yellow fleshed with the exception of France where white cultivars still account for 20-30% of new plantings.

In Italy, it is generally felt that tree demand is reducing at nursery level and the rate of new orchards will diminish over the next few years. With 10% of orchards over fifteen years, a scaling back of production is possible with the removal of older orchards and those orchards in marginal areas. However, EEC price supporting tends to limit this actually happening. Therefore, a regeneration of the peach industry is being impeded.

With very little fresh land available, European producers have to contend with replanting problems. Much research has been carried out on rootstock development.

Peach seedling is still preferred for new fertile soils. GF677 is showing up for areas of high pH (over 7) replant situations, and as a suitable product for micropropagation by in-vitro culture.

A fairly successful rootstock for wet areas is St. Julien 655/2. It is suitable for peach and nectarines, shallow rooted and reduces scion growth by 20-30%. However, this is not suitable for replant, and prefers a lower pH. It also induces a uniform early maturity.

A nursery we visited was producing 1.5 million fruit trees per year. The preferred peach root stock was Rubira. It has all the advantages of GF677 but with the added advantage of being a red leaf type. All stock was extremely even in size. This was an extremely impressive and unusual site to us.

To guarantee the quality and supply of virus indexed scion material, the Italians have formed an inter-professional group of nurserymen associations and fruit grower associations. CAV was founded to get an improvement of nursery materials and they believed this would give Italy a strong fruit industry. The task is to certify and premultiply propagation stock, maintaining varieties in virus free condition.

CAV includes ten Italian nursery groups who produce 90% of national strawberry plant production and 70% of fruit tree production. They are monitored by researchers at the University of Bologna.

Current levels of EEC stonefruit production are so high that further expansion seems impossible. The issue therefore is not where to put new areas under cultivation, but rather how to restructure the orchard industry, where to cut down old orchards and re-establish new ones. Stonefruit orchards appear to be expanding southward.

With 1992 fast approaching, it is believed that the northern areas of Italy and France will become the major pomefruit growing areas for Europe while stonefruit production will tend to concentrate nearer to the Mediterranean.

It was our observation that Europe will tend to become one large country producing its product in the best area for production and shipping the rest.

ITALY

The Italians are large consumers of fresh fruit. Consuming 80kg per capita annually in addition to 30 kg of citrus. Greengrocers and open air street markets are a major part of the retail distribution of fruit and vegetables.

Italy's principal exports are table grape, apple, pear, peach and strawberry. 70% of this export goes to other European Community member countries with West Germany accounting for 40%.

Italy is one of the largest producers of stonefruit in the world with approximately 100,000 hectares of peaches producing nearly 1.5 million tonnes of fruit annually.

Peaches, nectarines and plums are produced from the southern regions of Puglin to Veneto in the north. The majority is grown in the Emilia Romagna region. This is where we concentrated our studies.

The objectives for visiting Northern Italy were to visit and view firsthand:

1) current stonefruit production methods
2) Italian marketing systems
3) co-operative type packing and distribution centres
4) manufacturers of materials/handling equipment
5) Italian research institutes

Training

The accepted tree training systems in Northern Italy varied with the regions. Areas around Verona favoured the low vase systems while closer to the Adriatic, traditional palmette was predominant. The palmette system nearly always suffered from serious shading out of the lower branches. High density systems always used some kind of trellis and nearly always employed the use of self propelled pruning and harvesting platforms.

Because of the high capital investment necessary for palmette, researchers and some growers are developing training systems that can be worked from the ground.

The current preferred system is called "Fussetto". This has a spacing of 4m x 1.5m with a 3 metre maximum height. Fussetto is a centre leader system, with three branches at each of three levels. The branches are spirally spaced around the leader to intercept maximum light. The upper tiers being shorter than the lower. The result is a cone shaped tree.

Prof. Carlo Fideghelli, at the Institute of Fruitculture, Rome, leads a group of researchers who are developing the genetic dwarf varieties for the Italian industry. It will not be too many years before we see commercial dwarf varieties released to producers. This is viewed as a very important project, given the increasing public awareness of chemical growth regulators, as well as the increasing cost of labour and possible competition from Spain in 1992.

In an attempt to advance ripening of peaches, nectarines and plums, Prof. Fideghelli was trialing trees being grown in polyhouses. The aim was for the later northern Italian areas to advance their ripening so as to compete with southern Italy and southern Spain.

The advantages were:

> Advanced ripening of 15-25 days; better set, as trees were protected from adverse weather conditions; nectarine skin damage was minimal; more regular production.

The disadvantages were:

> Opening of the construction so as to allow bees in for cross pollination of plums; the expense of constructing polyhouses; the difficulties of spraying; removing the cover after harvest; temperature increase was too high in summer.

However, this technique did not advance this area sufficiently for their varieties to be harvested before southern Italy. This would be the same in Australia where we are growing peaches from north Queensland to southern Victoria.

Southern Italy receives rainfall of 400-600 mm per year. The lowest winter temperature is on average 0° C.

In Australia, we are often attempting to grow peaches in areas where the temperature does not drop below 10 C. These conditions increase our growing costs; varieties do not perform as well, pruning costs are greater, fruit is generally inferior. Each area ideally requires different varieties particular for that condition. The lower chill areas growing the Florida varieties.

Marketing

Most orchards in Italy are under ten hectares with the majority around two hectares. Many of the small farms are double cropped, wheat or vegetables are produced out of fruit season between the rows. The producers are loyal supporters of their co-operative or consorvs as this is cost effective. The consorvs provide services in pest control, pruning, harvesting, varieties, packing, cooling and marketing. Consorvs form a personal contract with each grower. Technicians visit the farms, evaluate crops and negotiate price. A contract is then signed prior to the beginning of the season. The consorvs treat each producer differently and operate their dealings according to the personal seller/producer relationship. Some producers may be paid before commencement of harvest.

Consorvs feel they have an advantage over co-operatives as (a) they are not bound to accept everyone's fruit, and (b) it is more individual.

Consorvs also operate fruit tree nurseries. This is another way of offering a service to growers.

The Italians harvest their fruit relatively immature, i.e. 7-10 days before consumption. This allows for any amount of mechanical handling without the risk of damage. The Italians do not classify peach and nectarine as soft fruit.

In the last week of May we witnessed stonefruit freighted nine hundred kilometres from southern Italy in bulk bins. This fruit was then hydro-cooled, packed and consigned to Northern Europe.

The co-operatives and consorvs are strong marketing centres. They have a large investment in cooling, packing and storage equipment. There are often many in the one region. Obviously competing for sales and produce, personal service is important. We were told that more than 70% of the producers in the north supply the co-operatives or consorvs. This is due to the total mistrust of the wholesale market sellers. Even the large co-operatives/consorvs are very wary of prices quoted by market agents.

Given this situation, fruit is sold to Multiple stores in Northern Europe or to the prepackers who prepare produce for the Multiples. Fruit is also sold to wholesalers in other countries, but on a pre-set price. Only unplaced or second quality fruit is consigned to the local wholesale market agents. Prepacking is carried out by the co-operatives/consorvs on behalf of retailers, this may also include pricing.

The packaging used in Italy is nearly all timber. Corrugated fibreboard is just beginning to be used in volume. We believe this is because they prefer to have packaging delivered to the packinghouse already erected. The materials handling industry has developed some very efficient carton erecting machines. These can be owned by the co-operative or by an individual who subcontracts to the cardboard converting company. He specialises in erecting and delivering to the co-operative.

The supermarket or multiple trade is one of the best markets for suppliers. To win this trade they must be competitively priced, consistent in quality, and most important, consistent in supply.

To help guarantee this consistent supply the co-operative has a team of technicians who visit grower members supplying the necessary advice to ensure crops of high quality and increased volume. This input from the co-operatives instils a loyalty within the producer. He does pay for the service. However, we were told he is happy as he sees increase in profits for his investment. The cost of advice is spread over all producers and charged as a percentage of fruit sales.

The technician must perform, his job and salary are dependent on his own performance. This is monitored by production levels of his growers. An important part of his job is to advise on pesticide use.

Pesticide Residues

The Italians are making a real effort to enhance their reputation as responsible users of pesticides. This type of responsibility is being demanded by the European consumers. The Green movement is beginning to have real power in Northern Europe. The suppliers must be seen to be recognising the consumer demand.

New laboratories are being built to cope with the demand for 'Biological Fruit'. Fruit samples are taken from the orchard by technicians in the week leading up to harvest and checked for residue

levels. If the producer has ignored the technician's recommendations and used extra pesticide, and residues appear, then the co-operative will refuse to handle the produce.

The Italian government has established a monitoring facility in Rimini where random samples from market and retail level are taken and tested for residue levels. Penalties for misuse are extremely harsh. First offence can draw a fine of equal to $90,000 and a prison term. This is for blatant use of an unregistered chemical.

EEC Intervention is applied to Italian production of stonefruit. Between thirty to forty cents per kilogram is paid to producers and /or co-operatives to divert fruit from market in times of glut. This is for market grade fruit only not for reject fruit. It is not available to consorvs and trading companies.

Italy's position as the largest producer of stonefruit in Europe is about to end. Spain is set to take over as new areas come into production nearer to the Mediterranean.

For this reason Italy is looking closely at their production and marketing costs in an attempt to ensure they can compete with Spain, southern France and Greece.

FRANCE

Our time in France was spent in the south, mainly in Costiers DuGarde. This was said to be the premier peach and nectarine producing area. The orchards here ranged from 20 ha to 350 ha. We saw no evidence of grading machines for packing stonefruit, although they do exist. The reason for this is the French belief in marketing ripe fruit that the consumer will appreciate. This practice is certainly working, as we heard consumers and industry people all over Europe sing the praise of French produce. They have taken the major part of the market from Italy. This has taken a well planned and concerted effort by all levels of the French Industry.

A group of the best and largest growers are all selling some of or all of the product through the one exporter. This in effect concentrates supply, thereby removing the chance of growers being played one off against the other by wholesalers.

We had the privilege of visiting the orchards of Estagel. This we understand is the premium stonefruit brand on the market. Some 350 hectares of fruit owned by Mr. Henri Bois and his four sons. Current production is about 280 pallets per day of Class 1 and Extra Class fruit. The ten year old orchard is expanded by 35 hectares per year. They are aiming to peak at 10,000 tns. While other producers battle to sell the fruit, Estagel obtains a premium and all fruit is sold the day of packing.

The success of Estagel can be attributed to the attention to detail in all areas of production.

All fruit is monitored by quality controllers at the harvest stage. It is precooled before packing. All packing is done by hand. Again quality controllers check all product at the end of the packing line.

Knowing his product means Henri Bois can sell with confidence. Even with an oversupply of stonefruit in Europe, Estagel brand can not keep up with the demand. We can learn a lot from this type of attitude.

Much of our time in France was spent working with Alaine and Christiane Legarde on their 20 ha orchard. Alaine is one of the few smaller growers who arranges the sales and prices of his own produce by phone each day.

It was a great opportunity to live with a family and witness the day to day traumas of a soft fruit season. To be able to stand back and watch people working under extreme stress. We could see a lot of ourselves in our hosts. We were encouraged to discuss openly what we observed, and to suggest possible ways they could improve their operation. This experience was extremely valuable to us.

Another very interesting part of the operation was a decision made to begin the transition to organic production. His reasons were twofold. Firstly Alaine was a concerned conservationist. The family had a wonderful community spirit with a concern for the environment. But they also believed that the European demand for organic produce was increasing, that it was to be the market of the future. The climate was very suited, hot dry summers.

New and different packaging was used for the organic product. Paper fruit liners replaced plastic, while the colour green features predominantly in the 'BioGarden' brand packaging. The produce was marketed in Switzerland and West Germany, where the 'Green party' has a strong following. The product was also direct-sold to a wholesaler in London who specialised in organic production at a pre-arranged price. Sales at the outset were extremely slow, although the price was high. By the end of the second week the organic produce was moving freely. The brand was being readily accepted. Alaine was very well supplied with market information. He was part of a grower group which consisted of 100 members. Daily sale prices were submitted by all members. These were entered into a computer and sent to a Government Agriculture officer in Nimes. Here information from all over France and Western Europe was collected and processed, then redistributed to the grower groups the same day. This information was used to plan their marketing.

The information is available by Telex, Facsimile, Telephone, or Minitel. Minitel is a Telecom operated computer screen available to subscribers. The grower receives prices, quantity, trends, and comments made by inspectors.

The user pays for these services, but the services are first rate.

There appears to be a harmonious team effort at all levels of French Horticulture. The overseas

foreign marketing officers are surveying the market opportunities and liaising with the supermarket chains. A few growers are selected to produce new crops, or to improve old ones for trial marketing.

INRA
(Institute National Research Agronomy)

INRA gathers all varieties that can be found throughout the world. They introduce between 100-200 new varieties of peach and nectarine each year to 3 centres in France. Each time a new variety is planted they also plant a known variety to check maturity date. The object is to find a variety that matures every five days throughout the stonefruit season. INRA are constantly breeding new varieties for the French conditions. New varieties are then distributed to Regional Research Stations. Here supplies of the variety are bulked up for distribution to ten growers in each Region for evaluation trials. A lot of emphasis is placed on flavour and consumer satisfaction. Production areas are selected for the growing conditions. Producers are encouraged to grow the crop that is best suited to the area, thereby removing a lot of cultural problems. For instances Costieres DuGarde was the premium peach and nectarine area, but there were no plums produced as it was considered a little hot for consistent production of quality plums. Subsidies exist to establish new or replacement orchards of varieties nominated as preferred. No incentive is given to those establishing non recommended varieties.

Marketing in France varied from Italy, although this can be attributed to us visiting northern Italy and southern France. We were told southern Italy is more independent in its marketing than northern Italy.

Chateaurenard N.I.M.

Provincial markets existed in Southern France. These resemble a large car park where producers bring their fruit and vegetables by truck and sell by private negotiation to members of the trade present. There is a level of order. Only one type of product can be sold at any one time. For instance between 6am and 6.15am only Rockmelons are sold. At 6.15am the buyers move to the next section which is salads. The salads though are slightly different, as the grower will only have a sample on display. He takes orders from the trade then calls for workers from a pool of casual workers to go with him and harvest his orders. This is then delivered to the purchaser at his warehouse. Here the produce is further prepared and shipped to other destinations.

The majority of producers using this market seemed the less organised type. Some may be the French peasant farmers. There were, however, some producers of extremely good products. One melon grower sold his four tonne of melons within eight minutes of the market beginning. Quality sells itself anywhere in the world.

The market continues until about 7.30am when sales are complete. Sale prices are collected by inspectors and displayed for all to see within fifteen minutes of completion of sales. Prices for the previous day's sales are on display before the commencement of selling each day along with quantities and market movements. Both the buyers and sellers know what to expect when they begin selling.

Nice N.I.M.

Nice Market, servicing the French Riviera was also a very interesting experience.

Here the fruit and vegetables are sold by merchants on a transaction basis. It is of similar size to Newcastle wholesale merchants, although there is a grower section which operates at a different time to the merchants. The fruit market was devoid of life and atmosphere. There were more merchants than buyers.

Right next door was the Nice Flower Markets. This facility included a producer, seller section as well as an auction hall. The grower section featured produce of superb quality by our standards. It was busy and bustling with a wonderful atmosphere.

A major feature was produce branded 'Rose de Carros'. A husband and wife team, Mr. & Mrs. Marc Gizzoni produced and sold the premier rose brand in France from their property in the outskirts of Nice.

Marc produced his flowers in computer controlled glass houses. All produce is grown in ground using compost prepared on the property. Integrated pest management featured strongly as did organic-type fungus control methods. The production peak was very precisely timed and monitored to coincide with major marketing events. In the four days leading up to Mother's day, one hundred and twenty five thousand blooms per day were harvested and packed. This product was then sold in two days. Any production left after Mother's day was only worth about 20% of that harvested before.

To ensure maximum shelf life all produce was pre-cooled immediately after harvest using a high humidity forced air system. Grading and packing was carried out in temperature controlled packing rooms. A very strict quality assurance scheme was in place. The resultant product was absolutely first class. Some was exported to fill orders in other parts of Europe, while the rest was sold by Mrs. Gizzoni who ran their marketing operation in the Flower Market. 'Rose de Carros' was an extremely professional and successful horticultural operation, which all began as a hobby for Mr. Gizzoni senior.

'Rose de Carros' did not feature in the Auction halls of Nice. The reason being that as the auction was not compulsory to all producers, then it did not command all the produce. By non concentration of supply they could not then influence demand.

The Gizzoni marque could command a premium when marketing was controlled. They were not subject to the fluctuations of the clock. All produce was sold to order.

The Auction description will be left until the section on the Netherlands.

Rungis N.I.M.

Rungis international market in Paris covers 220 hectares and each day provides employment for 17,000 people. Sydney's Flemington Markets are modelled on Rungis.

Of the 25,000 regular buyers, 90% come from the Paris region. Rungis does have regular buyers who drive from surrounding countries including those crossing the channel from the UK. The buyer can get everything at Rungis.

Estimated turnover in 1987	Aust $9,000 m
Conversion used $1Aus = 5FF	
Meat products	$1,874 million
Seafood products	644 million
Dairy products	566 million
General foods	591 million
Fruit and vegetables	2,502 million
Flowers and plants	377 million
Producers	203 million
Total wholesalers & producers	$6,757 m $Aus
Service firms	
Connected to sectors	1.038 million
Detached from sectors	1.230 million
Total of Service Firms	$2.268 million
Total Turnover	$9,025 m $Aus

These figures are from declaration of different firms in the Markets. A lot of them have external activities to be added to this. The figures are felt to be on the low side. This equates to nine times the turnover of Sydney's Flemington markets.

On the general side from a visitor's viewpoint, the quality of product was high. Again the number of visible buyers was, we felt, very small. Large import and export companies have facilities in Rungis. These account for a lot of the business. Aside from this there remained on the two days we visited, a lot of produce unsold in the fruit and vegetable sections. These were the two days leading up to Bastille Day, a bicentenary celebration. One would expect these to have been two heavy trading days.

Flowers and fish seemed to be clearing well each day.

Imported produce was dominated by the Netherlands for tomatoes and cucumber.

Italian stonefruit competed with the local product. Israel was the major supplier of avocado. Spain for citrus. With large supplies of apples being

serviced by South Africa, New Zealand and Chile. All use easily recognised in national generic packaging.

The only Australian product that we saw was about 20 trays of average quality avocados. While appearing quite good these were cutting brown. Sellers would have a lot of trouble to hold the high prices being asked. This product had been airfreighted. The importer was happy with the quality, but not happy with the price she had to pay "Your dollar is too high and the cost of freight also too high".

She was not able to sell very much produce. Just a few specialty buyers who particularly wanted something a little different. There was very little evidence of produce being damaged in transit. This can be attributed to a far superior road network. Also refrigerated road transporters, many of these with "air bag" suspension to soften the ride. All produce appears to be well palleted and strapped. Produce that was to be hand unloaded was packed in timber for added durability. For all this care taken, merchants still insist on leaving produce sitting in the sun!

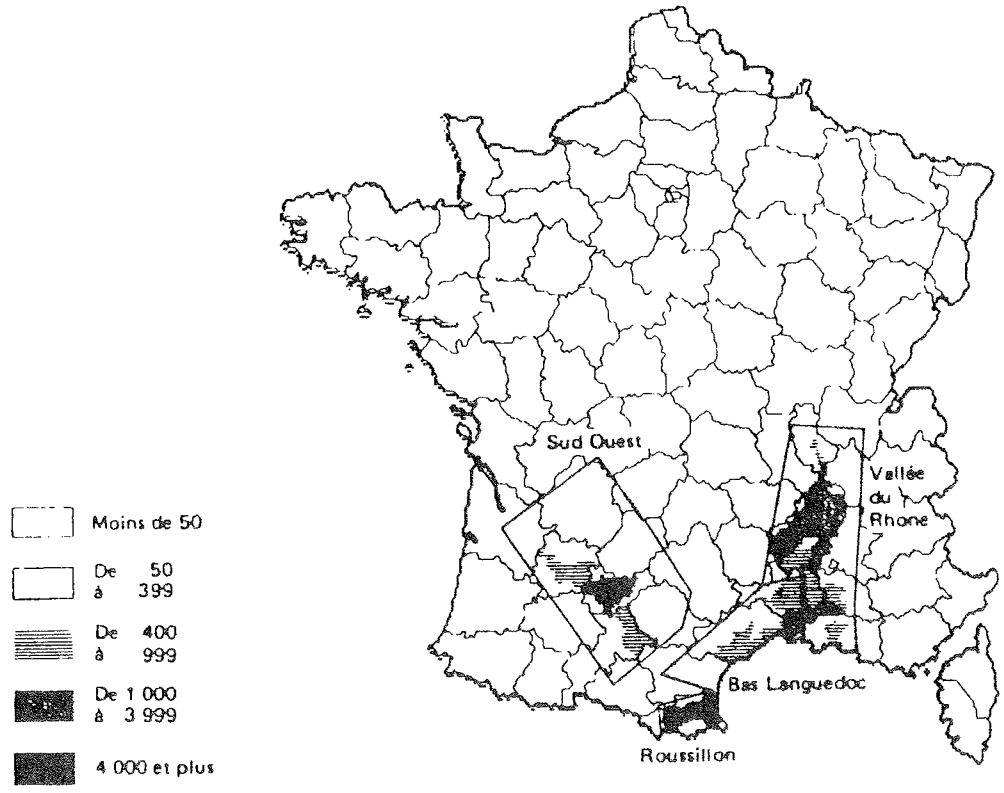


Figure 1. The Principal areas of peach production in France.

THE NETHERLANDS

The Netherlands is known as "The Gateway to Europe". It is geographically well positioned to service Europe as well as the UK. 160 million people within a radius of 500 kilometres.

It has good access through ports like Rotterdam and Antwerp. The major waterway artery is the Rhine river, connecting canals to Belgium, north and south east of West Germany and north east of France. 1,000 kms can be navigated from Basal in Switzerland to near Rotterdam.

Schipol, the international airport located in Amsterdam, provides efficient distribution of air cargo, KLM Royal Dutch airlines playing a major role. The well maintained road and rail network allows the Netherlands to service Europe. Refrigerated transport is a key element, a link which is not broken from seller to consumer.

The Netherlands has a total area of 4.15 million hectares. This is slightly more than half the size of Tasmania.

The total population of the Netherlands is 14.8 million people, a population density of 400 per sq. km, making it the most densely populated country in Europe. Australia has a population density of two per square kilometre. 6% of the work force are employed in agriculture.

The agricultural sector (including horticulture) is of importance to the national economy accounting for 25% of the Dutch exports (i.e. in 1987). To maintain this current position quality must be consistently high. It would appear that 'good quality pays'.

Many farms are small scale family farms. Most growers are specialised growing only one or two products. Farmers support each other, regarding, one another as having the same interest rather than as competitors. They compete on quality rather than on price. They produce product which is sold in identical lots, marketed anonymously. Therefore they all have the same market position.

Because of these common characteristics, growers joined forces and a specific government policy was formulated, allowing government and agribusiness to co-operate. e.g. auctions working together with commodity board. The Dutch agricultural policy is "to teach farmers to help themselves". It attempts to strengthen the competitive position of the Dutch through paying attention to production costs, improving efficiency through education, mechanisation, market regulations, quality and varieties, "if they don't have it then they'll make it" e.g. white eggplant.

Production

Netherlands horticulture is extremely intensive. The climate ranges from -10 C to 25 C in summer. Each province having its own product specialties, growing products in its most favourable climate.

Westland known as the Glass City. 4,000 hectares of glass accounts for one third of all Dutch glass houses. The average holding is a little more than one hectare. 99% of products grown here are grown in glasshouses. It is ideally situated along the coast with the sea breeze helping to balance the summer temperature.

Glasshouses are extremely sophisticated with computers controlling the climate. For heating in the winter natural gas is used. Energy conservation is a factor of consideration. Varieties are being bred which require less heat, as well technical improvements in glasshouses and heating are being researched.

To keep harvesting costs to a minimum harvesting aids were obvious. One tomato producer had a moat system under his glasshouse. He used the moving water to transport tomatoes from glasshouse directly into the fruit grader.

Another system was the utilisation of two inch water pipe as a heat source, i.e. filled with hot water. This was also used as a railway track for trolleys and mobile platforms. As an alternative to chemical spraying, integrated pest management has been used extensively. Germany is demanding more and more organically grown produce. A concept Holland will have to address if it is to retain its market share.

We also visited apple orchards in the Polders and at Geldermalson. Two, three and four row systems of Dutch Spindle. Trees were two metres apart in the rows and the rows were one metre apart. Planted on a diamond pattern. Maximum height of the trees was 2.5 metres. All trees were grown on dwarf rootstock, allowing fruit to be harvested from the ground. Fruit was picked into boxes and

wheeled along in trolleys. The tractor only passed through every fourth row.

Due to the high moisture content of the soil, compaction was a problem. To combat this, producers were practising a one pass multi operation system. For example in one pass a tractor and a mulching mower towing a sprayer. They also practised sub soil aeration and root pruning.

The Auction

Growers delivered their produce to their local auction in the afternoon or evening. The produce is then cooled in one of the cooling systems; vacuum cooling, wet flow cooling, normal cooling and CA preservation. The facilities were outstanding.

Auctioning of the produce then takes place the following day. Cooling treatment ensures a guarantee of shelf life and delivery temperature.

Growers who are auction members must commit all their produce for sale to their auction. They cannot send to another auction unless approval is given.

Behind this rule is the philosophy of restricting supply and at the same time concentrating demand. The advantage for the producer is obvious; a strong single market. For the buyer the advantages are efficiency through a single supply point and a large range of product.

The auctions of flowers and potted plants are completely separate to the auctions of fruit and vegetables and are operated by different organisations.

The grower of fruit and vegetables, produces, harvest, grades and packs his produce ready for the auction. He personally decides what standard it is. He then packs it in the appropriate box indicating the grade.

Visual aids help the producer with his grading so that grading is uniform throughout Holland. Class 1 produce displays the Dutch Girl logo. Other classes are identified by a colour symbol.

In the warehouse prior to sale all fruit and vegetables are inspected by auction officials under supervision of the Quality Control Bureau. If the produce is packaged under the incorrect grade, the producer has the choice of paying for repackaging by the auction or taking the produce away to be repacked himself.

The inspectors here also have grade charts so that individual preferences do not exist. In the flower auction the grower does not put an identifying grade on his goods. However, flowers are harvested according to very strict standards. Flowers must be uniform in all respects.

Once at the auction the flowers are inspected by officials. Inspectors look for insects, damage or any peculiarities. This is noted on the paperwork for the auctioneer who mentions this to the buyers at point of sale, along with grower's name and quality rating. In the flower auction hall produce passes in front of the buyers.

Here there may be several clocks running concurrently in one hall. Each clock for a different flower type. So in one hall Roses and Carnations may be selling, each on a different clock.

Consumption of cut flowers per capita/annum

Netherlands	155
Italy	74
W.Germany	66
Switzerland	50
Japan	38
Britain	36
France	25
USA	12

Per capita consumption cut flowers in Dfl

Japan	80. - -
Netherlands	75. - -
Italy	68.- -
Switzerland	68. - -
W.Germany	63. - -
France	40. - -
Britain	23. - -

Holland exports cut flowers to the following countries:

1. West Germany; 2. France; 3. U.K.;
4. United States; 5. Switzerland;
6. Italy; 7. Australia; 8. Denmark; 9. Sweden;
10. Belgium; 11. Japan.

The Clock System

The auction clock consists of large circle with figures running down from 100 to 0, from the highest price to the lowest. The figures are indicated by a hand or light.

The gallery of 300 face the clock, the auctioneer and his assistant. The buyer at his desk may stop the clock at the price he wishes to pay simply by pressing a button. Through microphone and earphone he informs the auctioneer how many units he wishes to buy. On the clock face appears his number, the number of units which remain to be auctioned and the price paid. (see appendix)

On average each clock registers 1000 transactions per hour. Therefore a transaction every 3 to 4 seconds. 50,000 transactions may be handled daily.

Fruit and vegetables do not enter the auction hall. It is sale by description, however, prior to sale the buyer may view the product in the auction warehouse.

Grade standards are most important, to enable a buyer to buy with confidence. Certain guarantees are given. The best of Class 1 (Class One Super) are guaranteed, that if properly treated this product will still satisfy Class 1 standard after several days.

The Dutch do not use Extra Class. They believe this standard is too high and virtually impossible to operate under. They also realise that the standard of product marketed under Class 1 varies enormously. For this class they have implemented a system of sub classes which divide it into three categories. This guarantees the producer is rewarded for his excellence and honesty.

For fruit and vegetables there are two types of packaging:

(a) non returnable cardboard boxes used for Class 1, which is usually exported;
(b) returnable containers; plastic or wood which circulate through a pooling system.

The one brand is standard for all Dutch produce, giving easy recognition of origin. The carton print shows a photograph of the produce contained inside and all necessary information (i.e. grade, number, size, storage, handling etc.). Colours are the distinctive blue, red and white.

The packaging is also designed for in-store display. The produce is then sold from the package, hence eliminating any extra handling and minimising damage and waste.

Quality is the Dutch trade mark

Fruit and Vegetable auctions conduct post harvest evaluation. Produce is treated as it would normally be by the trade and consumer. Produce is stored at approx. 16°C and is evaluated after two, four and six days. After the sixth day, producers of this fruit must come to witness the results. They observe and discuss the reason why one grower's produce is still of good quality, while another grower's produce may have collapsed. Production methods of each grower are discussed, identifying reasons for the difference in shelf life.

Fruit and vegetables are tested for pesticide residue levels. If residues exceed legal limits the produce may not be sold and if necessary is destroyed.

Post harvest conditions of flowers are also evaluated. The auctions have flowering rooms, where product is observed under consumer conditions. Vase life is checked. If a particular product is not up to standard then further tests are carried out.

Presence of bacteria and chemical in the stem is analysed. This is to ascertain whether the flowers have been pre-treated with the appropriate solution. Treatment is compulsory. Again growers come to discuss the results.

Success of the auction is attributed to large volumes of high quality produce being sold efficiently. Thereby encouraging large reliable buyers who are guaranteed a good product every time they make a purchase. Block selling is practised by the auctions. Small consignments of identically packaged and graded product are grouped to be sold as one lot.

Throughout the Netherlands major fruit and vegetable products are sold concurrently at National auction times. This prevents:

(a) large price variations between auctions; and

(b) eliminates the possibilities of buyers avoiding early auction in the hope of buying cheaper later in the day.

For example at 9.00 am precisely each day Class 1 tomatoes go on sale in all auctions throughout the Netherlands. We witnessed 40,000 cartons of tomatoes sold in four minutes. This with a maximum 3,000 per sale. The atmosphere was electric, absolute concentration. There were cries and groans as the price climbed well above expectations.

Grower Owned

The auctions are co-operative societies, owned by the growers. Some Dutch growers were surprised that we were charged to enter Flemington market, and that it was not our market.

Growers have a say in what happens in their auction. They jointly appoint the auction management. The CBT standardises sales and national issues. It belongs to and acts for the auctions. Along with this there seems to be an organisation for nearly all Dutch products, which then advises the CBT.

The number of auctions throughout the country is decreasing. In 1960 there were 133. In 1989 there remains 32. As the supermarkets combine and grow in strength so must the auctions. It is impossible to merge all auctions throughout Netherlands so Teleauctioning is being introduced. Here auction clocks at two or more auctions throughout the country are linked to computer so that they operate as one. Therefore buyers in one hall may push the button to buy products from another hall. This will again ensure concentration of supply. Only block products can be bought this way as the quality and standards must be assured. The tele-auction computer screen is divided into two halves. The bottom half shows the operations of the auction hall to which they are tuned, while the top half shows current activities in all other concurrent auctions. This allows access to all auctions by one person. Thereby drastically increasing the potential market and hence increasing demand and price for the producer.

Buyer Services

The auctions have aimed to develop an extensive range of produce, ensuring buyers need not approach other suppliers, e.g. capsicums come in a range of eleven colours. If necessary produce is imported to supplement the local produce. Imported produce is sold after the local goods and only through an importer.

As buyers must make an immediate decision so as to buy at the ideal price, they also must be well informed. The Purchasing Information System has been introduced. This keeps the exporter back in his office informed of the situation in each auction. Via a computer he can see what his buyers have purchased, the average price and product available. He can then instruct his buyers if necessary.

Buyers must have a registered address and Bank Account in Holland. All buyers must pay either immediately after purchasing or within a few days. If this agreement is broken the buyer is barred from further purchasing at any auction.

Buyers pay a small percentage of purchase costs as a service fee. They can be in possession of their goods within fifteen minutes of purchase. Many exporters have their own facilities at the auction. Packaging and completion of orders is carried out immediately. 80% of flowers are exported.

Funding

The auction covers its costs by a commission of 5.5%. On top of this a small flat charge is made per consignment, per flower consignment would be Dfl 2.00 and Dfl 4.00 per consignment of potted plants. Growers are then paid within ten days.

A minimum price is set for each product below which it would not be sold. Therefore the clock does not fall to zero. It is set below the cost price of the relevant article so that growers do not grow for the minimum price. It applies to all qualities. On surplus deliveries the lower quality will be the first which does not fetch the minimum price. Compensation is then made for items not sold. The amount of compensation depends on the quality. Class 1 compensation amounts to 80% of the minimum price, Class 2 is 60% and Class 3

received nil compensation. Compensation is paid from "product" funds. The auction deducts a levy for each unit for each product. This money then goes into the relevant "product fund".

Growers have a good relationship with research, as they share the costs. 50% of the auction commission is allocated for research. Therefore growers can influence what research is to be carried out.

Facilities and services

The auction offers great service and facilities to growers and buyers. The CBT continually carries out market research, analysing present products, market trends, demands and future markets. It also carries out advertising and promotion.

Market information; regular reports are issued to members available daily on their farm computer. We were given a booklet outlining all prices for imported flowers. A survey of weekly markets and prices is published.

Cartons are purchased in bulk by auctions. Members then take small amounts as required.

Flower growers are supplied with sterilised plastic containers. These are sterilised after each auction.

Consumption of Dutch products is stimulated through a huge network of advertising campaigns. To us the industry appeared to envelope the entire population.

We had to admire the Dutch support structure and co-operation. Advice was freely given to ourselves as this is the way the Dutch operate with each other. Study groups are common. Here growers not only discuss cultural aspects but also production costs and returns for different crops. By helping each other, they feel they are helping themselves. They each benefit by successfully servicing a large portion of the European market. Remembering a large percentage of Dutch product is exported.

	Auction supply as % of national production	% exported
glasshouse vegetable	99%	79%
open air vegetables	90%	43%
fruit	75%	32%
mushrooms	50%	22%
Total		56% ave.
flowers		80%

To ensure efficient export, there are all necessary facilities at the auction complex.

These include transport firms, freight forwarding agents, KLM Cargo, plant protection services, customs & excise. This all guarantees fast, efficient processing of highly perishable goods that are bound for an export market.

One complaint of the auctions comes from the supermarket chains. Auction prices vary daily whereas the supermarkets rather know prices at least one week ahead, allowing them to plan their advertising. Supermarkets are attempting to approach growers direct. Glasshouse growers are traditional auction supplies. Outside growers are not and are more prepared to look to other marketing strategies.

Germany which is a large buyer of Dutch products, sell 90% of fruit and vegetables through the supermarkets, with 5 major importers and retail chains controlling this, 5% only selling in specialist greengrocers.

In Holland 20% sell through supermarkets. The traditional greengrocer being very evident.

Importing

The majority of the imported produce is handled by importers/distributors. The major Dutch ports have warehouse facilities. This warehouse and distribution service is offered by reliable companies usually in combination with transport and forwarding services. There are 10 wholesale markets. Imported fruit can only be sold through an importer.

We visited in Rotterdam with one importing company Jos ven den Berg' and met with their representative, Matthew Jansen. The company doesn't sell a lot in Holland but works with other European agents who in turn have their buyers. It acts as a distribution point for Europe. Like many other importers, they have available bonded warehouse facilities for bulk storage.

Last season the company imported 1.5 million cases of fresh produce from Chile. Most of this product arrived by sea in just under three weeks. They are recommending the use of "Freshtaina". These shipping containers are twice the cost of the standard container but can significantly extend

possible shipping times. For example, Mangoes were guaranteed for forty days.

According to Matthew Jansen there is a large interest in double layer tray packing for peaches, compared to our single layer. "There is", he said "a niche market for quality cherries in December". He has in the past dealt with Australian produce and was quite happy with it. However, he complained of Australia's unreliable transportation.

It was July when we met. He knew then, that in December, Chile was exporting to him in Holland, 70 tonne of stonefruit. It was arriving by chartered 747. He knew the exact arrival date, and the complete product breakdown and the price.

When Mr. Jansen then asked us what we could supply, we realised how unprofessional we were in Australia. The European and UK importer is accustomed to dealing that way. At times they know twelve months in advance what will be arriving. They deal closely with the exporter and visit the farms where the produce is grown. Could we in Australia be equally organised? Too often we export because we have a surplus stock at Flemington Market.

According to Jack Akkersdijk of Austrade in The Hague, "Many Australian exporters now recognise the advantages of holding stocks in Dutch ports for distribution to European markets". According to Jack almost 90% of the imported Australian produce during the European "off-season" is sold by importers to the catering industry (usually through specialised wholesale markets) and to specialist shops (through wholesale markets). "Generally these premium price products are too expensive for the Dutch Supermarkets".

Australia sold and distributed in 1988 through Dutch importers and their warehouses:

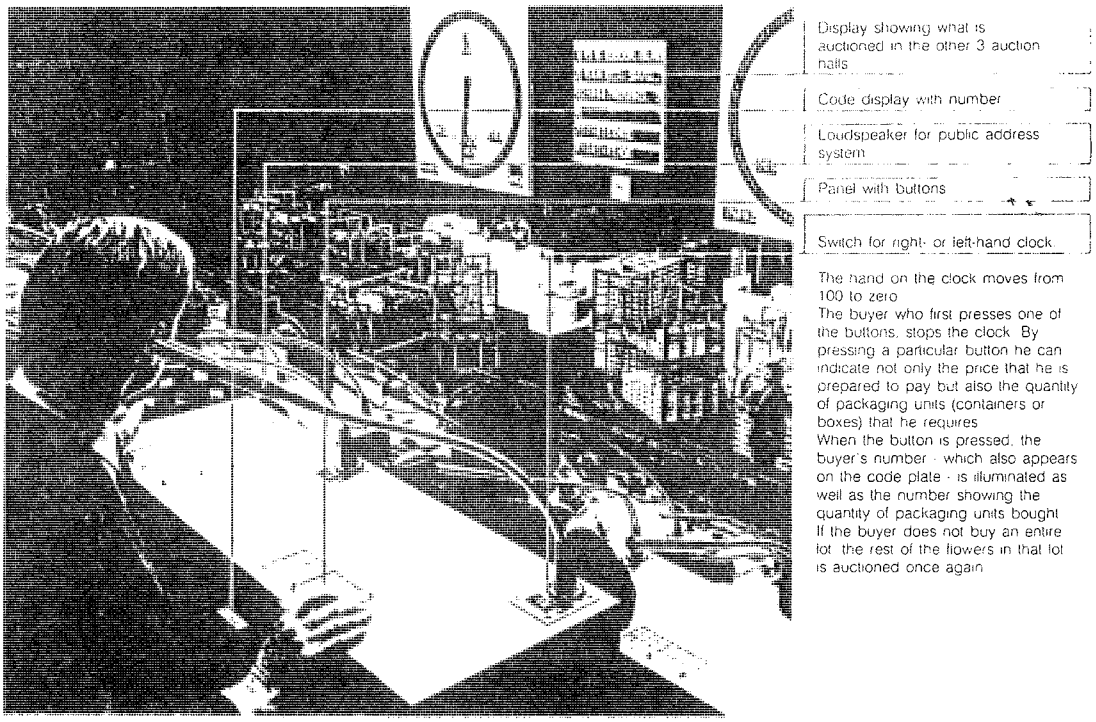
• Oranges and mandarines	nil
"other" citrus fruit	47 tonnes
apples and pears	663 "
"other fruit"	822 "
vegetables	258 "

The following was sold and distributed through Dutch bonded warehouses in 1988 to customers in other European markets:

- 8,747 tonnes of citrus fruit
  36,883 tonnes of apples and pears
  58,033 tonnes of "other' fruit
  7,941 tonnes of vegetables
  103,683 tonnes
- Total imports in the Netherlands -
  1988 imports of fruit totalled 1,294,134 tonnes, representing a value of $A918.4 million. 1988 imports of vegetables totalled 396,342 tonnes representing a value of $A308.4 million.

This equals one and a quarter times the estimated turnover of Flemington markets. The Netherlands is very anti South Africa. Australians have a good rapport with the Dutch as many immigrated to Australia in the 1960's.

Australia is seen to be a clean, healthy country with plenty of sun. We should be able to capitalise on this.



WEST GERMANY

In Hamburg, West Germany, we visited the wholesale markets, importers and Austrade. At Hamburg Wholesale Markets were some Tasmanian apples on display alongside the best from New Zealand and South Africa. The Australian apples in comparison to the others were undersized, unwrapped and of mixed maturity. The seller was quite disappointed.

German wholesalers did enquire about supplies of Australian kiwifruit. They were looking for an alternative supply to the New Zealand kiwifruit as the responsibility for this kiwifruit had been handed over to the New Zealand Apple and Pear Board. Therefore many wholesalers who had for years been responsible for the distribution suddenly found they were not receiving any further NZ kiwifruit. Only a select few were to receive this supply.

I question the possibility of this market, as Italy and France have large supplies which may be stored for their 'out of season market'. Large supplies also come in from Chile, by sea in a much shorter period than Australia could foresee.

Most NZ kiwifruit was packaged in volume fill bulk packs. This was very well accepted. The fruit, we were told, is the best in the world.

Austrade

George Miller, the Australian Austrade officer suggested Australian growers and exporters could avoid some problems (such as sending unwrapped apples when the present market preferred them wrapped) simply by communicating to those who are involved, such as the Austrade officer or the importer.

This is particularly important when marketing in foreign language countries. George cited an example of Australians using abbreviations in their marketing. The words 'Aussie Qual' appear on packaging in Hamburg. Qual in German means pain.

He has also been aware of problems arising from translations. 'Please send us a copy of all marketing literature and packaging print for us to check before you enter the German market'.

This message was driven home to us during our past stonefruit season. We were approached by a small exporter to supply fruit destined for Hamburg. We informed him that at the time our only packaging available was styrofoam. This is not acceptable for the German market. He replied that he would send it anyway. He was also unaware that in Australia we use a post harvest treatment which is prohibited in West Germany. Finally he had not prepared the importer of the impending consignment. Fortunately the consignment was stopped and this person no longer is involved in the export of Australian produce.

Import

We met with Heidi Griewaldt of Trofi who are importers and distributors. Heidi informed us that it was better to use importers and distributors rather than market wholesalers. They have the advantage of targeting the market that best suits the particular product. She advised distributing a high quality high cost product to Berlin, Dusseldorf and Munich. The lower priced products to Hamburg and Frankfurt.

Two weeks shelf life would be expected as produce travels from importer, wholesaler to supermarket. This may be difficult with soft fruits.

Absolutely blemish free produce is imperative for the German supermarkets which are self service. We noticed any blemished fruit was rejected by the consumer. We witnessed one consumer using his own scissors to remove unwanted berries from a bunch of grapes. Those he cut off were dropped to the floor.

Given that only five major importers and retailer chains control 99% of the market it becomes an important factor to notify at least two weeks prior to consignment in order for them to prepare their advertising and pricing.

UNITED KINGDOM

Produce for the U.K.

We had the pleasure of visiting a warehouse and preparation centre at Poeldijk Auction Centre in Holland. This facility belonged to the Geest company.

Geest are one of the market leaders in fruit and vegetable distribution for Britain, with 29 wholesale market outlets across the country. This aside from a specialist banana sector, fresh produce marketing sector and a food preparation sector.

From this facility in Holland, Geest is purchasing and forwarding Class 1 super grade to its distribution centre in Kent. Geest have recognised the potential problems of the multiples becoming too strong in the retail market place. If this trend continues then the small owner operated retailers will be all but put out of business. With this in mind Geest have put together a plan to support the small retailer. They have so far grouped together fifty shops in Scotland and the north of England to sell under a promotion brand of 'Field fresh' produce.

The produce is of course sourced and distributed by Geest. This is backed up by advertising and in-store promotion material.

The initial investment for each greengrocer was 400 pounds. For this he obtains a lower buying price, well organised, large scale advertising and a guarantee of consistent high quality placing him in a better position in the market place. Of course, Geest is not a benevolent society. The reason behind this project is to open up alternative supply markets. This reduces their exposure to the multiples. It also gives them a regular daily turnover of product.

There is a certain amount of concern that the large multiples from different countries may group together to gain a greater buying power. Geest buy two specific lines. One in the Holland brand cardboard for direct consignment and the second in timber trays. This second line of generic produce is taken back to the warehouse where it is rebranded into three different brands specially for the retailers. For example, J. Sainsbury label would be applied before consignment to Sainsbury's distribution centre in the UK. Geest do very little prepacking, in Holland. Instead it is carried out close to the retail outlet, to minimise the risk of product break down at the point of sale.

There is a certain amount of resistance developing in the UK to timber packaging. For these special orders Geest are buying or repacking into cardboard. The cardboard is a twin cushion type hot glue machine erected and very robust. This is seen to be a recyclable product.

Geest claim to have become the market leader in supply of organically grown fruit and vegetables. Whilst the market is still relatively small, their development work in this area is part of their policy of responding to environmental issues and consumer change. Their next step will be to extend their sourcing skills and growing and post harvest technology to a wider geographical area in order to secure consistent supply.

Trade Structure

The UK fresh produce market has changed dramatically over the past 20 years, from a wholesaler, greengrocer network to an increasingly supermarket dominated retail system. The importance of the wholesale markets has declined due to the multiples buying direct from UK growers and exporters.

There was some disagreement as to the actual proportion of sales through the retail outlets. The result is the same. The greengrocer and market stall holder have lost considerable ground to the supermarket. To combat this, many greengrocers are investing in quality, only to find that their market is becoming even more competitive and margins may decline! However, the benefits to the consumer, and ultimately to the producer who is prepared to invest in quality could be substantial.

Produce Distribution

In the UK we followed the fruit through the distribution chain to the consumer.

Several prepackers were visited. These all operated on similar lines. Their main differences being product and size of operation.

"Griffen and Brand"

The first of our visits was with Harry Crawley, who is known to the Australian industry through a tour made in 1986. He works for Griffen and Brand who specialise in repacking and prepacking the smaller type specialty lines for the supermarkets. They supply 60% to multiples and 40% to small traders and farm shops.

Whilst we were there they were preparing Califomian produce for sale in Britain:

(a) Thompson seedless grapes - well known in Australia
(b) Corinthian grapes - a mini grape which is extremely sweet and eaten stems and all.
(c) "Driscoll" brand raspberries - a premier US brand
(d) Black "Friar" plums

Nothing is left to chance with the import of Driscoll berryfruit. The pallet arrives totally encased in a very heavy duty cardboard. Similar to how we would receive a new television.

The raspberries were re-sorted and repacked in the consumer preferred size and type of package. The packages were priced and bar coded ready for sale complete with the supermarket's own label.

Although the Friar plums were not repacked every box was completely checked before delivery.

This enterprise utilised people not machines, as only people can see the short comings in quality. With a permanent staff of ten only who worked as supervisors, Griffen and Brand source their labour from an employment agency. Most of these people became regulars and semi skilled at their job. The employment pool allowed for fluctuations in demand and supply.

"Mack Multiples"

Mack Multiples is a brand new facility for prepacking and distribution in the UK. They believe with the enormous investment in state of the art technology and high quality facilities that they are setting the standards for other prepackers to match.

Dr. Allen Legge is the head of quality assurance. It is his responsibility to negotiate with the retailers, then write the standards for "Mack" its suppliers and producers. He also advised growers on new products for the future.

Evaluation laboratories are in place at all the major prepacking centres. Fruit is analysed as it arrives. Maturity for stonefruit is checked with penetrometers for firmness, sugar levels are also tested. Most tested at 8 to 10 pounds/square inch, sugar at 8-10° brix.

Stonefruit is then prepared to the individual specification of the buyer. The fruit is put into the ripening rooms and 'triggered' with heat and humidity and sometimes ethylene. Premier quality retailers Marks and Spencers specify pressure readings of 2 to 3 lbs to satisfy their "ripe ready to eat" market plan. Most other retailers will specify 4 to 6 pounds.

Samples of every consignment are kept on storage shelves in the laboratory for evaluation. They are not removed until about three days after the specified use by date. This helps in monitoring their handling procedure, as well as in case of a disputed claim for fruit breakdown at the point of sale.

"Hunter Saphire"

Our third operation was Hunter Saphire. Here we met with Ken Milne. They are prepackers for Marks & Spencers, Tesco and Sainsbury. They also have been appointed as marketers for East Kent Packers, one of the very large co-operatives packing houses. Primarily handling English apples and pears.

Over the past few years Hunter Saphire has changed direction emphasising the development of business in the packaged and prepared food markets. The main aim is to reduce dependence on the lower margin lines of fresh produce and to become more involved in higher value niche areas such as prepared meals. This has led to a string of acquisitions which transformed the company and brought a substantial increase in sales and profits. However, while the new businesses are beginning well, the produce business has been hit by overcapacity and fierce competition driving that part of the business into loss.

The range of produce handled is extensive and company development has resulted in an increased emphasis being placed on the provision of higher value produce. Those manufacturing activities have been developed where the basic fresh produce that once comprised the core business is converted into chilled recipe meals and other packaged products. This offers to the customer fresh convenience foods, free from additives.

"Hunter distribution"

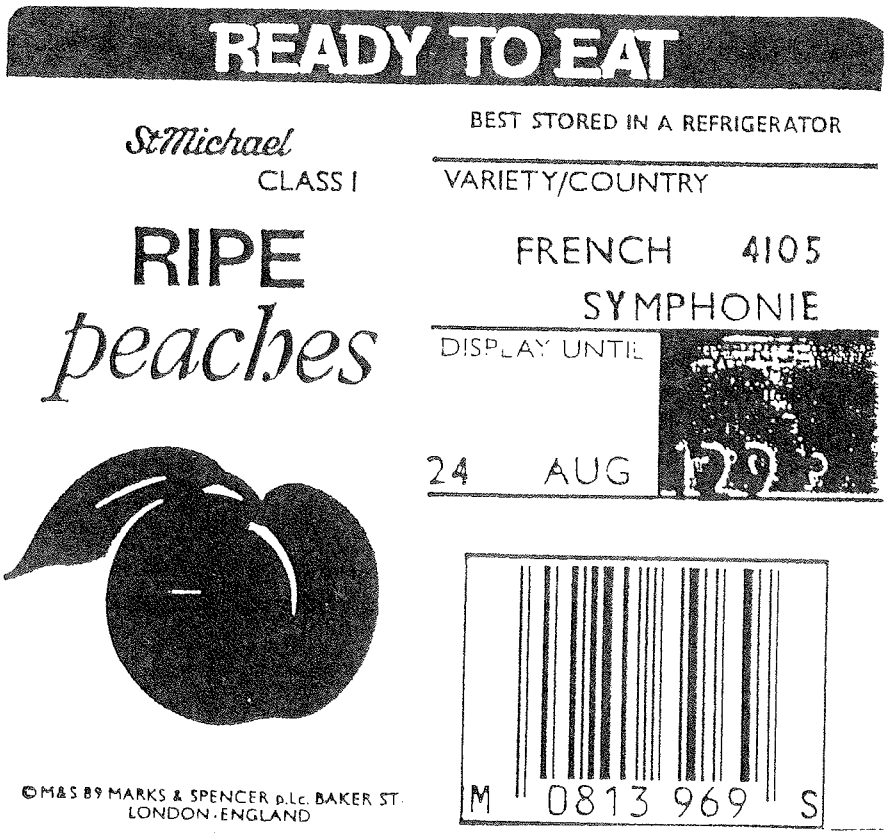
As well as providing a distribution service for other operations this division also operated distribution facilities on behalf of Marks & Spencer, Tesco and Sainsbury. A complete range of grocery items is provided. The company's distribution division operates depots on behalf of Tesco, Sainsbury and Marks & Spencers.

"Hunter Saphire"

Knew Australian produce very well and would think twice before committing themselves on negotiations with Australian suppliers. They had in the past lost a lot of money handling our produce. They claimed this was due to inconsistent supply and a lack of any quality assurance schemes. Leaving them with inconsistent quality on arrival in the UK, when and if it arrived at all.

If the prepackers are late to supply the multiples, or worse, cannot supply as promised, they are reprimanded by the removal of all orders for two weeks. Business with a large investment cannot stand this sort of disciplinarian action. Therefore they must ensure that their suppliers are committed and reliable.

Hunter Saphire would stay in contact to follow the progress of Australian suppliers. When Australia could guarantee the commitment they may consider again doing business.



Home Grown Fruit (HGF)

Home grown fruit is the most recognised brand of English apple. It is also the name of the second tier co-operative that is responsible for the marketing of it. HGF is a co-operative of co-operatives. They command 35% of the domestic market. Mr. Michael Green is the man responsible for the marketing of all fruit handled by the member co-operatives. This was single desk selling at its best. Turnover exceeded twenty million pounds, with 60% attributed to sales of the English Cox's Orange Pippin apple. The processing apple of Brambley contributed twenty per cent.

The members may have their own packing and storage facilities but must work within the guidelines set down by HGF. HGF arrange all sales, freight, supplies of packaging and quality assurance standards. The co-operative is left to concentrate on sourcing fruit and running an efficient packing and storage complex.

Multiples

Seven supermarkets (multiples) retail 58% of all food sales, 50% of fruit and vegetables. The major multiples are: Sainsbury, Tesco, Gateway, Safeway, Waitrose, ASDA and M&S. The following are some comments made by distributors and prepackers about the Multiples.

- They are all very similar in their strategies
- They are often very strict with their distributors/packers
- They have developed their own label products which act as a quality assurance scheme
- They have developed individual specifications which must be strictly adhered to by the distributor/packer
- They frequently inspect the distribution centres ensuring hygiene standards are high.
- Produce is standardised and of first class quality
- Packaging is standardised, selling usually by weight
- They demand consistency
- Often carry out field inspections on producers

There are approximately 20 pre-packers who compete to supply the multiples. Produce not required is then sold at the wholesale market. Independent retailers source produce from the wholesale market. The next step may see some of the multiples purchasing more produce direct from the suppliers. To counteract this we would see packers and prepackers entering into joint ventures with suppliers.

With the requirements being set by the multiples, efficiency and timing are of utmost importance. Specified delivery times are being set by the retail distribution centres. Delivery outside of the arranged time is not allowed.

"Tesco"

After visiting one of these retail distribution centres we can begin to understand why these delivery times are important. One of Tesco's 8 retail distribution centres at Rugby is responsible for supplying all the fresh produce including smallgoods to 50 of their large supermarkets. Outside this building were at least 30 refrigerated trucks, waiting to be loaded. The enormous warehouse was temperature controlled with facilities for about twenty trucks to unload and be loaded.

On arrival all produce is checked by quality control inspectors. If the inspection is passed, then produce is entered into the computer, as received. It is then warehoused in the appropriate cold storage facility.

The Tesco distribution system was referred to as "Pickby Line System". The area used to prepare orders was divided into fifty i.e. one collection area for each shop. One person had the responsibility of delivering to each of the 50 collection areas only one produce type. For example, all the orders for apples were carried out by one person on a forklift. Each shop's complete order was displayed at each collection area, while the operator carried a breakdown of apple orders for each shop. This allowed everything to be double checked. At any one moment up to ten fruit and vegetables would be distributed to collection areas by 10 different people.

Tescos refrigerated trucks were sectioned into three. The front section below zero degrees, for

frozen smallgoods. The second section at 0° to ten degrees for perishable fruit and salads. The third section at ten degrees for hard vegetables and fruit such as citrus.

Produce was moved quickly through the warehouse and into the retail store. Delivery was made as soon as the truck was loaded. Storage was reduced. The shop may get more than one delivery per day, thus allowing for a more even workload. Small loads more often. This lessened the likelihood of the shelves looking empty and guaranteed the consumer of fresher product..

The specifications sound very strict, although those who were supplying the multiples claimed that the standards assured the customer was getting a product that she will come back for again and again. This increased the consumption of fruit and vegetables. We were told by HGF that to supply the multiples does cost money, they are demanding, but they make you money.

I have included:

(1) a sample of a specification for peach from Italy, France and plums from South Africa (see appendix)

At the supermarkets the retail presentation of fresh produce is first class. Produce is a feature of the store. Shopping for fresh fruit and vegetables is a pleasure.

Staff training is obviously very important in the UK. The produce manager in a Tesco store is responsible for

(a) selling as much produce as possible; and
(b) ensuring that all lines of stock are available;
(c) ensuring produce is handled correctly;
(d) displaying produce to its best advantage;
(e) he is not responsible for pricing, that is management responsibility.

Successfully achieved the visual result is an environment in which the housewife is relaxed. Produce was as specifications demanded. The result being produce was walking out the door.

Promotion of product in a Tesco store uses shelf talkers, information leaflets, in-store promotion, taste testing and price reduction.

Tesco stores operate procurement on similar lines to the other multiples with direct contact with growers and marketing organisations as well as receivals from the multi product distributors.

"J. Sainsbury"

Quality standards must be independently monitored. Quality assurance adds value to products.

The ability to offer consumers a reassurance of consistent quality and perceived value for money provides a strong marketing tool. We have seen that value for money through consistent quality is a stronger motivating factor than price. The UK consumer is conditioned to expect quality. Sainsbury's quality has been the key to their reputation. This has been achieved through their own label products. This label offers a quality assurance to the consumer.

"Marks & Spencers"

Marks & Spencers operate growing programmes in which producers grow to a defined schedule. At the beginning of the programme a price is set although seasonal factors may see price change. New crops specially grown for M & S are priced on a cost plus basis. Except for times of glut M & S do not reduce prices as a promotion method. They consider shelves stacked, with the finest quality, their preferred promotion tool, attractively presented, it promotes itself. They aim for the very up-market clientele. This in itself sets M & S apart from the rest. The English are particularly "spoilt for choice" and some will pay very high prices for quality produce, particularly out of season.

ORGANICS

The big discussion everywhere we went centred on "Nitrates", attributed to intensive farming methods and the use of fertilisers and manure. This was very evident in Holland where their major problem is the disposal of animal waste. The Dutch channels were overgrown with weed. At the Adriatic sea in Italy, there were complaints that the poor colour of the water was attributed to high Nitrates used throughout Europe. It is these physical signs that start people thinking.

Organically grown produce was a major topic throughout our travels. In the UK it appears to be an industry which is quite organised. Recognised labels are: The Soil Association, Demeter, Farm Verified Organic, Organic Farmers and Growers, Conservation Grade. The Soil Association acts as a body which sets standards and outlines acceptable organic practices for fertilising, control of insects, disease and weeds. It is a recognised authority lobbying for producers. Their one complaint being that at this stage there was no subsidy for conversion. They are asking for assistance for three years. It is in this conversion period that yields and returns drop. Subsidies are already available for traditional farming methods. Produce is only sold under the Soil Association standards after being certified free from non-approved practices for a minimum of two years.

Overseeing all of this is UKROFS. UKROFS (United Kingdom Register of Organic Food Standards) is an independent third party organisation set up at the request of the Minister of Agriculture, Fisheries and Food, to set production standards for, and establish a register of, approved producers of organic foods.

Most of the organic produce has been sold in the small greengrocer or at the farm gate. Recently the multiples have carried out tests to identify the demand for organic produce. The findings show that the demand is growing, and the consumer is willing to pay a premium for the organic produce.

Safeways have attempted to introduce organic produce into the stores on a regular basis. However, to be consistent they have had to import a lot of produce. They purchase produce which conforms to the standards of The Soil Association or internationally those under the International Federation of Organic Agricultural Movement.

Sainsbury offers organic produce as a trial basis in 22 stores. Sales will be monitored before any further commitment is made. They already have strict standards on non-organic produce, the great majority of foodstuffs being bought under contract. This enables them to set stringent detailed quality control specifications. All suppliers are required as a condition of supply to ensure that only pesticides covered by the Government approved chemical scheme are used and applied at times and rates prescribed.

New legislation is being introduced in the UK which requires growers to maintain records of all pesticide applications. This requirement has been made by Sainsbury's for several years.

Sainsbury's have over 3,000 own label food and drink lines from over 700 world wide sources. The suppliers are visited on a regular basis, ensuring the final product is as the specified standard.

I feel the multiples will continue to demand imperfection-free, cosmetically clean fruit. Requirements which conform to their present standards, along with continuity of supply.

Application

Australia's CSIRO and Hawkesbury College (Hawke Aide) are recognised as having achieved results in the field of integrated pest management. As yet, results are only satisfactory in the controlled environments of the glasshouse. In the future the use of glasshouses will increase in Australia. We then may see more organically grown vegetables.

Due to unfavourable weather conditions and Queensland fruit fly, coastal areas of NSW are not a satisfactory growing area for organically grown stonefruit. However, there are growers who:

1. Recognise the need to reduce the use of chemicals. This is achieved through -
   (a) better programming, spraying only as necessary
   (b) careful attention to spray equipment
   (c) good cultural practices.
2. Recognise the need to improve soil structure through mulching with natural products and reducing chemical fertilisers.

3. Reducing the use of pre-emergent weedicides by the introduction of controllable legume crops and grasses. The advantages are two-fold -

   (a) nitrogen fixing

   (b) a supply of organic mulch.

All of this will lead us in the direction of a sustainable horticultural system.

There are different levels of "organic" production, ranging from "reduced use" (as practised by the Italians) to total organic production. The total organic farmer may suffer as consumers may become confused. Therefore, it will be more important that the consumer sticks to the recognised labels.

The introduction of the concept "organics" is causing obvious conflicts in the market. The housewife is now being told that what we once understood to be healthy fruit and vegetables is now seen to be unhealthy.

It is important that the consumer is accurately informed about chemical residues. Wrong information can be very damaging to all. In Australia 99% of fresh fruit and vegetables sampled at Sydney's Flemington Market had been found to be well within the maximum safety standards.

Organically grown produce with some skin blemishes may not be accepted by the consumer unless it is accompanied by details of production, thus, explaining that the blemish is due to the lack of chemicals. The consumer in Europe is beginning to request organic produce, and given the media coverage in Australia of Greenhouse gases and the environment, the Australian consumer will follow suit.

CONCLUSION

Australian orchards are some of the cleanest with the most modern growing techniques seen anywhere. However, we must become more cost effective. The major buyers do not care whether wages are high or our dollar is too high. That is not their problem. Their only concern is whether our product is good and the price is right. Nobody owes us a living.

We will not develop a market on the political problems of South Africa or Argentina. The only thing that counts is delivering a product at a competitive price on a very regular basis. This rule applies whether we are talking about Hamburg, Hong Kong or Flemington market in Sydney.

What we were told and observed is not really very different to what we have been told by our industry leaders. The following are some of the more important points that were repeated to us on our travels.

These refer to Australian export.

- Identify if your industry needs to export. If not, don't bother. It is a very difficult exercise and needs dedication.
- Communicate with the experts. That is the importers and officers of Austrade in the importing country.
- Produce and supply only the product requested by the importing country. Do not simply export surplus product from domestic consignment.
- We must be more reliable with quantity, quality and the time of supply.
- There is a need for national co-ordination of supply and packaging to ensure a reliable and recognisable product
- Creation of a good image of Australia is only possible by the use of quality assurance schemes and National Branding. We witnessed numerous European companies selling under Australian brands, i.e. Kangaroo, Koala, and Cockatoo.
- Unfortunately we must sell on consignment, the method practised by our main competitors, such as Chile.

At this point of time Australia does not have an uninterrupted cool chain. Growers may carefully pre-cool and even consign in refrigerated transport. However, produce then sits out in the markets and is transported to the retail shops in open trucks. The ripening process quickens with this variation of temperature. In Europe and UK produce is pre-cooled at the packing facility, the cool chain is not broken until the consumer leaves the shop.

Improvement in transportation system is imperative. Our most profitable market for stonefruit in Europe is pre-Christmas. At this time air freight space is at a premium and we must compete with the Christmas mail for space allocation. Given that mail pays a premium rate, then produce is disadvantaged.

The Australian producer tends to be very individual and very secretive. We compete with our fellow producer on price, not on quality. For the Dutch producer it is the opposite and to a large extent the same exists for the co-operative members of Europe. The Australian producer belongs to the "Plant and Pray Society" and hence will consign to where he can get the best price today, disregarding export arrangements he may have made months earlier.

There is a need to work together in the interest of our country. We have seen how this approach has been successful for countries in Europe. 1992 will see the EEC in economic union. a market of 320 million with no economic barriers. With this consolidation of their market, new economies of scale will open up to the European. This will make market entry even more difficult for others.

We do have the materials required, if only we would accept being part of a team, knowing when to ask for help, not attempting to control all aspects of the market.

It is difficult for exporters to procure produce from individual growers and then attempt to compile a uniform consignment. The industry needs greater co-operation between growers, exporters and government officials.

The Dutch act as a member of a highly co-ordinated national team. This team effort easily shows up the countries whose members and industries play as individuals. We have many exporters competing nationally. However, I wonder how many times an order is dropped as it cannot be filled by one individual company. Here there is an opportunity to co-operate with others, working together so that Australia can fulfil a commitment.

This presents problems with cartons, as each company has their own packaging. This is why Holland, South Africa, New Zealand, Chile and Israel use a national brand carton. To be a market force there is a need for us to be united. The countries visited have come to expect long lines of even quality. Why should they accept small consignments of various packages with varying standards. This only presents problems for them to sell.

The Australian producer has been disadvantaged by the absence of Plant Variety Rights in the past. Some of our current varieties lack colour, flavour and shelf life compared to product supplied by our competitors. Some of our newly planted varieties have already been superseded in Europe. This problem will resolve itself over the next few years.

Quality control at all levels is a major factor in Europe. The Dutch claim that 'Quality Pays' while the British say that it is 'absolutely essential'. Quality assurance schemes cost money to initiate and operate. However, a much greater cost is incurred when at some point in the marketing chain a buyer rejects the produce.

The UK multiples are so successful because they provide to the consumer a fresh product available 12 months of the year. This is achieved through a series of quality assurance schemes, started by the grower, completed by the retailer on behalf of the consumer. We all must take responsibility for our product. The responsibility does not end until the produce has been consumed by a satisfied customer.

The European producer is very well serviced with market information. This is necessary for successful marketing. Much of the grower unrest at Flemington Markets in Sydney could possibly be attributed to insufficient market information.

The European market is highly sophisticated and very competitive and for the most part over-supplied. There are, however, niche markets available for specialty product, particularly pre-Christmas. Access to this market is quite difficult and limited. For these reasons Australia should

concentrate on the markets of Asia and the Pacific region. We are ideally suited to service these markets. If ever we have an opportunity this is it. Chile is very much aware of this market and is beginning to target it. If we are not careful we will lose this market also. Even though this market is closer, the same principles of marketing exist as for Europe.

Throughout UK and Europe there are many value added industries. Value adding is only a worthwhile exercise if we have a market for the goods. I do not know if the Australian population would accept food prepacked in the plastic wrappings as the English do. Perhaps this will change.

The purposes of packing foodstuffs have been:

- as a marketing tool
- for mechanical protection
- for improved hygiene

Mechanical protection and guaranteed hygiene during handling has ensured longer shelf life. This improved shelf life offers:

- the advantage of expanding the market geographically
- a satisfied customer
- reduces distribution/transport cost.

With Asia, we may be able to establish a value adding industry for our fruit and vegetables. We may have a position in this closer export market.

Our six months has given us the opportunity to follow the path of fresh produce through Europe. We have spent time with very proud producers. Visited the establishments of very efficient packers and wholesalers. We have watched the consumer carefully choose her family's meals from fresh produce sections of some of Europe's leading retailers. This experience will go with us for the rest of our producing days.

For this we are eternally grateful to the Nuffield Organisation and all the other people who have supported us during my 1989 Nuffield Scholarship.

PRODUCE SPECIFICATION F - PLM - 02 - 5

DATE: November,1988

1. **PRODUCT NAME:** Plums, Bulk (Cape)

2. **ORIGIN:** South African

3. **DESCRIPTION:**

3.1	General:	Bulk plums packed in standard cape cardboard boxes, in 2 layers
3.2	Appearance:	Clean, dry, sound and with a shape characteristic of the cultivar. Free from all insect and mechanical damage, excessive shrivel or decay. A tolerance of not more than 1 fruit per box will be permitted for waste.
3.3	Colour	Typical of variety
3.4	Texture:	Fruit should be ripe and reasonably firm.
3.5	Size/Count:	Size: A-50-55mm B-45-50mm
3.6	Net Weight:	5 Kilo

4. **TEMPERATURE CONTROL:**

4.1	Product Temperature Prior to Packing	7-10 deg C
4.2	Air Temperature in Storage Prior to Despatch	4-5 deg C
4.3	Air Temperature during Distribution to Depot	4-5 deg C
4.4	Product Core Temperature on arrival at Depot	<10 deg C

5. **PACKAGING:**

5.1 INNER:

5.1.1	Type:	Cellular trays and foam packing.
5.1.2	Materials:	2/3 trays of plastic (with cupped recesses) Foam protective layer and foam blocks for corners to act as spacers.
5.1.3	Dimensions:	NA
5.1.4	Labelling:	
	Description:	NA
	Position:	NA
	Code:	NA
	Bar Code:	NA
	Price:	As stated by Buying Department

5.2 OUTER:

5.2.1	Type:	Standard cape box with hinged top flaps
5.2.2	Materials:	Cardboard with plastic strengtheners
5.2.3	Dimensions:	NA
5.2.4	Pallet Configuration:	NA
5.2.5	Labelling:	
	Discription:	Cape Plums Loose
	Origin:	South African
	Pack Count/Weight:	5 Kilo
	Display Until:	Day of delivery plus 3 days
	Packers Code	
	Bar Code:	Suppliers Name and Address Code

6. **APPROVAL & ACCEPTANCE**

FOR BUYING STORES .....

FOR SUPPLIER .....

PRODUCE SPECIFICATION F - PCH - 01 - 1

DATE: September,1988

1. **PRODUCT NAME:** Peaches, Bulk

2. **ORIGIN:** Italian, Spanish and French

3. **DESCRIPTION:**

3.1 General: Italian cardboard or wooded Eurotray containing 1 layer of peaches within the protective recesses of a black cellular acetate liner.

3.2 Appearance: Clean, dry, sound, intact and of uniform shape i.e. excluding all insect, mechanical and hail damage - all bruising, pressure marks, scars - all mishapes, cracks and split stones.

3.3 Colour: Dependent on variety - minimum percentage of total surface area. Between 50 - 80%. Fruit should be packed with the coloured face uppermost.

3.4 Texture: Flesh must be yellow and free from signs of storage damage. Smooth, intact skin, firm but NOT hard. Internal fruit to have high juice content, not fibrous and no signs of cold store damage. Ave. 11-13 lbs per sq.inch pressure to allow for 3 days in store.

3.5 Size/Weight:

Size:		Weight
A	68 - 74mm	146 - 170g
B	62 - 68mm	115 - 130g
C	56 - 61mm	95 - 114g

3.6 Size/Count:

	Italian		Spanish/French
AA	Size = 39 (42)	AA	Size = 22
A	Size = 48	A	Size = 26
B	Size = 56	B	Size = 32

4. **TEMPERATURE CONTROL:**

4.1	Product Temperature Prior to Packing	N.A
4.2	Air Temperature in Storage Prior to Despatch	3-5 deg C
4.3	Air Temperature during Distribution to Store/Depot	9-11 deg C
4.4	Product Core Temperature on arrival at Depot	max 10 deg C

5. **PACKAGING:**

5.1 INNER:

5.1.1 Type: Cellular protective liner

5.1.2 Materials: Black actetate liner

5.1.3 Dimensions: Approximately 24"x16" (40-60mm). Number of cups and size depending on grade of fruit.

5.1.4 Labelling:

Description: NA

Position: NA

Code: NA

Bar Code: NA

Price: As stated by Buying Department

5.2 OUTER:

5.2.1 Type: Standard Eurotray solid ends, handle cut out

5.2.2 Materials: French cardboard cartons

5.2.3 Dimensions: Approximately 16"x24" (40-60mm)

5.2.4 Pallet Configuration: Europallet max 20 high (5 layers) Corner posts netting & strapping. Top layer to be covered with cardboard, to prevent chill damage.

5.2.5 Labelling:

Discription: Variety, Class 1 size grade

Origin: Italian, Spanish, French

Pack Count/Weight:

Display Until: Date of packing plus Sell by Date and Bar Code

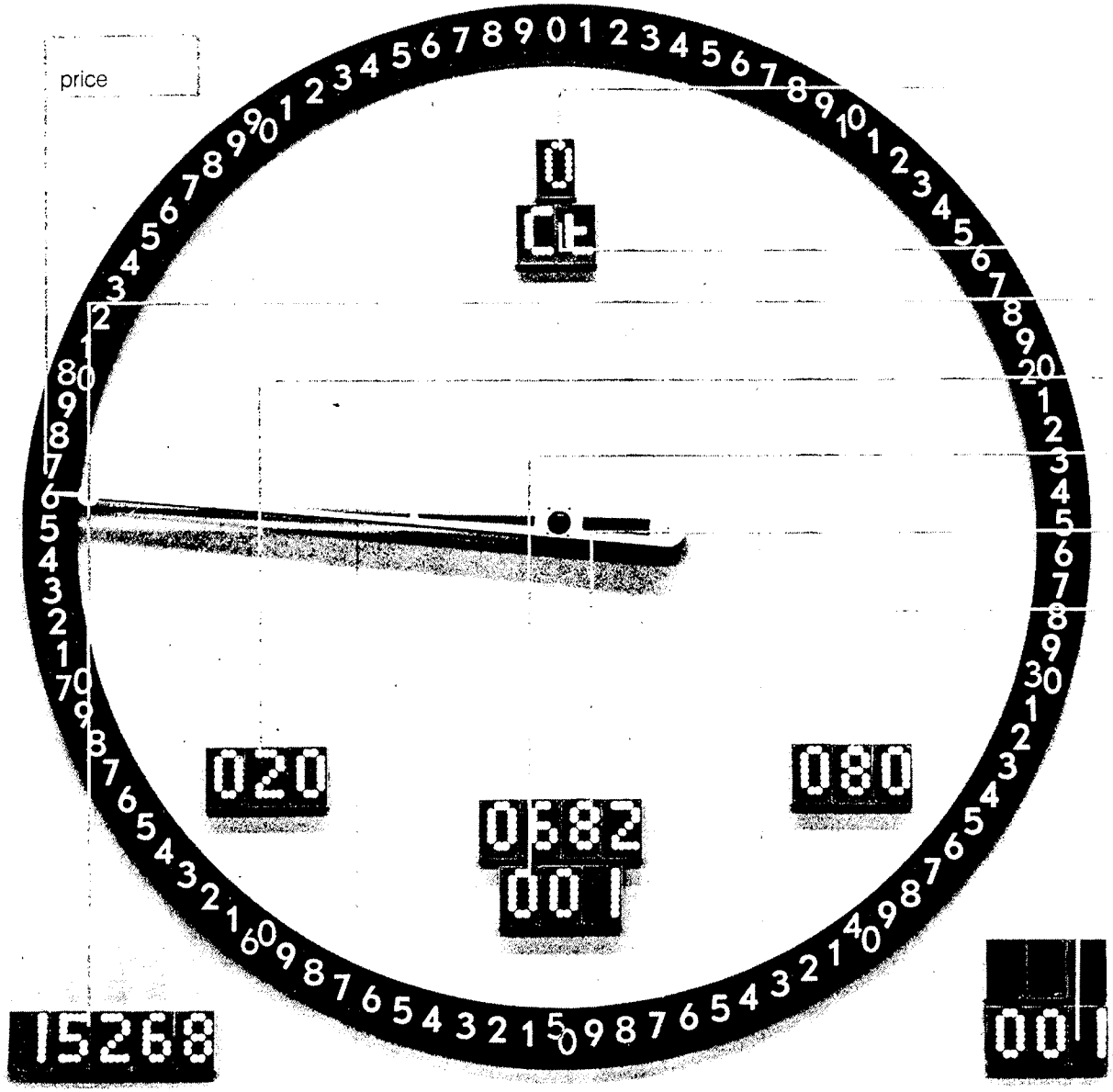
Packers Code

Bar Code: Suppliers Name and Address Code

6. **APPROVAL & ACCEPTANCE**

FOR BUYING STORES .....

FOR SUPPLIER .....



0 = from 0 to 99
1 = from 100 to 199 ect.

Denomination
Ct = cents
St = 5-cents
Db = 10-cents
Gd = guilders

lot number

quantity of units offered
(boxes or containers)

quantity of units bought

buyers number
(from the code plate)

number of items per
packaging unit

minimum quantity
per sale

Label used by a Grower in the Conversion Period to Organic Production