

NICARAGUA

ARAP

**Agriculture Reconstruction
Assistance Program**

**Ornamental Plants Market Study
The Western European Market from a Nicaraguan
Perspective**

Prepared by:
Cornelius Janson

Submitted by:
Chemonics International Inc.

To:
**United States Agency for International Development
Managua, Nicaragua**

Under RAISE IQC Contract No. PCE-I-00-99-00003-00
Task Order No. 802
October 2000

CONTENTS

Introduction	3
Chapter 1 Conclusions & Recommendations	4
Chapter 2 Product Characteristics	8
2.1 Product groups	8
2.2 Customs/statistical product classification	9
Chapter 3 The European Union Market	10
3.1 Consumption	10
3.1.1 Market size	10
3.1.2 Market segmentation	10
3.1.3 Consumption patterns and trends	11
3.2 Production	12
3.3 Imports	13
3.3.1 Total imports	13
3.3.2 Imports by product	14
3.3.3 The role of the developing countries	19
3.4 Exports	20
3.5 Trade structure	22
Chapter 4 Access to the European Union Market	26
4.1 Regulatory aspects	26
4.2 Quality requirements and specifications	31
4.3 Shipping and acclimatisation	32
4.4 Terms of the trade	33
4.4.1 The contract	33
4.4.2 Payment methods and delivery terms	34
4.4.3 Business practice	34
4.5 Promotion	35
4.5.1 Trade fairs	35
4.5.2 Trade press	36
4.5.3 Assistance with market entry	36
4.6 Checklist	37
Chapter 5 Nicaraguan Field Trips	38
Appendices	
1 UPOV Member States	40
2 Main European Wholesale Markets and Auctions	41
3 Trade Associations	46
4 Trade Fair Organisers	50
5 Trade Press	53
6 Trade Promotion Organisations	55
7 Other Useful Addresses	57
8 Pictures of Floricultural Products	59

Introduction

The Nicaraguan Agricultural Reconstruction Assistance Program (ARAP) is interested in exploring and developing higher value crops in the floricultural area for Nicaragua. The objective of this market study is determining the market demand for indoor palms and the potential that exists in Nicaragua to produce these palms. As there is more potential in Nicaragua than just palms the market study has extended to all types of plants (young plant material and finished plants).

Chapter 1 Conclusions & Recommendations

Nicaragua has a good infrastructure needed for international trade. The high ways are rather good and they give connection to the high ways of Costa Rica. All the area's in Nicaragua important for Horticulture and Floriculture can deliver their goods in 40' feet containers within one day to the main seaport of Puerto Limon at Costa Rica. This seaport has good facilities to handle reefercontainers. The containers can be transported within 14 days to the main ports of Western Europe. Products that have to be transported by air can be delivered within a day from all places of Nicaragua to the international airport of Managua. Young plant material such as products from tissue culture and soft cuttings rooted or unrooted will be transported by air. Cane products like dracena and yucca, semi-finished and finished plants like palms will be transported in reefer containers by boat.

The advantage of Nicaragua is that it has different climatological areas with specific microclimates. For each product one can find an area with a suitable microclimate. For the tropical plants there are the lower area's like San Benito/Las Maderas and Leon/Chinandega and for the plants that demand lower temperatures the higher area's like Esteli and Matagalpa/Jinotega are suitable. Between these two extremes there are excellent areas like Sebaco that are suitable for Floriculture. Beside the production of ornamental plants there are good possibilities for growing cut flowers for the North American Markets. Flowers need a dry season with low humidity and from December till April an area like Sebaco has an excellent climate to grow flowers. This is the period that export to North America is interesting, as the demand is during that period high. An interesting cut flower can be *Limonium sinuatum* (Statice) produced from tissue culture young plants. They can be grown in the open air and demand low investments in facilities. Other cut flowers can be traced for the North American Market.

Nicaragua has an excellent competitive edge with its low labour costs comparing with their neighbour countries. Floriculture is very labour intensive and Nicaraguan production can be therefor very competitive. Floriculture is pre-eminently suitable for women. It is light and clean work.

Although the European market for plants and young plant material is dominated by European production, developing countries nevertheless play an important role in some fields. For example tropical young plant material is almost entirely imported from tropical regions, where canes or palms can be produced at lower costs. Other possibilities exist in the field of big-sized foliage plants for interior scaping and in vitro (tissue culture) propagation of young plants (lilium, zantedeschia, limonium, and gerbera) and young plant material (cuttings) that was traditionally produced in Western Europe like chrysanthemum and carnation cuttings, but for labour costs reason has been moved over to low labour costs countries.

The market research indicates that the demand for green plants in general like Dracena and Yucca is the last years stabilising and even decreasing, as the trend in the market is more focused on flowering plants. That means that the prices are under pressure. A second reason for pressure on the prices of tropical plants is the bad ratio between the US\$ and the Euro. Planting material paid in US\$ is more than 30%

increased in purchase price last year whereas the sales prices for the finished plants are increased not more than 4 %!

So it is not obvious to recommend these plants to Nicaragua, although the low labour costs in Nicaragua comparing with Costa Rica can make some of these products still feasible. Accurate calculations should be made to determine this.

Exemptions are some green ornamental plants like exclusive palms, cycas, zamioculcas etc.

Young plant material imported from developing countries	
Aglaonema	Dracaena Fragrans
Ananas	Dracaena Fragrans Massangeana
Benamina	Dracaena Godseffiana
Aralia	Dracaena Sanderiana
Araucaria	Epipremnum Scindapsus
Bambusa	Ficus
Beaucarnea recuvata	Jatropha
Carnation cuttings	Livistona
Caryota mitis	Philodendron
Chamaedorea Elegance	Phoenix Canariensis
Chrysalidocarpus	Phoenix Roebelenii
Areca Chrysanthemum cuttings	Polyscias
Cocos Nucifera	Raphis Excelsa
Codiaeum	Sanseveria
Cordyline	Schefflera
Curcuma	Syngonium
Cycas Revoluta	Yucca Elephantipes
Dieffenbachia	Zamioculcas
Dizygotheca Elegantissima	Zantedeschia
Dracaena Marginata	
Dracaena Deremensis	

The trend in the market for the coming years is that importers in Western Europe have a preference to import more and more finished plants rooted in plastic pots. The disadvantage is the higher transport costs, but these are for the greater part compensated by lower transport tariffs because of the higher volume, by lower failure rates and lower reconditioning costs at Western European grower's places.

Interesting floricultural products Nicaragua

- Ornamental plants mainly palms as finished plants like (for pictures, please refer to Appendix 8):
 - Cycas Revoluta (see picture 1)
 - Zamioculcas Zamiifolia (see picture 2)
 - Zamia (see picture 4)
 - Caryota Mitis (see picture 3)
 - Livistona Rotundifolia (see picture 5)
 - Licuala Grandis (see picture 6)
 - Dypsis Decaryi
 - Chrysalidocarpus Triandra = Areca Triandra
 - Areca Catechu (see picture 7)
 - Areca Vestaria
 - Calypstrocalyx
 - Cyrtostachys Renda
 - Pinanga
- Flowering plants as semi finished plants rooted in plastic pots like
 - Gardenia Jasminoides (see picture 8)
 - Camellia (see picture 9)
 - Carissa Grandiflora (see picture 10)

These plants should be shipped in the not-flowering stage.

3. Young planting material :
 - cut flower cuttings unrooted for chrysanthemum cut flowers and carnations.
 - rooted cuttings for ornamental plants for example gardenia, aglaonema, syngonium.
4. Young planting material from tissue culture :
 - cutflowers like liliun, zantedeschia, limonium sinuatum (statice, see picture 11), and gerbera.
 - Ornamental plants like ficus, syngonium, and orchids.
5. Cut Flowers during the dry season for the Northern American market like limonium sinuatum and some other off-season cut flowers still to be determined.
6. Bromelia (see picture 12) as a cut flower could be an interesting product for the European and Northern American market depending on the cost price and sales price.

N.B. For young planting materials it is possible to make long term agreements with fixed prices with the Dutch breeders/propagators and with the Dutch growers. It is quite easy to make a feasibility study for these products.

Where to grow these plants?

General selection criteria for a location for Floriculture are:

1. flat area, most economical way of production
2. good soil with a good drainage
3. good and enough water, good means a minimum of salts in the water
4. no influence of volcanoes, sulphur acid damages the plants

More specific selection criteria depending on the type of plant/flower:

1. temperature, minimum/maximum and difference day/night temperature
2. humidity minimum/maximum during the day
3. rainfall

Who can grow these plants/flowers?

Selection criteria for growers:

1. able to manage large scale operations of 10 or more hectares
2. open mind for and experience with international business
3. money available for investments in facilities i.e. drip/fertilising systems, shading houses, packing sheds, transport facilities etc. etc.

The existing smaller growers can operate in the future as subcontractors for the bigger growers or they can supply the local market, but than they have to improve their yields and quality by using better motherstocks and by transferring the knowledge how to grow these high quality products.

Recommendations

1. Investigate the best combinations of the recommended plants/flowers and the most suitable areas
2. Create a production facility for all sizes of plastic pots.
3. Press the government to subscribe as soon as possible the UPOV agreement. Most of the young plants for cut flowers are under breeders right protection and the breeders are not so willing to give licences for (micro-) propagation of their protected varieties if a country is not a member of the UPOV.

4. Matching brokers in Holland with interested Nicaraguan growers for ornamental semi-finished and finished plants.
5. Contacting different breeders/propagators in Holland to get the permission to multiply their protected varieties in Nicaragua for the different markets (Europe, USA and Africa)
6. Set up a new Tissue Laboratory or expand (and privatize?) the existing Tissue Laboratory for seed potatoes in the Esteli area for micro-propagation of young plant material for mainly cut flowers young plant material.
7. Find in Holland a Dutch tissue culture expert who can transfer the know -how of micro-propagation of the different floricultural products.
8. Do trial shipments with reefer containers with some promising products as gardenia's, camellia's and heliconia's in pots.
9. Execute tailor made feasibility studies for interested Nicaraguan growers to determine exactly what has to be invested for a certain crop, what will the variable costs, what will be the yields and the sales and transport costs and last but not least what will be the profit and IRR over a five year period.
10. Organise visits of interested Nicaraguan growers to Dutch breeders/propagators and brokers and to interesting plant exhibitions in Western Europe.
11. Import better motherstock for the small growers in Nicaragua and instruct them how to grow good quality plants.

Chapter 2 Product Characteristics

2.1 Product groups

The following product groups are covered in this market study:

young plant material	
®	<i>in vitro</i> cultures (micropropagation, tissue cultures)
®	pot plant cuttings (rooted and unrooted)
®	cut flower cuttings (rooted and unrooted)
finished plants (indoor and outdoor)	
®	flowering plants (Azalea, pot Chrysanthemum, Cyclamen, Begonia, Hyacinths, pot roses, etc.)
®	foliage plants (Dracaena, Ficus, Hedera, palms, Yucca, Dieffenbachia, Schefflera, etc.)

The first product group **young plant material** comprises cuttings, canes, young plants and *in vitro* cultures. The term young plants stands for plants or plant material that still has to be cultivated in the importing country before it can be sold to the consumer.

The differentiation between **indoor and outdoor plants** may not be very clear to exporters from tropical countries, as plants grown in tropical countries can be considered over there as outdoor plants, while they will be used as indoor plants in Europe.

The product group of finished plants includes plants which enter the European market as already sellable products, which only need to be acclimatised before they can be sold. A distinction is made between flowering pot plants, which account for a major part of the European finished plant sales, and foliage pot plants.

Distribution channels and users of the products mentioned above differ strongly. Finished plants are usually bought by European wholesalers, who acclimatise the plants on arriving in Europe, so that they can be sold to interior landscapers. In particular, big-size plants like palms and big Ficuses are used by interior landscapers. Young plant material and semi-finished plants usually target European growers and wholesale nurseries, who further cultivate the plants for the European market. Most cut flower cuttings are produced under licence for propagators. Hardly any small to medium-sized finished plants for the consumer market are imported from outside the European Union.

<i>Product groups</i>	<i>Products</i>	<i>User</i>
young plant material	<i>in vitro</i> cultures	propagators
	young pot plant material	pot plant growers
	cut flower cuttings	cut flower growers
finished plants	small/medium-size finished plants	consumers
	big -size finished plants	interior landscapers, architects/building companies

2.2 Customs/statistical product classification

On January 1, 1988, a unified coding system was introduced to harmonise the trading classification systems used world-wide and to allow for improved international comparability of foreign trade statistics. This system is called the Harmonised Commodity Description System (HS).

Table 2.1 gives the four-digit list of the main HS codes for the products concerned.

Table 2.1 HS-code classification for plants	
HS codes	Products
Cuttings and semi-finished plants	
0602 10 90	Unrooted cuttings, canes (excl. vines)
0602 90 70	Rooted cuttings and young plants (excl. cacti)
Finished outdoor plants	
0602 90 51	Perennial plants
0602 90 59	Other outdoor plants
Finished indoor plants	
0602 90 91	Flowering plants (excl. cacti)
0602 90 99	Foliage plants

Chapter 3 The European Union Market

3.1 Consumption

3.1.1 Market size

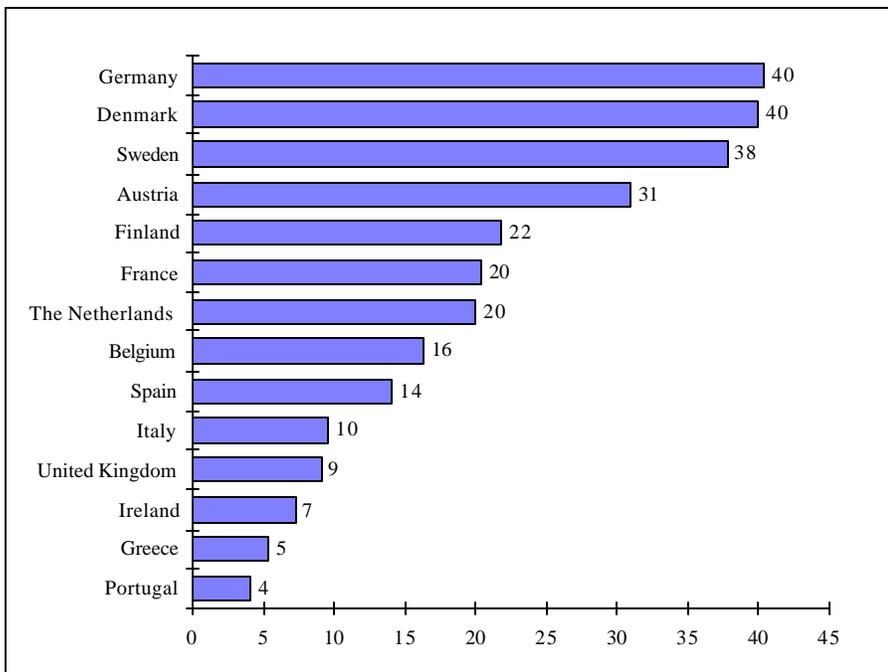
The total European consumption of pot plants is estimated at Euro 7 billion. The consumer market is dominated by Germany, which is by far the largest consumer of pot plants in Europe, followed at a distance by France.

	Euro million		trends
Germany	3,150	(1997)	↗
France	1,350	(1996)	↗
Italy	532	(1996)	⇒
The Netherlands	350	(1997)	⇒
United Kingdom	350	(1996)	↓
Denmark	226	(1997)	⇒
Belgium	154	(1996)	↘

Source: AIPH-Yearbook (1998), Flower Council of Holland (1998)

Concerning consumption per head, the Danish are the major purchasers of pot plants. In Germany and Denmark, the average consumption per capita of pot plants is highest standing at US\$ 40 per year.

Figure 3.1 European consumption of plants per capita (US\$), 1998



Source: Flower Council of Holland (2000)

3.1.2 Market segmentation

The following market segments can be recognised for finished plants:

consumer market:

- own use → people buy plants for their home, working place, balcony/terrace and garden;
- gifts → plants are bought for special occasions like birthdays;
- funeral → plants are purchased to place on graves and use at funerals;

interior scaping:

- architects/building companies → large plants are used to decorate new or renovated buildings;
- interior landscapers → interior scaping companies use plants to decorate offices, shopping malls, airports etc.

3.1.3 Consumption patterns and trends

consumption trends

• **Continuous production line**

A reason for the popularity of flowering and green houseplants is that growers can maintain a much more continuous production of their lines, ensuring year-round availability.

• **More emphasis on home and home decoration**

The so-called ‘cocooning’ trend, which puts more emphasis on home and home decoration, has a favourable influence on plant consumption.

• **Lengthening of the holiday season**

One of the reasons for the increase in consumption is the lengthening of the holiday season throughout Europe.

• **Decorative pots and ceramics**

Presently, there is a trend of adding value to plants by presenting them in groups or with the addition of co-ordinated ceramics or other fashionable containers. This can be seen as important factor influencing the growth in plants consumption. It enables the public to see at a glance what will immediately fit into, enhance or even slightly alter, their interior surroundings.

• **Care for the environment**

It is no longer only nature lovers who are concerned about the environment. Large groups of consumers have come to realise that generations to come also have a right to a healthy environment. They are therefore making increasingly stringent demands with respect to the way in which products are produced. The field of ornamental plants is also receiving attention. Consumers are now not only interested in the shape, colour or fragrance of flowers and plants, but also in the way in which they have been grown. They assume that the plants and flowers they buy have been cultivated using the smallest possible amounts of crop protection agents, energy and fertilisers and with the least possible waste.

A distinction must be made between flowering pot plants and foliage pot plants as most plants purchased by European consumers comprise smaller flowering pot plants

like Kalanchoe, Ericas, Begonias etc. Depending on the country, foliage pot plants account only for a relative small share of the total plant market.

The quality requirements regarding young plant material are constantly increasing. Furthermore, the changing consumer trends have a major bearing on suppliers of young plant material. These trends can differ per region and are also important for global suppliers to recognise.

3.2 Production

Lack of data about European production of pot plants makes it difficult to give a clear view of production and production trends. Combining figures from a number of sources gives an indication of the main pot plant producing countries.

The major producer countries of finished pot plants in Europe are :

	hectares	
Denmark	2,977	(1993)
Italy	n.a.	
Spain	1,845	(1994)
France	1,543	(1994)
The Netherlands	1,144	(1997)
Germany	1,106	(1996)
Belgium	397	(1993)

Source: AIPH-Yearbook (1998), Flower Council of Holland (1998), Product Board for Horticulture (1998)

* These data are collected from various organisations and sources. They therefore serve only as an indication.

n.a. not available

Denmark mainly produces flowering pot plants. The lion's share of European production comprises small flowering pot plants. Foliage plants are also produced, however, in smaller numbers. Young foliage plant material is either produced by European companies, or (in the case of tropical plants) imported.

Tropical flowering plants and foliage plants are also produced in the greenhouses. The biggest production of potted Orchids, Bromeliads and Anthuriums comes from Italy, The Netherlands and Germany. In Italy, Spain and Portugal larger tropical plants like Mediterranean palms (Phoenix, Chamaerops, Washingtonia) are also grown.

• young plant material

The Netherlands is the largest EU producer of young plant material (for pot plant and cut flower production), followed by France and Germany. France and Germany hold a strong position in the production of young rose material.

Young plant material of tropical varieties (as Yucca and Dracaena) is hardly produced by European companies. These products are mainly imported.

Because of the diversity and wide assortment of products that is usually produced at plant nurseries, it can be interesting for these nurseries to produce their own young plant material. This is in particular the case for growers of pot plants. In the case of cut flower producers, the grower usually buys the young plant material from specialised companies.

Until a few years ago, plant developers mainly focused on new varieties that could increase production. However, other aspects have become important as well in recent years. Attention for quality aspects like disease resistance, colour, scent and strength have become at least as important as productivity. Other important aspects are product range and year-round availability.

Note that production is very efficient in Europe. A European grower of Croton cuttings is able to get some 200 cuttings per square meter each year. In developing countries, production per m² lies markedly lower at 100-120 cuttings. Even under perfect soil conditions, watering etc. the production in tropical regions will at the most reach 150 cuttings per m² because:

- Tropical regions have 12 hours of sun daily, while North-European countries have about 18 hours of sun in the midst of the summer.
- Growers in tropical regions often use fixed shadow screens (for instance 60 percent shade screens), while growers in Europe only use their screens when the sun is high in the sky.
- Many tropical regions are characterised by more than 150 days of rain. When a plant is wet, it won't grow.

3.3 Imports

3.3.1 Total imports

The total EU imports of plants, i.e. young plant material, outdoor plants and indoor plants, amounted to more than US\$ 1.7 billion in 1998. Between 1996 and 1998, imports remained relatively stable. Table 3.3 shows the importance of Germany as the leading import country accounting for more than one third of total European imports of plants. Other important countries are France, United Kingdom, The Netherlands, Italy and Belgium.

Table 3.3 Imports of plants into the EU (value in US\$ million, volume in thousand tonnes), 1996-1998

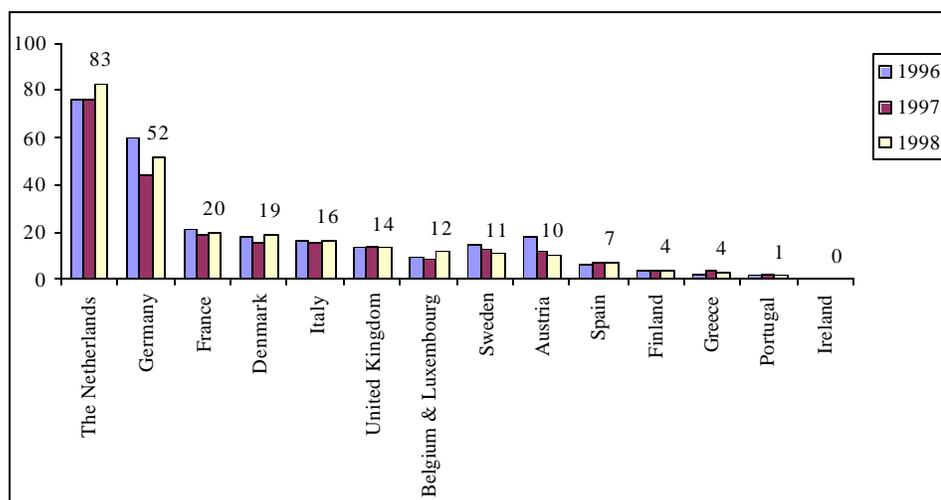
EU	1996		1997		1998	
	value	volume	value	volume	value	volume
EU	1,712	585	1,715	649	1,739	671
Germany	659	253	637	290	608	306
France	255	67	243	72	258	85
United Kingdom	144	42	161	55	187	58
The Netherlands	139	65	167	65	171	63
Italy	113	27	117	38	115	31
Belgium & Luxembourg	92	38	97	42	103	43
Austria	83	22	81	22	79	21
Sweden	85	24	79	21	72	19
Denmark	48	12	43	12	55	15
Spain	41	18	37	14	37	13
Finland	20	5	20	5	21	5
Portugal	17	5	16	6	16	6
Greece	10	5	11	5	11	5
Ireland	6	1	6	2	6	2

Source: Eurostat (1999)

3.3.2 Imports by product

YOUNG PLANT MATERIAL

Total European imports of young plant material (plant and cut flower planting material) amounted to US\$ 253 million in 1998. As a result of the higher quality demanded for floricultural products, young plant material has become an important factor. A shortage of specialised suppliers of young plant material in several producer countries has led to an extensive international trade in young plants.

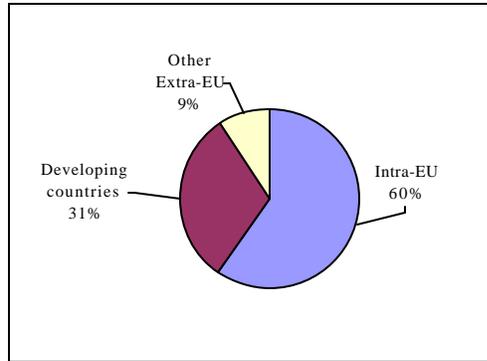
Figure 3.2 Destination of imported young plant material (value in US\$ million), 1996-1998

Source: Eurostat (1999)

In 1998, US\$ 103 million worth of imports of young plant material was supplied by other EU countries. Developing countries supplied US\$ 80 million

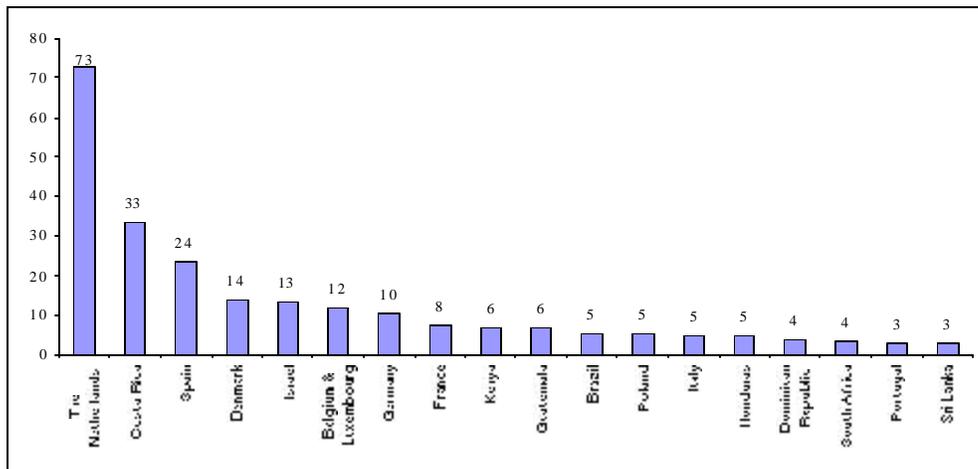
The Netherlands is not only the leading importing country of young plant material, but also the leading exporter of young plant material. However, Netherlands exports are decreasing. In 1996, total supply amounted to US\$ 88 million, while two years later the figure had dropped to US\$ 73 million. Supplies from Costa Rica to the EU (cuttings, mainly *Dracaena* airlayers), the second largest supplier, increased in the same period. Other important developing countries supplying young plant material are Kenya, Guatemala, Brazil, Honduras, Dominican Republic, South Africa, and Sri Lanka.

Figure 3.3 Imports of young plant material, by origin (share of value), 1998



Source: Eurostat (1999)

Figure 3.4 Imports of young plant material, by country of origin (value in US\$ million), 1998

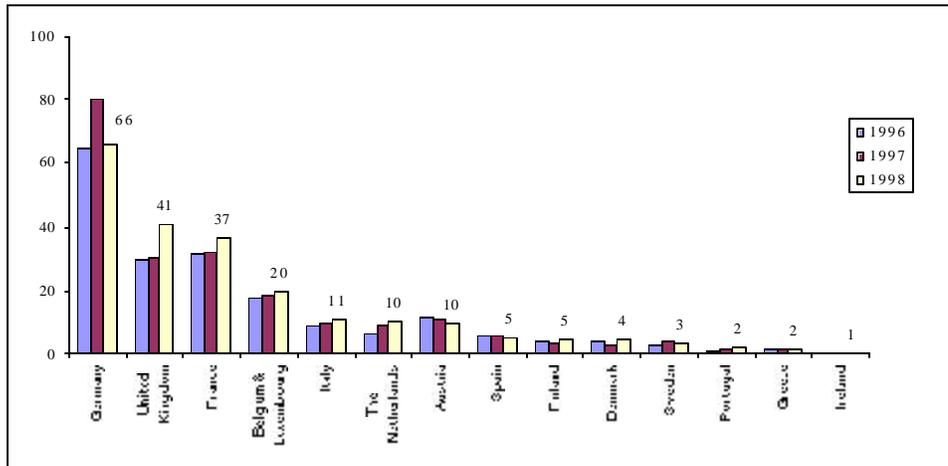


Source: Eurostat (1999)

OUTDOOR PLANTS

Total imports of outdoor plants (including perennial plants) amounted to US\$ 217 million in 1998. The main outdoor plants traded in Europe are *Pelargonium* (*Geranium*), *Viola*, *Erica calluna*, *Fuchsia*, *Buxus sempervirens*, *Chamaecyparis*, and *Petunias*. Germany, United Kingdom, France, and Belgium are the leading importing countries. Most of the consumption of outdoor plants in other EU countries is met by domestic produce.

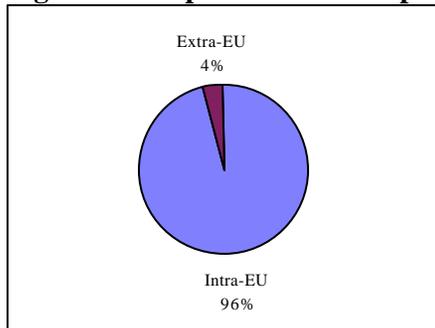
Figure 3.5 Destination of imported outdoor plants (value in US\$ million), 1996-1998



Source: Eurostat (1999)

More than 96 percent of imports into EU countries is supplied by other EU countries, with The Netherlands dominating the trade. Other suppliers are Italy, Germany, Belgium, Spain and Denmark. The position of the developing countries is negligible.

Figure 3.6 Imports of outdoor plants, by origin (share of value), 1998



Source: Eurostat (1999)

INDOOR PLANTS

Total imports of indoor plants amounted to more than US\$ 1 billion in 1998. In terms of volume, total imports increased substantially between 1996 and 1998, in terms of value, however, imports were relatively stable.

In terms of volume, the import markets for flowering and foliage plants are almost equal. However, it becomes clear from Table 3.4 that flowering plants are clearly less interesting to exporters from developing countries than foliage plants. This is due to the fact that flowering indoor plants in general are harder to handle and transport than foliage plants.

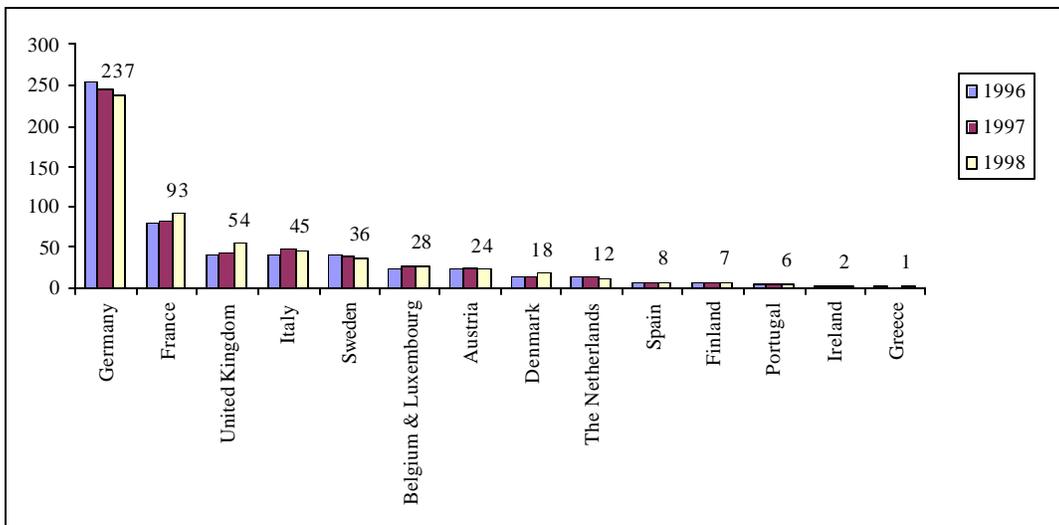
	1996		1997		1998	
	value	volume	value	Volume	value	volume
Indoor plants	1,256	441	1,268	493	1,269	511
Extra-EU	39	20	31	15	34	19
Developing countries	18	10	18	10	22	14
Flowering plants	553	203	557	239	570	259
Extra-EU	2	1	1	0	1	0
Developing countries	0	0	0	0	0	0
Foliage plants	704	238	711	253	699	252
Extra-EU	37	19	31	15	33	18
Developing countries	17	10	17	10	21	14

Source: Eurostat (1999)

• FLOWERING PLANTS

European imports of flowering plants are witnessing a steady growth, amounting to US\$ 570 million in 1998. The main supplying countries are The Netherlands (US\$ 341 million) and Denmark (US\$ 148 million), followed at distance by Belgium (US\$ 32 million), Germany (US\$ 24 million) and Italy (US\$ 18 million). There are no remarkable shifts in the top supplying countries. Maintaining the quality of small flowering plants during transport is cumbersome, when transporting over larger distance. As a consequence, imports of flowering plants from outside Europe are negligible.

Figure 3.7 Destination of imported flowering plants (value in US\$ million), 1996-1998



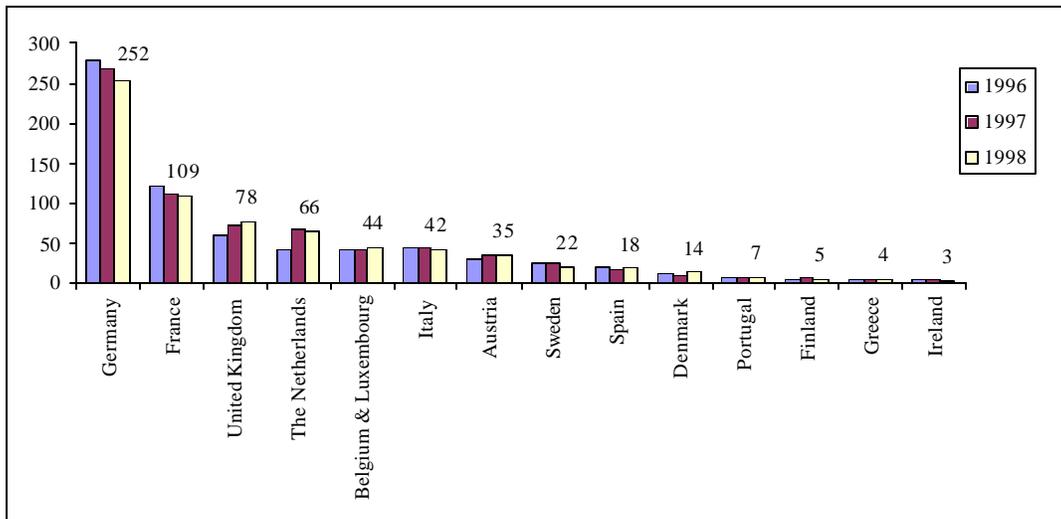
Source: Eurostat (1999)

• **FOLIAGE PLANTS**

The product group of foliage plants also includes big plants targeting the interior scaping market. These products are generally acclimatised before being sold to the end user. European imports of foliage plants increased steadily up to 1997. In 1998, total imports amounted to 252 thousand tonnes (stable compared to 1997), representing a total value of US\$ 699 million. Compared to the preceding year, this reflected a small decrease of 2 percent in terms of value.

The leading importing country is Germany, accounting for about 36 percent of total European imports. In terms of value imports have been declining since 1996, while in terms of value they have increased. Other major importing countries are France, The Netherlands and United Kingdom.

Figure 3.8 Imports of foliage plants into EU member states (value in US\$ million), 1996-1998

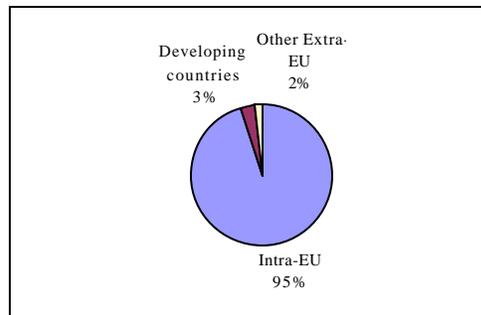


Source: Eurostat (1999)

The import market is dominated by European produce (95 percent) and Netherlands produce in particular, accounting for 63 percent in 1998. Other European supplying countries are Belgium (13 percent), Denmark (10 percent), Germany (3 percent) and Italy (3 percent).

A large number of foliage plants originally stems from tropical regions. The direct imports of finished foliage plants from developing countries, nevertheless, is rather limited. Note that developing countries export young plant material like *Dracaena* and *Yucca* canes to Europe, where they are further cultivated to become finished full-grown plants. The selling of these finished plants is reflected in underlying intra-EU import figures.

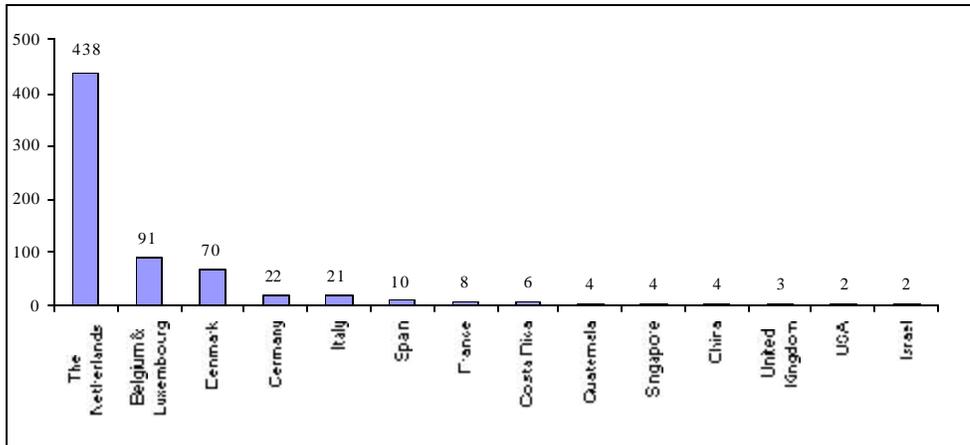
Figure 3.9 Imports of foliage plants, by origin (share of value), 1998



Source: Eurostat (1999)

Still, more than half of the finished foliage plants imported from outside the EU originates in developing countries. In 1998, imports from developing countries increased from US\$ 17 million to US\$ 21 million. The most important supplying developing countries are Costa Rica, Guatemala and China. The market shares of these countries are fairly stable.

Figure 3.10 Imports of foliage plants, by country of origin (value in US\$ million), 1998



Source: Eurostat (1999)

3.3.3 The role of the developing countries

Table 3.5 summarises the role of developing countries in the EU trade in plants. It is clear that developing countries mainly export young plant material. To a lesser extent, indoor foliage plants are also supplied. In 1998, total imports from developing countries amounted to US\$ 103 million or 5.9 percent of total European plant imports. In particular, opportunities for rooted cuttings look promising as the market share of developing countries for these products show the strongest increases over the past three years.

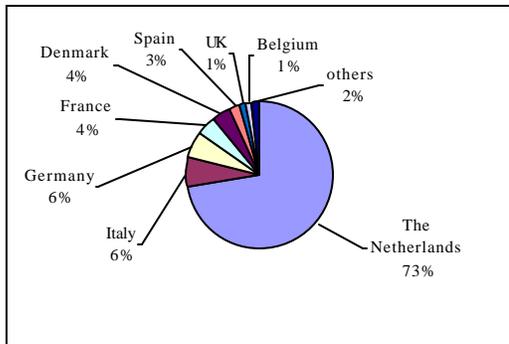
Plants supplied by developing countries: Costa Rica takes up 38 percent, followed by Guatemala (10 percent), Kenya (7 percent), Brazil (5 percent), China (5 percent), Honduras (5 percent). Smaller suppliers are Dominican Republic, South Africa, Sri Lanka, Mexico, El Salvador, Uganda, South Korea, Togo, Thailand, Côte d'Ivoire, and Cuba.

According to Eurostat data, Nicaragua did not supply any plants to the EU in 1996 and 1997. In 1997, it supplied 1 ton of rooted young plant material, valuing US\$ 10 thousand.

Table 3.5 Imports into the EU originating in developing countries (value in US\$ thousand, volume in tonnes), 1996-1998

	1996		1997		1998		% of total EU imports
	value	volume	value	volume	value	volume	
plants total	92,491	42,790	93,639	42,873	102,536	44,877	5.9
young plant material	73,184	30,467	74,401	31,646	79,517	29,705	31.5
- rooted	43,385	18,303	45,393	21,349	47,402	22,727	31.6
- unrooted	29,799	12,164	29,008	10,297	32,115	6,978	31.3
outdoor plants	1,741	2,207	1,687	814	1,340	897	0.6
- perennial plants	426	236	186	60	176	111	0.2
- other	1,315	1,971	1,501	754	1,164	786	0.9
indoor	17,566	10,116	17,550	10,413	21,680	14,275	1.7
- flowering	128	22	112	28	254	133	0.0
- foliage	17,439	10,094	17,438	10,385	21,426	14,142	3.0

Source: Eurostat (1999)

Figure 3.11 EU countries importing plants from developing countries (share of value), 1997

Source: Eurostat (1999)

To which countries is the produce from developing countries going? The pie chart clearly shows that most of the products enter the EU through The Netherlands (importers, wholesale nurseries, auctions). No less than 73 percent of produce exported by developing countries to the European Union is imported into The Netherlands. Note, however, that a large part of these products is re-exported to other EU countries. For instance, a number of Netherlands importers function as suppliers of young plant material to Belgian, German and Danish nurseries. Nevertheless, most of the young plant material imported from developing countries is used by Netherlands nurseries to grow finished plants.

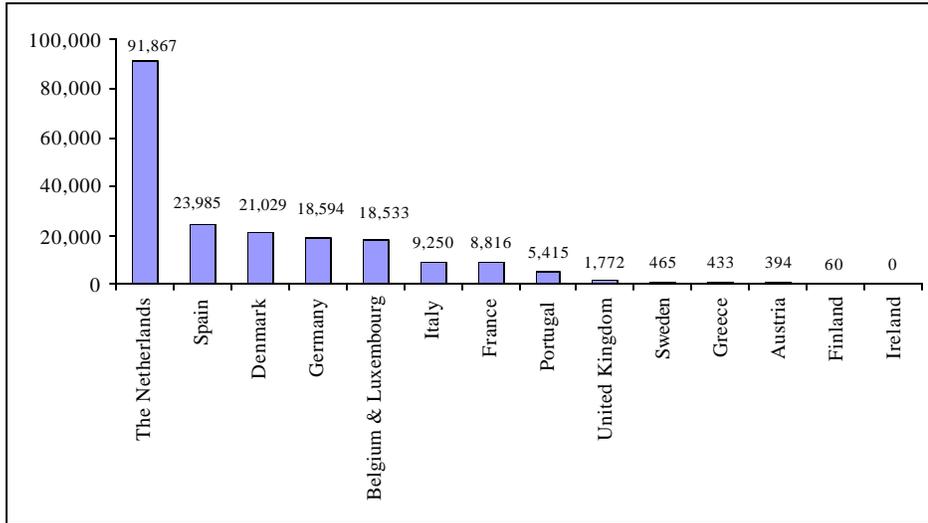
3.4 Exports

In terms of volume, European exports of plants (young plant material, indoor and outdoor plants) have been increasing over the past few years, arriving at 767 thousand tonnes in 1998. In terms of value, however, total exports of plants levelled at about US\$ 1.9 billion. Around 86 percent of European exports is directed to another EU member country.

The European export market is dominated by the Netherlands industry. Other important producer countries are Denmark, Belgium, Italy, Germany, Spain, and France.

Total exports of young plant material increased 11 percent to US\$ 201 million in 1998. Germany, The Netherlands, France, and UK are the major buyers of European cuttings etc. While the Netherlands market for young plant material is largely supplied by domestic producers of plantlets, nurseries in Germany, France and the UK also import these from other European countries.

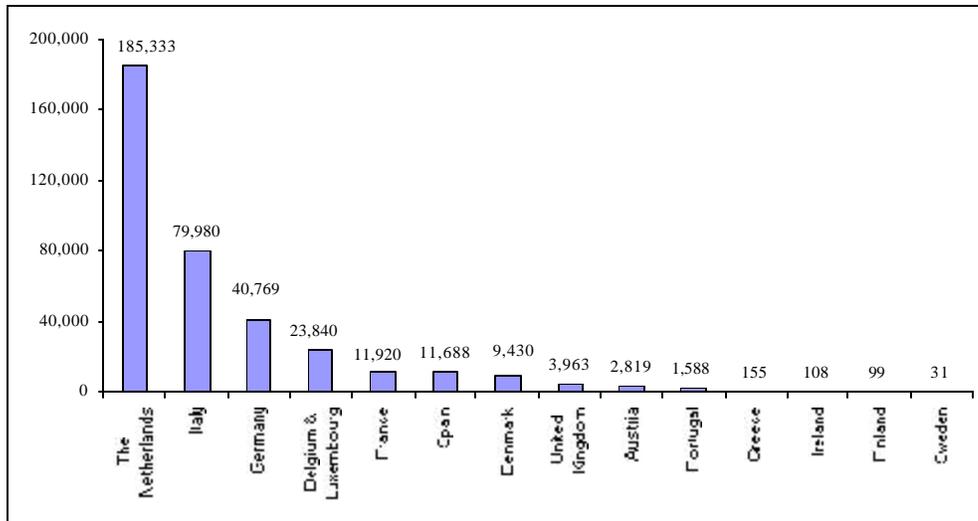
Figure 3.12 Exports of young plant material by the EU (value in US\$ thousand), 1998



Source: Eurostat (1999)

European exports of outdoor plants increased to US\$ 372 million in 1998, with perennial plants accounting for US\$ 115 million. Outdoor plants are mainly exported to Germany, France, United Kingdom, The Netherlands and Switzerland.

Figure 3.13 Exports of outdoor plants by the EU (value in US\$ thousand), 1998

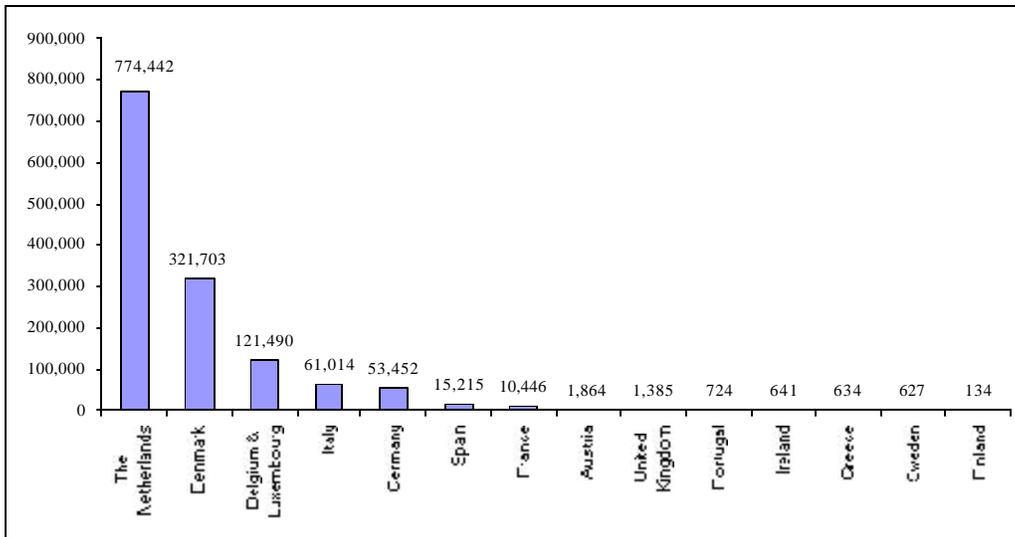


Source: Eurostat (1999)

There is a downward trend in the average price of European exported indoor plants. In terms of volume, exports of indoor plants are increasing (516 thousand tonnes in

1997). In terms of value, however, the figure has decreased and amounted to US\$ 1.4 billion.

Figure 3.14 Exports of indoor plants by the EU (value in US\$ thousand), 1998



Source: Eurostat (1999)

3.5 Trade Structure

Looking at the trade structure, one should be aware of the fact that each product group described in this market survey, i.e. young plant material (for cut flowers and pot plants) and finished plants (small flowering or big foliage), is characterised by its own typical trade structure. An importer of big plants for scaping purposes will most probably not be the same person as the importer of cuttings.

Even when looking into the product group of young plant material, it becomes clear that the trade in young pot plant material is differently structured compared to the trade in cut flower material or tissue cultures. European companies producing young cut flower material are often specialised in one cut flower. In the case of young pot plant material, however, many producers supply a wide package of products.

WHOLESALE LEVEL

The wholesale trade is becoming more concentrated. This strong tendency in the European trade, towards **concentration** and thinking and operating in ‘straight lines’, is clearly recognisable. The fastest growing companies are the ones working with supermarkets. The method of direct trading lines between producers/exporters and the retailer is, in some European countries, partly eroding the function of the specialised importers. This leads to those same importers functioning partly as logistics service providers, quality controllers and co-ordinators of the stream of plants. In general, the importers still play an individual and specific role in the chain, because they have a strong relationship with their suppliers and because they play an indispensable role as collectors of a broad package of products. In various European countries, the current growth in flower and plant sales is being driven by the supermarkets.

- **Auctions**

Auctions are markets, generally created by EU growers to market their products. Most of the around 15 auctions in Europe are located in The Netherlands, where the auctioning system once started. Other countries, such as Belgium, Denmark, Germany and France, also trade at auctions, although the importance of these auctions for international trade is very small in comparison.

The Netherlands auctions in particular function as a pivot around which the international floricultural trade revolves. Through their concentration of supply and demand, they act as a price-setting mechanism for the trade and have developed into a major centre for the distribution of domestic and foreign grown products to the European markets. The VBA auction at Aalsmeer in The Netherlands is the largest auction in the world. The VBA has a 45 percent market share of the flower trade in The Netherlands, 10 percent in Europe and 5 percent world-wide.

	Euro million, 1998	Euro million, 1999	% change 98/99
Bloemenveiling* Aalsmeer	448	455	+ 1.6
Bloemenveiling Holland	380	406	+ 6.8
Bloemenveiling Zuidoost-Nederland	24	29	+ 25
Bloemenveiling Oost Nederland	23	25	+ 9.8
Bloemenveiling Eelde	20	21	+ 4.4
Bloemenveiling Flora	14	13	- 6.7
Bloemenveiling Vleuten	7	8	+ 13
Total	916	957	+ 4.5

Source: Flower Council of Holland (1998)

* Bloemenveiling = Flower Auction

Apart from products supplied by domestic growers, the auctions handle products from foreign growers. During periods when the choice of plants and flowers on offer is less varied, products from abroad ensure that the range remains as wide as ever.

The auction centres use several methods to sell products to traders. Chief among them is the auction clock. Another method is known as mediation, adopted especially for trading plants. Growers let the auction centre know in advance what price they wish to receive for their products. The centre then approaches traders, who either accept or reject this price. Thus a grower sometimes finds himself compelled to adjust his asking price.

Top 10 plants traded at the Dutch auctions in 1999

	million euro	98/99% change
1. Ficus	45	-6.9
2. Kalanchoe	31	+4.7
3. Phalaenopsis	31	+28.9
4. Dracaena	28	-4.0
5. Dendranthema	26	+10.2
6. Hedera	23	-1.1
7. Spathiphyllum	20	+6.9
8. Begonia	18	-4.6
9. Hydrangea macrophylla	18	+1.0
10. Rose	17	+11.0

Source: VBN (2000)

Top 10 foliage plants traded at the Dutch auctions in 1999

	million euro	98/99% change
1. Ficus	45	-6.9
2. Dracena	28	-4.0
3. Hedera	23	-1.1
4. Yucca	11	-2.8
5. Areca	10	+3.4
6. Calathea	10	-1.1
7. Nephrolepis	8	-11.2
8. Kentia	8	+1.4
9. Schleffera	8	-1.5
10. Dieffenbachia	7	-4.1

Source: VBN (2000)

At the moment, tele-auctioning and information auctioning are new developments. With tele-auctioning it is no longer necessary for all the trolleys to pass before the clock during the auctioning. The batch being auctioned is displayed to the buyers via a large video screen before the clock. Information auctioning is an electronic system allowing customers at home and overseas insight into the supply, one day prior to auctioning. This is effected via computer line connections between auction, exporter and customer. All batches to be sold are first recorded on video tape.

As was shown in the top-10 foliage plants, various palms are ranking in the top 10. It is expected that palms as potted plants will become only more popular. Younger people especially buy more palms. 60% of this target group prefers palms above other flowering and foliage plants, because they find the palm attractive, decorative, long lasting and easy to maintain. Today palms are available year-round and many species have been introduced as potted plant.

Top 10 palms traded at the Dutch auctions, 1999**Total sales 1999 Euro 33.5 million**

	% share in total sales
1. Areca (Chrysalidocarpus lutescens)	32.0
2. Howeia (Kentia)	23.0
3. Cycas	13.4
4. Chamaedorea elegans	11.6
5. Phoenix (canariensis & roebelenii)	7.6
6. Livistona rotundifolia	3.8
7. Cocus nucifera	2.8
8. Ravennea rivularis	2.1
9. Mascarena verschaffeltii	1.5
10. Caryota mitis	0.9
11. Other varieties	1.3

Source: VBN (2000)

Many traders who buy products at the auction centres have their own office/premises there. They can rent a space in which to process all the flowers and plants they have purchased and to prepare them for dispatch.

RETAIL LEVEL

The market shares at retail level vary strongly between the countries. In all countries (except United Kingdom), pot plants are primarily bought at the florists'. In Sweden, Denmark, United Kingdom, Finland, Germany and Austria, multiples take up an important role in the retail trade. In general, the position of multiples (and supermarkets) and garden centres is growing in importance.

	year	florists	(street) markets	garden centres /growers	multiples	others
Austria	1996	39	2	28	25	5
Belgium	1996	56	18	15	14	6
Denmark	1993	20		3	54	23
Finland	1995	30	13	22	30	5
France	1996	45	9	25	16	5
Germany	1996	42	4	25	17	12
Italy	1993	50	15	25	10	
Spain	1992	45	20	20	15	
Sweden	1992	32	7	9	49	3
The Netherlands	1996	50	21	11	15	2
United Kingdom	1996	12	6	20	34	28

Source: Flower Council of Holland (1997)

Chapter 4 Access to the European Union Market

4.1 Regulatory aspects

PHYTOSANITARY REQUIREMENTS

Since 1993, access by ornamental plants to the various countries of the EU has been subject to common phytosanitary regulations under Directive 77/93. Designed to preserve the territory of the EU from the introduction of harmful organisms, these regulations help to improve the quality of exported products. Compliance with the regulations is essential for access to the market.

Phytosanitary regulations define four categories of items:

<p>1. Harmful organisms, known as “quarantinable”, whose introduction is prohibited:</p> <p>- Quarantinable organisms: introduction strictly prohibited throughout the European territory or in certain protected areas <u>Insects, arachnids, nematodes:</u> most frequently met on ornamentals. <i>Bemisia tabaci</i> → mealy-winged vector of various viruses. <i>Helicoverpa armigera</i> (= <i>Heliothis armigera</i>) → owlet-moth, on plants. <i>Thrips palmi</i> → stinging insect; risks on Orchids and Ficus. <i>Liriomyza trifolii</i> → boring insect; risks on Chrysanthemums. <i>Spodoptera littoralis</i> → owlet-moth, plant-eating larva; risks on Carnations.</p> <p>- Harmful organisms whose introduction and dissemination are prohibited in Europe if present on plants: <u>Insects, arachnids, nematodes:</u> <i>Radopholus citrophilu</i> (nematode) on Araceas, Marantaceas, Musaceas, Strelitzias with roots or with substrate adhering. <u>Bacteria:</u> <i>Erwinia chrysanthemi var dianthicola</i>, <i>Pseudomonas caryophyllin</i>, on Dianthus seedlings. <u>Fungi:</u> <i>Fusarium oxysporum</i> on Phoenix spp. seedlings, <i>Didymella ligulicola</i>, <i>Puccinia horiana</i> on Chrysanthemum seedlings, <i>Phialophora cinerescens</i> on Dianthus seedlings. <u>Viruses:</u> <i>Cadang-Cadang</i> virus on Palmae seedlings originating in non-EU countries. Chrysanthemum stunt viroid, Tomato spot wilt virus (TSWV) on Chrysanthemums, etc.</p>
<p>2. Plants of vegetable products whose introduction is strictly prohibited in Europe or certain protected areas:</p> <p>Citrus plants and their hybrids coming from third countries (except for fruit and seeds). Isolated earth and growing media, except those composed exclusively of peat.</p>
<p>3. Plants and other products (including substrates and packing materials) subject to special requirements:</p> <p><u>Substrates</u> adhering to plants are authorised, provided that it is officially observed:</p> <p>a. That at the time of planting, the growing medium</p> <ul style="list-style-type: none"> - was free of earth and organic material, <u>or</u> - was free of harmful insects or nematodes and had been subjected to an inspection or adequate thermal treatment or fumigation guaranteeing that it contained no other harmful organisms. <p><u>and</u></p> <p>b. That since planting:</p> <ul style="list-style-type: none"> - appropriate measures have been taken to guarantee that the growing medium has remained free of harmful organisms, <u>or</u>

<p>- during the two weeks before dispatch, the plants have had their growing medium removed from them by shaking, so that only the amount necessary to keep them alive during transport remains on them, and in the case of replanting, that the growing medium used expressly fulfills the requirements included in point a. above.</p> <p><u>Other products subject to special checks</u> (must be free of certain harmful organisms): Chrysanthemum, Carnations (cut flowers and plants), Ficus, Palmae, Bonsai, Euphorbia pulcherrima, plants originating in countries infested with <i>Thrips palmi</i>.</p>
<p>4. Plants subject to export checks and phytosanitary certificate:</p>
<p>- All pot plants and cuttings for replanting.</p>

Thus, note that all pot plants imported into the EU are subject to presentation of a phytosanitary certificate. If you export plants, make sure not to use any accompanying prohibited vegetable products like Conifer bark or wedge from plants.

The controls

Goods subject to Customs are checked at the port of entry by the National Quarantine Services (QS). Controls, either systematic or at random, concern the documents accompanying the shipment and the possible presence of Quarantine harmful organisms.

A phytosanitary certificate signed by the Quarantine Services of an exporting country is an official document which makes its signatory responsible for his country and guarantees that the product fulfils the conditions. It is examined on arrival and must have been completed with great care.

<ul style="list-style-type: none"> • <i>In the first six months of 1996, 28 percent of interceptions of vegetable products were due to absence of a phytosanitary certificate or to an incomplete or inaccurate certificate.</i> • <i>The presence of a single quarantinable harmful organism means that the entire contaminated batch will be blocked.</i> • <i>If pest problems arise, the goods are usually destroyed by incineration.</i> • <i>Destruction costs are invoiced to the carrier or the importer, who often recharge them to the exporter.</i>
--

How to prevent problems?

→ Inspecting flowers and plants before dispatch, to check the absence of quarantinable pests, especially concerning plants which are the potential hosts of such pests. This inspection can be accompanied by specific treatments for certain plants, to limit the risks.

→ Finding out how regulations have developed Harmful organisms or new plants can be added to or removed from the lists at any time. Moreover, Member states can take provisional protection measures against non-member countries or members of the Community in case of a particular phytosanitary risk (special requirement until September 1996: *Thrips palmi* on Ficus from The Netherlands)

Regular updates on regulations are therefore a necessity. European regulations are widely disseminated to international operators. The official lists must be known

to the quarantine services of all exporting countries. For information, contact your carrier, who should be familiar with the texts of the destination countries. Embassy attachés also hold their countries' official texts.

- Preventing risk of contamination. Checks on departure cannot on their own resolve phytosanitary quality problems. The technical monitoring of crops, and appropriate preventive and combative measures are the true solutions to preventing phytosanitary export problems. Exporters should be able to rely on efficient public services for this, so as to benefit from a technical control network to undertake the following tasks:

From the Extension Services:

- advice to producers;
- improvement of crop checks for better identification of harmful organisms, especially quarantinable pests;
- improvising the choice and use of treatment products.

From the Quarantine Services:

- control of exports according to the prescription of their destination countries;
- control of imports and protecting the territory from the introduction of new harmful organisms;
- introduction of procedures for the approval of treatment products and authorisation to retailer for their territory.

Exporters seeking detailed information about the specific phytosanitary regulations are referred to their national phytosanitary or plant-health institutes. In case more information is needed, national European branch organisations or phytosanitary institutions should be approached.

CITES

The Convention on International Trade in Endangered Species of wild fauna and flora (CITES) imposes restrictions on the international trade, with the objective of protecting endangered animal and plant species. CITES prohibits its signatory member states to trade in seriously endangered species. However, international trade in less seriously endangered (vulnerable) species is allowed, even though a number of conditions has to be satisfied. Import and export of certain specimen of protected species is allowed only under the condition that documents, prescribed by CITES, can be handed over. Only under specific conditions, may these documents be handed out by the responsible institutions. The CITES regulations do not apply to artificially propagated plants.

Two EU regulations have been operational since 1 January 1984, with the aim of applying CITES uniformly throughout all EU member states. These regulations consist of more powerful protection measures than CITES describes, a greater number of species being listed as endangered, while the import of certain species demands additional import requirements.

For more information concerning CITES, refer also to CBI's 'Environmental quick scan cut flowers and plants'.

BREEDERS' REGULATIONS (UPOV)

The number of varieties offered on the market is diversified by creating and selecting new plant varieties. Furthermore, the technical performance of varieties in terms of yield, size, appearance, disease-resistance and adaptation to different agricultural and climatic conditions, has been improved. In this respect, the breeders' work benefits the whole industry by making productive plant-based materials available to producers and invigorating the market by constantly introducing new products.

There are several protection frameworks for new plant varieties:

1. *Countries belonging to the UPOV: New Variety Certificates (COVs)*

The UPOV (International Union for the Protection of New Plant Varieties) is a group of 30 countries which operate according to the principles of the UPOV Convention held in Paris in 1961 (revised in 1972, 1979 and 1991). The registered office of this inter-governmental organisation is located in Geneva (Switzerland). The purpose of the UPOV Convention is to ensure that the member states of the Union acknowledge the achievements of breeders of new plant varieties, by making available to them an exclusive property right, on the basis of a set of uniform and clearly defined principles.

To be eligible for protection, varieties have to be:

- distinct form existing, commonly known varieties,
- sufficiently homogeneous,
- stable, and
- new in the sense that they must not have been commercialised prior to certain dates established by reference to the date of the application for protection.

Like all intellectual property rights, plant breeders' rights are granted for a limited period of time, at the end of which varieties protected by them pass into the public domain. The rights are also subject to controls, in the public interest, against any possible abuse.

It is also important to note that the authorisation of the holder of a plant breeder's right is not required for the use of his variety for research purposes; this also includes its use in the breeding of further new varieties.

Information on the development of plant variety protection legislation throughout the world is published in UPOV publication No. 438(E) '*Plant Variety Protection*'.

The address of the registered office and a list of the member countries of UPOV can be found in Appendix 2.

2. *European level: a Community regulation applicable in the 15 EU member countries relays the UPOV Convention and sets up a European New Variety Certificate*

3. *Other forms of protection: patents, trade marks and license agreements*

- Patents: The TRIPS rule (Trade-Related Aspects of Intellectual Property) of the World Trade Organisation (WTO) stipulates that member countries must envisage provisions for the protection of varieties in their territory. This text allows them to choose between joining the UPOV and using patents.
- Trade mark: Since 1st April 1994, breeders have been able to apply for a European trade mark. This can be used by the breeder and by companies which pay for the use of licences. Trade marks can last longer than protection rights, which are limited to 25 years.
- Licences: A breeder can decide to entrust the production of a protected variety to 'license d' companies. He must then entrust the marketing material to the multiplier. The multiplier is required to identify the plants by their names and trade marks. Licences can be exclusive or non-exclusive. In the case of a non-exclusive licence, several companies can protect the variety.

TARIFFS AND QUOTAS

In general, all goods entering the EU are subject to import duties. External trade conditions in the European Union are mostly determined by EU regulations. The level of the tariffs depends on:

- country of origin
- product
- period

In order to support exports from developing countries, the EU operates the Generalised System of Preferences. Under the GSP scheme of the EU, imports from a number of developing countries are admitted at a reduced tariff and imports from a group of least developed countries at a zero tariff. Furthermore, one can generally say that, under the Lomé Convention, the ACP countries and Overseas Countries and Territories qualify for duty-free access.

Based on the outcome of the Uruguay Round, and the general trend towards liberalisation of world trade, it was felt necessary to reconsider the GSP. A general lowering of trade barriers would mean an erosion of the relative advantage of the preferences received by developing countries. A renewed GSP was therefore required. The renewed preferential scheme was introduced on 1 January 1995.

The EU Commission has established a new scheme of preferential rights for the period 1999-2001. This new scheme has formally been published under Regulation EC 2820/98 in the Official Journal Nr. L 357. It also applies to floricultural products.

HS code	Description	Customs duties (%)	
		Conventional	Developing countries* (incl. Nicaragua)
Young plant material			
0602 10 90	Unrooted cuttings and slips (excl. vines)	4	0
0602 90 70	Rooted cuttings and young plants (excl. cacti)	8.3	0
Outdoor plants			
0602 90 51	Perennial plants	8.3	0
0602 90 59	Other outdoor plants	8.3	0
Indoor plants			
0602 90 91	Flowering plants (excl. cacti)	6.5	0
0602 90 99	Foliage plants	6.5	0
0602 30	Rhododendrons and Azaleas	8.3	0
0602 40	Roses	8.3	0

* Import duties specified are applicable for a number of developing countries (see Annex 4 of Regulation 2820/98/EC). A form A or EUR I form has to be provided, in case a tariff is applicable and the exporter in a developing country wants to have the advantage of the GSP tariff.

Source: Internet site of the Dutch Customs: www.douane.nl/taric-nl, November 2000

VAT

All fiscal borders disappeared in the EU on 1 January 1993. The EU decided at that moment that all VAT (tax levied at the consumption level) rates for floricultural products must be harmonised at a high level. It was proposed to set this level at a minimum of 14 percent in 1997. However, many countries, in particular those with a significant domestic production, would like to see ornamental horticulture categorised as agriculture and thus taxed at a low VAT rate.

Austria	10	Germany	7	Portugal	12
Belgium	6	Greece	8	Spain	7
Denmark	25	Ireland	12.5	Sweden	25
Finland	22	Italy	10	The Netherlands	6
France	5.5	Luxembourg	6	United Kingdom	17.5

Source: Netherlands Ministry of Finance (2000)

4.2 Quality requirements and specifications

Over the last decade, the ornamental trade organisations, led by the VBN (the organisation of Dutch Auctions) have been very active in creating more uniformity in the whole range of cutflowers and plants.

Since 1953 the auctions have dictated very strict rules for the supply of ornamental plants and palms to the auction system, especially for the clock.

It should be mentioned that for special orders, through mediation or for direct orders, without interference of the auction, these rules do not necessarily apply. However it is advisable to try to meet these demands as much as possible, as a situation where the auction is needed to market the product could always occur.

The minimum demands are as follows:

- Pots should be filled with good potting media, min. 90% full.
- Pots should be clean and no parts of the media should hang over the pots.
- The potting media should be just moist enough.
- No weeds on potting media.
- The rootball should show new and active roots, surrounded by fresh media.
- Palms imported from outside the EU have to be repotted in a wider pot with new potting media, when sold through the clock of the auction.

Quality standard for A-1 grade:

- Plants have to be 100% free of any animal or vegetable parasites (0-tolerance)
- Plants have to be 95% free of any residue, growing interruptions, mechanical damage, dead or dying parts of foliage.
- Plants should stand firmly on the pot (not leaning) and the ratio between pot and the height and fullness of the plant should be in order (for example the overall height of Areca in a 25 cm pot should be min. 110 cm and max. 150 cm)
- Plants should have an excellent green colour.
- Plants need to be hardened off.

Above specifications are essential in order to obtain the best possible price !!!

4.3 Shipping and acclimatisation

Prior to the physical loading of a 40' feet reefer container, the quality control should be carried out in a way that only plants that meet the standards and specifications will be prepared for packing.

24 hours before loading the pots have to be drenched with water , so they will not dehydrate during the voyage , however the foliage should be absolutely dry , otherwise there is a big risk of developing spots or rotting on the leaves.

The best temperature during the sea voyage has been proven to be 15 degrees Celsius, with an airchange of 75 % per day.

The plants will not go into a complete dormant stage (that would create too many problems after arrival), but the assimilation level will be very low.

Because of the drop in temperature from the outside into the container (15 ° C) condensation will take place. It is from the utmost importance to remove the plugs in the container and the ventilation of the container should be open.

It is necessary to have the generator set of the container running during the loading process , to reduce the temperature shock for the plants.

Since the sailing time from the port of Limon (Costa Rica) to Rotterdam will take 14 days loading should only start max. 48 hours before departure of the vessel. It is crucial for the quality at arrival to keep the transit time as short as possible.

The following documents are required for import plants into the EU

- Commercial invoice
- Phytosanitary certificate
- Certificate of origin
- Bill of loading

After arrival of the boat, the container can be delivered at the importer's door within 6-12 hours, if all formalities have been handled correctly.

It is customary that the importer uses the services of a handling agent in the harbour, which will arrange all the paperwork with customs and the transport to importer's place. It is necessary that the importer receives the above mentioned papers per DHL 1 week prior ship's arrival.

The experienced importer will make sure that the container will be unloaded immediately after arrival. The plants will be unpacked and placed in a climate-controlled greenhouse, preferably on a concrete floor with floor heating so the foliage on the bottom will also dry quickly. The pots will be irrigated and fertilised if required.

Depending on the variety of plants it will take approximately from 2 till 3 months, before they are re-conditioned and ready to enter the marketplace. This acclimatisation process is needed to re-activate the assimilation and the production of new roots in the new media and larger pot.

4.4 Terms of the trade

4.4.1 The contract

A contract is not necessarily a document. If two parties agree on something verbally, this verbal agreement is a contract according to most European laws. Since, in the case of a verbal contract, it is very difficult to prove that something in particular has been agreed upon, the agreement should be confirmed in writing.

The Contract

Details which must be mentioned in a contract are:

1. The contract parties: The seller, the buyer, the broker and/or export agent / import agent. Make sure that all names and addresses are correctly spelled.
2. The product, price and quality of the product must be specified in sufficient detail, so that no misunderstandings can arise.
3. The quantities must of course be mentioned. If the buyer and the seller assent to more or less than the agreed quantity, this is to be specifically mentioned.
4. The delivery terms must be stated according to the description of the Incoterms 2000 (see to www.iccwbo.org/home/incoterms/the_thirteen_incoterms.asp).
5. The payment terms must be spelled out in detail.

6. The delivery time is a vital piece of information on which the seller and the buyer will have to agree.
7. Packaging details, including measurements and weights.
8. If one of the parties has negotiated special conditions, this is to be stated in the contract.
9. What will be done if the two parties disagree with each other? To which arbitration court / district will they turn?

- Contracts are taken extremely seriously in Europe, as well as in the USA and Japan. A contract is of vital importance if there is a matter of disagreement.

Nevertheless, in practice, some sales also take place by 'Gentleman's Agreement'. After a personal visit, or even by telephone, once the trade relationships are settled and mutual confidence has been established, the two parties verbally agree on the product, quantity, quality, price, date of delivery and other conditions of the sale.

Trading relations between exporter and importer are based on trust, and can only be built up by meeting the high expectations of the importer. If an importer finds the plants delivered do not meet his expectation, this will backfire immediately on the business relationship with the exporter. A prospective long-term relation may be damaged. The complaints most often heard are:

- not meeting the delivery date;
- not meeting the agreed amounts of products;
- payment problems; and, above all
- not satisfying the high quality requirements of the European market.

4.4.2 Payment methods and delivery terms

The determination of payment conditions for a regular export transaction is part of the package of negotiations between seller and buyer. The two parties have more or less opposing interests. The seller wants to have the largest possible guarantee of financial coverage for the goods he has to supply according to his sales contract. The buyer wants to be sure about availability, quantity, quality and continuity of the products he buys, before he pays the agreed price.

General methods and terms of payment

Clean payment

This is the most common method and is used when both parties know each other well. The process is fast and reliable, depending on the credit worthiness of the importer. The bank carries out the transactions through swift electronic data system and the transfer costs are not very high.

Documents against payment (D/P)

Also known as cash against documents (CAD). The buyer takes possession of the goods only after payment. Although this method is not very popular, it is very safe and the costs amount to one pro mille.

Letter of Credit (LC)

The irrevocable LC is very often used in the beginning of a business relationship when the importer and exporter do not know each other very well yet. The LC is irrevocable, it should be confirmed by the bank, and then it will always be paid. The costs are higher when compared to the D/P method, namely five pro mille. This method is widely used in the European Union when dealing with exporters from outside Europe.

Bank guarantee

The buyer's bank will present a bank guarantee for the amount of the invoice.

Cheques

Bank guaranteed cheques are generally no problem, though cashing may take some time, up to six weeks. Not all personal cheques are accepted.

Payment on consignment basis

Payment on consignment basis is mostly used in the trade of perishable products. The products are sold at a predetermined price after a mutually appointed arbitrary person (General Super Intendance Company (GSC)) has controlled the quantity, quality and other aspects of the products at the moment of acceptance/sale. If the products do not meet the conditions as described in the contract, the contract is not valid and, depending on the conditions of the contract, prices are generally adjusted. An open account is used to make the payment after 14 days as from acceptance/sale.

In most other sectors, the most popular payment method for starting traders is to make use of an irrevocable LC and later on D/P. However, as many trade relations are long-term partnerships and on the basis of trust, clean payments are the most commonly used payment method in the floricultural trade. On the whole, payment takes place on a 30 days/4 weeks basis after the plants have been delivered. However, beware when making use of clean payments; it is often a starting point for friction if the importer is not totally trustworthy.

Most common delivery terms:

- **FOB** (Free On Board): Buyer arranges for transportation and insurance. FOB must specify the port of departure.
- **CFR** (Cost & Freight): Exporter pays the freight, the buyer arranges for the insurance.
- **CIF** (Cost, Insurance & Freight): Exporter pays the freight and the insurance.

4.5 Promotion

4.5.1. Trade fairs

Participation in a specialised trade fair abroad can be a very efficient tool for communicating with a market. It provides more facilities for bringing across the message than any other trade promotional tool, such as personal contact, a 3-D presentation of the products and the presence and interest of potential customers. Floricultural trade fairs are organised in many European Union countries.

The most relevant trade fairs for plants and young plant material traders in Europe are listed in the box below. The addresses and telephone and fax numbers of these and other trade fairs are listed in Appendix 5.

Trade fair	Where?	When?	What?
International Horti Fair	Amsterdam, The Netherlands	annual (31 October-3 November 2001)	Important international floricultural trade fair
IPM	Essen, Germany	annual (1-4 February 2001)	International trade fair for cut flowers and plants, equipment and florists' requisites
Flormart	Padua, Italy	twice yearly (16-18 February 2001; 14-16 September 2001)	Strongly growing international trade fair on flowers, plants and equipment
Iberflora	Valencia, Spain	annual (18-20 October 2001)	Garden and horticultural show
IFTEX	Swanley, United Kingdom	annual (September 2002)	International flower & plant trade exhibition

4.5.2 Trade press

The following are the main (inter)national trade magazines which can be relevant for exporters of pot plants who want to develop a better insight into the EU markets.

Please refer to Appendix 6 for the names and addresses of the publishers.

Magazine	Country	Language	Topics
Prophyta	The Netherlands	English/Dutch	international magazine on micropropagation in horticulture
Floraculture International	USA	English	international floricultural magazine, production and trade
Blumen	Germany	German	publication on wholesale trade
Gartenbörse	Germany	German	magazine for producers and wholesalers
TASPO	Germany	German	floricultural magazine
Flor TECNICA	Italy	Italian	floricultural technology magazine
Vakblad voor de Bloemisterij	The Netherlands	Dutch	trade journal for floriculture
Groot Handelsblad	The Netherlands	Dutch	magazine for the floricultural wholesale
Horticultura Internacional	Spain	Spanish	horticultural trade magazine
Flower Trades Journal	United Kingdom	English	trade journal
The International Floricultural Quarterly Report	United Kingdom	English	international floricultural wholesale reports

4.5.3 Assistance with market entry

Before approaching organisations abroad, an exporter should first check with the local trade promotion organisations, Chambers of Commerce and foreign representatives in his/her country whether the information required is readily available. There is a great number of organisations in the EU and in other European countries which are important in the field of general representation, promotion and public relations activities for exporters from developing countries.

Trade Promotion Organisations

In most EU countries, there are organisations which promote imports from developing countries through specific export promotion programmes.

Possible services of Trade Promotion Organisation are:

- supplying information on: statistics and publications about the national market, regular news bulletin, importer's database and product market opportunities;
- individual assistance: management training, testing products by display and product adaptation services;
- establishing contacts: collective trade fair missions and selling missions.

Branch organisations / trade organisations

In most European countries, producers, wholesalers and sometimes retailers are organised in branch organisations. These organisations can be of use to new exporters to the EU, for the gathering of information about the market.

Addresses, telephone and fax numbers of Trade Promotion Organisations and other organisations which can be of assistance in entering the European Union market can be found in Appendix 7 and Appendix 8 respectively.

4.6 Checklist

This checklist can be used to verify the subjects mentioned in the previous sections:

CHECKLIST

- Does your product comply with the European phytosanitary regulations (see Section 4.1)?
- Are your products listed on the CITES list (see Section 4.1)?
- Check the breeders' rights, UPOV (see Section 4.1).
- What are the Custom tariffs for your products (see Section 4.1)?
- What are the VAT rates for your products in Europe (see Section 4.1)?
- Take notice of the environmental measures in Europe (see Section 4.3).
- Check whether there are interesting trade fairs for you (see Section 4.5.2).
- Which distribution channels and trade partners are most suitable for you (see Section 4.5)?
- Study the business practices (correspondence, business attitude, etc.) in the EU (see Section 4.4.3).

→ Most important: If necessary, see if you can adapt your product and/or production process to the aforementioned demands of the importer.

Chapter 5 **Nicaraguan Field Trips**

From October 9 till 13 2000, we visited growers in Masaya (Catarina, Masatepe), Carazo (Jinotepe, San Marcos, Las Esquinas), Sebaco, Matagalpa/Jinotega and Esteli. The growers in the Masaya region are mainly small growers who growing ornamental plants for the local market. The quality of the plants was very poor because of the lack of good quality motherplants and the lack of knowledge.

These growers are certainly not the growers who can start up an export oriented nursery. They have not the mentality for doing international business and they do not have the land and the money to set up such operations.

The most interesting target group seems to be the coffee growers who are looking for alternatives. The coffee business is not so profitable anymore and they are looking for more profitable crops. These growers have in general the good mentality, they studied abroad, they have an international business experience, are used to grow on a larger scale and they have the needed money for investments.

All the areas we have visited had in general good soil for floriculture. The question still is if the water is of a good quality. This has to be investigated yet, as too salty water means that Floriculture is not possible. The structure of the soil can be adapted, but water not at all.

Another problem we met was the fall out of the volcanoes especially in the Masaya area. Sulphur acid is sometimes damaging the plants and even when that happened once per year it can destroy the whole crop for export. In the Esteli area we visited a small Tissue Laboratory. They produced seed potatoes for local use. After producing the very small mini potatoes in the Laboratory they grow these small potatoes further outside the laboratory under aphid net houses to protect them against contamination with virus diseases. If this is possible with potatoes it is also possible with lily bulbs. These bulbs require the same climate and protection against viruses. Lilies are the 4th in volume of all the cut flowers in Holland with a turnover of almost 200 million US\$. Every year new varieties of lilies are developed by Dutch breeders and after developing they want to propagate the new varieties as quick as possible. Tissue culture = vegetative in vitro cloning is the only way to do this quickly. Every year tens of millions of lily bulbs are multiplied by tissue culture mainly in the low labour costs countries. A possibility for Nicaragua!! A half year growing on outside the laboratory produces bigger bulbs with a higher value. The climate in Esteli is excellent for this production.

The area of Matagalpa is the highest area for growing plants and they have already a good and profitable crop of leatherferns. This area is very suitable for growing camelia's, because of the moderated climate.

After all the field trips we came to the conclusion that there are 7 areas with a potential for Floriculture, i.e:

1. Masaya, Height 500-600 m, Dry season: December-May
2. Carazo (San Marcos, Jinotepe, Las Esquinas), Height 500-600 m, Dry season: December-May
3. San Benito/Las Maderas, Height 50-100 m, Dry season: November-May

4. Sebaco, Height 450 m, Dry season: December-May
5. Mata galpa/Jinotega, Height 1000 m, Dry season: January-May
6. Esteli, Height 800 m, Dry season: December-May
7. Leon /Chinandega, Height 100-200 m, Dry season December-May

For all these different areas it has to be determined which plant/flowers are the best to cultivate depending on the temperature, humidity, rainfall etc.

Appendix 1 UPOV Member States

UPOV

International Union for the Protection of New Varieties of Plants

Address: 34, ch. des Colombettes, CH-1211 Geneva, Switzerland

Telephone: (41) 22-3389111

Fax: (41) 22-7330336

E-mail: upov.mail@wipo.int

Internet: www.upov.int

MEMBER STATES OF UPOV AS OF SEPTEMBER 2000*

Argentina	France	Portugal
Australia	Germany	Republic of Moldova
Austria	Hungary	Russian Federation
Belgium	Ireland	Slovakia
Bolivia	Israel	Slovenia
Brazil	Italy	South Africa
Bulgaria	Japan	Spain
Canada	Kenya	Sweden
Chile	Kyrgyzstan	Switzerland
China	Mexico	Trinidad and Tobago
Colombia	The Netherlands	Ukraine
Czech Republic	New Zealand	United Kingdom
Denmark	Norway	USA
Ecuador	Panama	Uruguay
Estonia	Paraguay	
Finland	Poland	

Appendix 2 Main European Wholesale Markets and Auctions

WHOLESALE MARKETS

- FRANCE

Marché d'Intérêt National

consumption market

Address: 1, Rue de la Tour, 94152 Rungis Cedex, France
Telephone: (33) 1-41808080
Fax: (33) 1-41808189

Marché d'Intérêt National

dispatch market

Address: PAL 1, 06042 Nice Cedex, France
Telephone: (33) 4-92297575
Fax: (33) 4-92297599

Marché d'Intérêt National

consumption market

Address: 34-36, Rue Casimir-Premier, 69297 Lyon Cedex 02, France
Telephone: (33) 78-425867
Fax: (33) 78-425399

Marché d'Intérêt National de Lille

consumption market

Address: Cidex 1-A, 59160 Lomme, France
Telephone: (33) 3-20924515
Fax: (33) 3-21930032

- GERMANY

Marktgemeinschaft Blumengrossmarkt Hamburg e.G.

Address: Bankstrasse 28, 20097 Hamburg, Germany
Telephone: (49) 40-3097760
Fax: (49) 40-30977677
E-mail: info@blumengrossmarkt-hh.de
Internet: <http://www.blumengrossmarkt-hh.de>

Blumengrossmarkt Berlin Wirtschaftgenossensch. e.G.

Address: Friedrichstrasse 18, 10961 Berlin, Germany
Telephone: (49) 30-2516026
Fax: (49) 30-2518795

Blumengrossmarkt München wV.

Address: Thalkirchner Strasse 81, 81371 München, Germany
Telephone: (49) 89-773333
Fax: (49) 89-773334

- ITALY

Mercato dei Fiori San Remo

Address: UCFLOR, via quinto mansuino 12, 18038 San Remo, Italy
Telephone: (39) 184-513520
Fax: (39) 184-510903

Centro All' Ingrosso Dei Fiori Di Roma

Address: Via Trionfale 45, 00195 Roma, Italy
Telephone: (39) 06-39736193
Fax: (39) 06-380589

Centro Commercializzazione Fiori dell' Italia Centrale

Address: Via Salvo d'Acquisto 10/12, 51012 Castellare di Pescia (PT), Italy
Telephone: (39) 572-4401
Fax: (39) 572-453346

Mercato dei Fiori di Taviano

Address: Strada Prov. le per Casarano, 73057 Taviano (LE), Italy
Telephone: (39) 833-914216
Fax: (39) 833-914357

Mercato dei Fiori Viareggio

Address: Via Aurelia Nord 179, 55049 Viareggio (LU), Italy
Telephone: (39) 584-50781
Fax: (39) 584-53011

Mercato dei Fiori di Vittoria

Address: Stradale per Gaspanella, 97019 Vittoria (RG), Italy
Telephone: (39) 932-866188
Fax: (39) 932-866190

Nuovo Mercato dei Fiori di Ercolano

Address: Via Sac. B. Cozzolino, 80056 Ercolano (NA), Italy
Telephone: (39) 81-7394401
Fax: (39) 81-7322950
E-mail: masa@netlab.it

- NORWAY

A.L. Økern Torvhall

wholesale market Oslo

Address: Økern Torg 4, 0580 Oslo, Norway
Telephone: (47) 22-644180
Fax: (47) 22-645981

- SPAIN

Mercat de Flor y Planta Ornamental de Catalunya

Address: Carretera Nacional 2, km 639.5, Spain
Telephone: (34) 93-7594800
Fax: (34) 93-7501198

Mercabarna

Address: Centre Directiu, Zona Franca - Sector C., 08040 Barcelona, Spain
Telephone: (34) 93-3355300
Fax: (34) 93-3352940
E-mail: mb@mercabarna.es
Internet: <http://www.mercabarna.es>

Mercaflor

Address: Carretera d'en Corts 231, 46013 Valencia, Spain
Telephone: (34) 96-3675150
Fax: (34) 96-3677566

• UNITED KINGDOM

New Covent Garden Market

Address: Covent House, New Covent Garden Market, London SW8 5NX, United Kingdom
Telephone: (44) 171-7202211
Fax: (44) 171-6225307
E-mail: collin@covent-garden-market-authority.gov.uk

New Smithfield Market

Address: Withworth Street East, Openshaw, Manchester M11 2WJ, United Kingdom
Telephone: (44) 161-2347781
Fax: (44) 161-2314365

AUCTIONS

• BELGIUM

Bloemenveiling Aalst

Address: Albrechtlaan 78, 9300 Aalst, Belgium
Telephone: (32) 53-782078
Fax: (32) 53-782079
E-mail: sales@flora-veiling.be
Internet: <http://www.flora-veiling.be>

Euroveiling

Address: Oorlogslaan 1, 1120 Brussels, Belgium
Telephone: (32) 2-2410050
Fax: (32) 2-2410057

• DENMARK

GASA Odense

Address: Lavsensvaenget 1, 5200 Odense V. Denmark
Telephone: (45) 66-126000
Fax: (45) 66-126001
E-mail: blomster@gasa.odense.dk
Internet: <http://www.gasa.odense.dk>

GASA Århus

Address: Havkærvej 83, 8381 Mundelstrup, Denmark
Telephone: (45) 89301500
Fax: (45) 89301543
E-mail: gasa-aarhus@gsa.dk
Internet: www.gsa.dk

• GERMANY

NBV

Niederrheinische Blumenvermarktung eG
Address: An de Klus 46, 47608 Geldern, Germany
Telephone: (49) 2832-9210
Fax: (49) 2832-291199
E-mail: nbv-lullingen@t-online.de
Internet: http://www.nbv-blumen.de

UGA

Union Gartenbaulicher Absatzmärkte Niederrhein GmbH
Address: Südstr. 81, 47623 Kevelaer, Germany
Telephone: (49) 2832-1250
Fax: (49) 2832-125125
E-mail: uga-kevelaer@t-online
Internet: http://www.uga.de

• ITALY

COMICENT

Centro Commercializzazione Fiori Dell' Italia Centrale
Address: via Salvo D'Acquisto,10/12, 51012 Castellare di Pescia (PT), Italy
Telephone: (39) 572-4401
Fax: (39) 572-453346

• THE NETHERLANDS

Bloemenveiling Aalsmeer

Address: Legmeerdijk 313, 1431 GB Aalsmeer, The Netherlands
Telephone: (31) 297-393939
Fax: (31) 297-390039
E-mail: info@vba.nl
Internet: http://www.vba-aalsmeer.nl

Bloemenveiling Holland

Address: P.O. Box 220, 2670 AE Naaldwijk, The Netherlands
Telephone: (31) 174-633333
Fax: (31) 174-632222
E-mail: info.bvh.nl
Internet: http://www.bvh.nl

Coop. Bloemenveilingvereniging 'Flora' B.A.

Address: Laan van Verhof 3, 2231 BZ Rijnsburg, The Netherlands
Telephone: (31) 71-4094444
Fax: (31) 71-4094533
E-mail: auction@flora.nl
Internet: http://www.flora.nl

Tele Flower Auction (TFA)

only cut flowers

Address: Noordammerweg 102 b, 1187 ZV Amstelveen, The Netherlands

Telephone: (31) 20-6404985

Fax: (31) 20-6405522

E-mail: infotfa@eaf.tfa.nl

Internet: <http://www.tfa.nl>

Appendix 3 Trade Associations

- INTERNATIONAL

AIPH

International Association of Horticultural Producers

Address: P.O. Box 90403, 2509 LK The Hague, The Netherlands

Telephone: (31) 70-3041313

Fax: (31) 70-3470956

E-mail: pt@tuinbouw.nl

Union Fleurs

see address Swedish Wholesalers Association

- AUSTRIA

Bundesverband der Erwerbsgärtner Österreichs

Address: Draschestr. 13-19, 1232 Wien, Austria

Telephone: (43) 1-6102514

Fax: (43) 1-6102521

E-mail: office@gartenbau.or.at

- BELGIUM

Algemeen Verbond van de Belgische Siertelers

Belgian Nurserymen and Growers' Federation

Address: Kortrijksesteenweg 390, 9000 Gent, Belgium

Telephone: (32) 9-2410420

Fax: (32) 9-2410426

E-mail: willy_de_geest@boerenbond.be

- DENMARK

Dansk erhvervsgartnerforening (DEG)

Danish growers association

Address: Hvidkærvej 29, 5250 Odense SV, Denmark

Telephone: (45) 66-171714

Fax: (45) 66-171715

E-mail: jh@deg.dk

Internet: <http://www.deg.dk>

Container Centralen

Address: P.O. Box 479, 5260 Odense S, Denmark

Telephone: (45) 65-910002

Fax: (45) 65-913784

Danpot

Address: Hvidkærvej 29, 5250 Odense SV, Denmark

Telephone: (45) 66-174716

Fax: (45) 66-174219

- FRANCE

Fédération des grossistes en fleurs et plantes

French wholesalers federation

Address: 117, Allée de la Côte d'Azur, Fluers 123, 94631 Rungis cedex, France

Telephone: (33) 1-60759799

Fax: (33) 1-60759800

- GERMANY

Arbeitskreis Deutsche *In vitro* Kulturen (ADIVK)

Address: Köstlinstr. 121, 70499 Stuttgart, Germany

Telephone: (49) 711-864657

Fax: (49) 711-861450

E-mail: adick@t-online.de

BGI

Association of the German Flower Wholesale and Import Trade

Address: Jülicher straße 32, 40477 Düsseldorf, Germany

Telephone: (49) 211-441388

Fax: (49) 211-482647

E-mail: bgi@online-club.de

Zentralverband Gartenbau e.V. (ZVG)

German growers association

Address: P.O. Box 201463, 53144 Bonn-Bad Godesberg, Germany

Telephone: (49) 228-8100210

Fax: (49) 228-8100248

E-mail: zvg-bonn@t-online.de

- ITALY

ANCEF

Associazione Nazionale Commercianti Exportatori Fiori

Italian exporters and wholesalers association

Address: Via Gioberti 25, 1-16038 San Remo, Italy

Telephone: (39) 184-509660

Fax: (39) 184-509052

- THE NETHERLANDS

Bedrijfschap voor de Groothandel in Bloemkwekerijprodukten

Dutch Floricultural Wholesale Board

Address: P.O. Box 1012, 1430 BA Aalsmeer, The Netherlands

Telephone: (31) 297-380090

Fax: (31) 297-380099

E-mail: info@bloemengroothandel.com

Internet: <http://www.bloemengroothandel.com>

Bloemenbureau Holland

Flower Council of Holland

Address: Schipholweg 1, 2316 XB Leiden, The Netherlands
Telephone: (31) 71-5659565
Fax: (31) 71-5659555
E-mail: flower@bbh.nl
Internet: <http://www.bbh.nl>

Productschap Tuinbouw

Product Board for Horticulture

Address: P.O. Box 90403, 2509 LK The Hague, The Netherlands
Telephone: (31) 70-3041234
Fax: (31) 70-3041200
E-mail: pt@tuinbouw.nl
Internet: <http://www.tuinbouw.nl>

Vereniging van Bloemenveilingen in Nederland (VBN)

Association of Dutch auctions

Address: P.O. Box 9324, 2300 PH Leiden, The Netherlands
Telephone: (31) 71-5659600
Fax: (31) 71-5659610
E-mail: vbninfo@vbn.nl
Internet: <http://www.vbn.nl>

Vereniging van Groothandelaren in Bloemkwekerij Producten (VGB)

Association of Dutch Wholesalers in floricultural products

Address: P.O. Box 1104, 1430 BC Aalsmeer, The Netherlands
Telephone: (31) 297-380202
Fax: (31) 297-360309
E-mail: receptie@vgb.nl
Internet: <http://www.vgb.nl>

• NORWAY

Opplysningsk ontoret for blomster og planter

Norwegian horticultural growers association

Address: Motzfeldtsgt 1, 0187 Oslo, Norway
Telephone: (47) 22-173444
Fax: (47) 22-174488

• SWEDEN

Blomster Grossisternas Riksförbund (BGR)

Swedish Wholesaler Association

Address: Västergatan 9, 241 31 Eslöv, Sweden
Telephone: (46) 413-15850
Fax: (46) 413-60666

- UNITED KINGDOM

Flower Importer Trade Association (FITA)

Address: Jervis Road PR, Haygarth House 28-31, High Street, Wimbledon Village,
London SW19 5BY, United Kingdom

Telephone: (44) 181-9713355

Fax: (44) 181-9473700

E-mail: jbp@blp.co.uk

The Fresh Produce Consortium

Address: 266-270 Flower Market, New Covent Garden, London SW8 5NB

Telephone: (44) 171-6273391

Fax: (44) 171-4981191

Appendix 4 Trade Fair Organisers

- AUSTRIA

IGM

International Horticultural Exhibition, cut flowers and plants

Frequency: annual (23-27 August 2001)

Address: Tullner Messe GmbH, Messegelände, 3430 Tulln, Austria

Telephone: (43) 2272-624030

Fax: (43) 2272-65252

E-mail: messe@tulln.at

Internet: <http://www.tulln.at/messe>

- FRANCE

Florissimo

international exhibition fair for plants, flowers and foliage

Frequency: every 4 years (10-20 March 2000)

Address: Parc des Expositions et Congrès de Dijon, 3, Bd. De Champagne, P.O. Box 108, 210003 Dijon Cedex, France

Telephone: (33) 3-80773900

Fax: (33) 3-807739

E-mail: congrexpodijon@exnet.fr

Hortiflor

florist's trade fair, cut flowers and pot plants

Frequency: annual in February

Address: BEPP - Bureau Européen de Presse et de Publicité, 44, avenue de George V, 75008 Paris, France

Telephone: (33) 1-49521400

Fax: (33) 1-49521442

- GERMANY

IPM

international trade fair for cut flowers and plants, equipment and florists' requisites

Frequency: annual in 1-4 February 2001

Address: Messe Essen GmbH, Postfach 100165, 45001 Essen, Germany

Telephone: (49) 201-72440

Fax: (49) 201-7244248

IFLO - International Floristik Messe

international florists' trade fair

Frequency: annual (17-19 August 2001)

Address: Messe Essen GmbH, P.O. Box 100165, 45001 Essen, Germany

Telephone: (49) 201-72440

Fax: (49) 201-7244248

Gafa - Internationale Gartenfachmesse

International trade fair for horticulture

Frequency: annual (2-4 September 2001)
Address: Messe Köln, Messeplatz 1, 50679 Köln, Germany
Telephone: (49) 221-8210
Fax: (49) 221-8212574

- ITALY

FLORMART-MIFLOR

International flower -growing, nursery and gardening show

Frequency: twice a year (16-18 February 2001, 14-16 September, 2001)
Address: Auanovaiere, Via n. Tommaseo 59, Padova
Telephone: +39 (0)49 840111
Fax: +39 (0)49 840570
E-mail: info@padovafiore.it
Internet: http://www.padovafiore.it

- THE NETHERLANDS

International Horti Fair

Amsterdam Rai

Frequency: annual (31 October - 3 November 2001)
Address: Foundation International Flower Trade Show, P.O. Box 1445, 1430 BL Aalsmeer, The Netherlands
Telephone: (31) 297-344033
Fax: (31) 297-326850
E-mail: info@flowertradeshows.nl
Internet: http://www.flowertradeshows.nl

Holland Plantenbeurs

mainly domestic produce, but open to exporters from developing countries

Frequency: annual (7-9 March 2001)
Address: Bloemenveiling Holland, Middelbroekweg 29, 2670 AE Naaldwijk, The Netherlands
Telephone: (31) 174-635897
Fax: (31) 174-632222

- SPAIN

Iberflora

garden and horticultural technology show

Frequency: annual (18-20 October 2001)
Address: FMIV, Avenida de las Ferias s/n, P.O. Box 476, 46080 Valencia, Spain
Telephone: (34) 96-3861100
Fax: (34) 96-3636111 and 3644064
E-mail: feriavalencia@feriavalencia.com
Internet: http://www.feriavalencia.com

- SWEDEN

Trädgård

gardening fair, cut flowers / plants

Frequency: (25-25 March 2001)

Address: Sollentunamässan, Box 174, 19123 Sollentuna, Stockholm, Sweden

Telephone: (46) 8-506 65000

Fax: (46) 8-506 65225

E-mail: gun.edin@sollfair.se

Internet: <http://www.sollfair.se>

- UNITED KINGDOM

HORTEX

Horticultural Exhibition

Frequency: annual (16-17 January 2001)

Address: Nexus Media Ltd, Nexus House, Swanley, Kent BR8 8HY, United Kingdom

Telephone: (44) 1322-660070

Fax: 44) 1322-667633

E-mail: grower@nexusmedia.co.uk

IFTEX

International Flower & Plant Trade Exhibition

Frequency: annual (September 2002)

Address: Nexus Media Ltd, Nexus House, Swanley, Kent BR8 8HY, United Kingdom

Telephone: (44) 1322-660070

Fax: (44) 1322-667633

E-mail: grower@nexusmedia.co.uk

Appendix 5 Trade Press

- INTERNATIONAL

“Floraculture International”

international floricultural magazine, production and trade

Language: English

Address: P.O. Box 9, Batavia, Illinois 60510-0009, USA

Telephone: (1) 630-2089080

Fax: (1) 630-2089350

Internet: <http://www.growertalks.com>

and

Address: P.O. Box 176, 3980 CD Bunnik, The Netherlands

Telephone: (31) 30-6592234

Fax: (31) 30-6570452

E-mail: westersb@wattbn.mhs.compuserve.com

- GERMANY

“Blumen”

publication for wholesale trade

Language: German

Address: Kriener & Potthoff, Münsterstrasse 109, 48075 Münster, Germany

Telephone: (49) 2506-93090

Fax: (49) 2506-930950

E-mail: donau-verlag@florist.de

“Gartenbörse”

magazine for producers and wholesalers

Language: German

Address: Theaterstrasse 77, 52062 Aachen, Germany

Telephone: (49) 241-4779170

Fax: (49) 241-4779179

“TASPO”

floricultural magazine

Language: German

Address: Bernard Thalacker Verlag, P.O. Box 8364, 38133 Braunschweig, Germany

Telephone: (49) 531-380040

Fax: (49) 531-3800425

E-mail: thalacker-medien@t-online.de

- ITALY

“Flortecnica”

production and marketing of floricultural products

Language: Italian (including summary in English)

Address: 22050 Calco (como), Italy

Telephone: (39) 39-9910719

Fax: (39) 39-9910719

E-mail: flortec@promo.it

- THE NETHERLANDS

“Groot Handelsblad”

magazine for the floricultural wholesale sector

Language: Dutch
Address: P.O. Box 1104, 1430 BA Aalsmeer, The Netherlands
Telephone: (31) 297-346560
Fax: (31) 297-345736

“Prophyta”

Address: Elsevier bedrijfsinformatie, P.O. Box 4, 7000 BA Doetinchem, The Netherlands
Telephone: (31) 314-349574
Fax: (31) 314-338939

“Vakblad voor de Bloemisterij”

trade journal for floriculture

Language: Dutch
Address: Elsevier, P.O. Box 4, 7000 BA Doetinchem, The Netherlands
Telephone: (31) 314-349911
Fax: (31) 314-343839
E-mail: svs@euronet.nl

- SPAIN

“Horticultura Internacional”

horticultural trade magazine

Language: Spanish (including summary in English)
Address: Paseo Misericordia 16-1º, Apartado 48, 43205 Reus (Tarragona), Spain
Telephone: (34) 77-750402
Fax: (34) 77-753056
E-mail: horticom@edio.es
Internet: <http://www.edio.es>

- UNITED KINGDOM

“Flower Trades Journal”

trade journal

Language: English
Address: Yewtree Publishing Co. Ltd, 17 Wickham Road, Beckenham, Kent BR3 5JS, United Kingdom
Telephone: (44) 181-6588688
Fax: (44) 181-6582289
E-mail: yewtreepublishing@ukbusiness.com
Internet: <http://www.ukbusiness.com/yewtreepublishing>

“The International Floricultural Quarterly Report”

international floricultural wholesale reports

Language: English
Address: Pathfast Publishing, 31 Second Av, Frinton on Sea, Essex CO13 9ER, United Kingdom
Telephone: (44) 1255-678755
Fax: (44) 1255-850258
E-mail: 106032.1505@compuserve.com
Internet: <http://www.pathfast.com>

Appendix 6 Trade promotion organisations

INTERNATIONAL

International Trade Centre (ITC)

Address: Palais des Nations, P. O. Box 10, 1211 Geneva 10, Switzerland
Telephone: (41) 22 7300111
Fax: (41) 22 7334439
E-mail: itcreg@intracen.org
Internet: <http://www.intracen.org>

AUSTRIA

Austrian Federal Economic Chamber

Address: P.O. Box 150, A-1045 Vienna, Austria
Telephone: (43) 1 501050
Fax: (43) 1 50105-150
E-mail: aw-online@aw.wk.or.at
Internet: http://www.wk.or.at/aw/aw_intl/index.htm

DENMARK

DIPO, Danish Import Promotion Office for Products from Developing Countries

Address: Danish Chamber of Commerce, Børsen, 1217 Copenhagen K, Denmark
Telephone: (45) 0 33 950541
Fax: (45) 0 33 120525
E-mail: dipo@commerce.dk
Internet: <http://www.dipo.dk>

FRANCE

COLEACP

Address: 5, Rue de la Corderie, Centra 342, 94586 Rungis Cedex, France
Telephone: (33) 1 41800210
Fax: (33) 141800219
Email: coleacp@coleacp.org
Internet: <http://www.coleacp.org>

GERMANY

BfAI, Federal Office of Foreign Trade Information

Address: Agrippastrasse 87-93, P. O. Box 100522, 50455 Cologne, Germany
Telephone: (49) 0 221 2057-0
Fax: (49) 0 221 2057-212
E-mail: bus.contacts@bfai.com
Internet: <http://www.bfai.com>

ITALY

ICE, National Institute for Foreign Trade

Address: Via Liszt 21, P.O. Box 10057, 00144 Rome, Italy
Telephone: (39) 06 59921
Fax: (39) 06 5964 7438
E-mail: ice@ice.it
Internet: <http://www.ice.it>

THE NETHERLANDS

CBI, Centre for the Promotion of Imports from developing countries

Address: P. O. Box 30009, 3001 DA Rotterdam, The Netherlands
Telephone: (31) 10 2013434
Fax: (31) 10 4114081
E-mail: cbi@cbi.nl
Internet: <http://www.cbi.nl>

NORWAY

Norad, Norwegian Agency for Development Co-operation

Address: Ruseløkkveien 26, P. O. Box 8034 Dep., 0030 Oslo, Norway
Telephone: (41) 0 22 314400
Fax: (41) 0 22 314403
Internet: <http://www.norad.no>

SWEDEN

SIDA, Swedish International Development Co-operation Agency -Department for Infrastructure & Economic Co-operation

Address: Sveavägen 20, S-105 25 Stockholm, Sweden
Telephone: (46) (0)8 6985000
Fax: (46) (0)8 6208864
E-mail: sida@sida.org.se
Internet: <http://www.sida.se>

SWITZERLAND

SIPPO, Swiss Import Promotion Programme

Address: Avenue de l'Avant-Poste 4, CH-1001 Lausanne, Switzerland
Telephone: (41) 0 21 320 32 31
Fax: (41) 0 21 320 73 37
E-mail: info@sippo.ch
Internet: <http://www.sippo.ch>

Appendix 7 Other Useful Addresses

- INTERNATIONAL

International Chamber of Commerce

Address: 38, cours Albert 1er, 75008 Paris, France
Telephone: (33) 1-49532828
Fax: (33) 1-49532942
Internet: <http://www.worldchambers.com>

Global Crop Protection Federation (GCPF)

Address: 143 Avenue Louise, 1050 Brussels, Belgium
Telephone: (32) 2-5420410
Fax: (32) 2-5420419
Internet: <http://www.gcpf.org>

- EUROPEAN UNION

European Commission

For ACP countries: DG VIII (General directorate for Development VIII)

Address: Directorate General for External Relations, 200, Rue de la Loi, 1049 Brussels, Belgium
Telephone: (32) 2-2991111
Fax: (32) 2-2969931
Internet: <http://europe.eu.int>

EUROSTAT

Statistical Bureau of European Union

Address: Data Shop, 2, Rue Jean Ingling, 1466 Luxembourg
Telephone: (352) 43352251
Fax: (352) 43352221
E-mail: dslux@euroshop.datashop.lu
Internet: <http://europa.eu.int/eurostat.html>

RAL, Deutsches Institut für Gütesicherung und Kennzeichnung E.V.

Blauer Engel, German Ecolabel enquiry point

Address: Siegburger Strasse 39, 53757 Sankt Augustin, Germany
Telephone: (49) 2241-160523
Fax: (49) 2241-160511
Internet: www.blauer-engel.de

SGS European Quality Certification Institute E.E.S.V.

Address: P.O. Box 200, 3200 AE Spijkenisse, The Netherlands
Telephone: (31) 181-693333
Fax: (31) 181-623566
E-mail: sgs.nl@sgsgroup.com
Internet: <http://www.sgs.nl>

- THE NETHERLANDS

ATO-DLO

research institute

Address: P.O. Box 17, 6700 AA Wageningen, The Netherlands
Telephone: (31) 317-475000
Fax: (31) 317-475347
E-mail: info@ato-dlo.nl
Internet: http://www.ato-dlo.nl

CBS

Central Bureau for Statistics

Address: P.O. Box 4000, 2270 JM Voorburg, The Netherlands
Telephone: (31) 70-3373800
Fax: (31) 70-3877429
E-mail: infoserv@cbs.nl
Internet: http://www.cbs.nl

GreenBuss®

Address: P.O. Box 600, 2900 AP Capelle a/d IJssel, The Netherlands
Telephone: (31) 10-4502341
Fax: (31) 10-4510549
Email: greenbuss@kommanet.nl
Internet: www.cbi.nl/greenbuss

Milieukeur Foundation

Netherlands Ecolabel enquiry point

Address: Eisenhowerlaan 150, 2517 KP The Hague, The Netherlands
Telephone: (31) 70-3586300
Fax: (31) 70-3502517
Internet: www.milieukeur.nl

Milieu Project Sierteelt (MPS)

Foundation Floriculture Environmental Project

Address: Postbus 533, 2675 ZT Honselersdijk, The Netherlands
Telephone: (31) 174-615715
Fax: (31) 174-632059
E-mail: recording@st-mps.nl
Internet: www.st-mps.nl

SKAL

Contact point for SKAL certification

Address: P.O. Box 384, 8000 AJ Zwolle, The Netherlands
Telephone: (31) 38-4226866
Fax: (31) 38-4213063
E-mail: skal@euronet.nl
Internet: www.skal.com