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END MARKET STUDY FOR FRESH AND DRIED FRUITS GERMANY

AGRICULTURAL COMPETITIVENESS AND ENTERPRISE DEVELOPMENT PROJECT
(ACED)



MAY 2012

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END MARKET STUDY FOR FRESH AND DRIED FRUITS IN GERMANY

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EXECUTIVE SUMMARY

Germany is the biggest importer within the European Union and the biggest European market for all fresh fruits and vegetables. With a population base of 82 million inhabitants, Germany annually imports roughly 5.5 million tons of fresh produce. German consumers are very conservative and prefer to buy fresh produce that is grown in the region where they live.

Germany is a very price sensitive market with fierce competition but the origin of the fruit is the most important factor influencing consumption. Prices on the German market are not as high as might be expected from a country that has high average discretionary income. Great emphasis is placed on the product's cosmetic appearance rather than its overall taste. The natural taste of product is not the most important organoleptic factor as this is now being sacrificed due to retailers' demands on appearance perfection at the expense of "palatability".

Product safety is a big concern with all market players. The MRLs (Maximum Residue Limits) established by retail chains are much lower than those permitted EU regulations. GlobalGAP certification is a critical issue and producers who are not GlobalGAP certified have no chance at all to enter the market in a significant way.

Moldovan fresh produce is not found in Germany today. There are various reasons contributing to this but the most important ones are the following: 1) very few Moldovan producers are GlobalGAP certified; 2) Moldovan produce does not comply with minimum quality requirements imposed by the market with a key factor being the low level of cold chain management; 3) competition from EU producing countries is fierce and Moldova is disadvantaged by being outside the common EU market; 4) the distance factor for Moldovan product is greater than from the main EU supplying countries, such as Italy, Spain or France; 5) the market is saturated and doesn't really look for new suppliers unless there is a product that is distinctly different 6) German consumers prefer regionally grown products (especially apples and tomatoes) along with a competitive price, which then becomes a secondary consideration; 7) Moldova lacks certain types of products demanded by the market such as white seedless or red grapes, round shaped plums and early big size sweet cherries; 8) Moldova is not known "unproven" in the market as a reliable supplier of fresh fruits and vegetables and building this reputation requires significant time and costs; 9) The Minimum Entry Price protection mechanism, in some cases and for certain products, can represent a trade barrier for Moldovan fruits. There are no trade barriers for dried plums and the quality of Moldovan dried plums does correspond to market requirements however currently there is no product present in the market due to the huge price pressure from overseas suppliers mainly Chile.

The only Moldova product (from those studied in this report) found in the market that successfully competes both in quality and price (value) are walnuts. This is due to the fact that Moldova has naturally ideal conditions for growing walnuts and the largest Moldovan exporters have adopted modern technologies for producing shelled walnuts.

There are no specific or unique packaging requirements for fruit in Germany as long as the packaging sufficiently protects the fresh produce from being damaged. If packaging satisfies this requirement it will

be accepted by the buyer whether it is made of wood or carton. Plastic packaging, although sometimes accepted, is generally not preferred by the buyers.

Germany has adopted EU legislation and business practices. Therefore compliance with EU Marketing standards, or UNECE standards, is extremely important. Besides GlobalGAP other industry certifications such as BRC, HACCP, IFS, QS and others are often required by individual buyers.

The German market is dominated by retail chains that account for more than 75% of all sales of fresh fruits and vegetables. The most popular retail formats are discount stores with a market share of around 50% that dominate the market due to their low pricing strategy. Retail chains purchase most of their fresh produce via big importers although sometimes they do establish long-term direct supply programs with producers.

The main criteria that must be satisfied by Moldovan producers to effectively penetrate the German fruit market are:

1. GlobalGAP certification;
2. to assure that the quality of the product and packaging is comparable to the high market segment competitors. German buyers to a certain extent tolerate lower quality only for the locally produced fruits and vegetables. Imported products should be of the highest quality. The imported products of lower quality have no chance to penetrate the market because of the MEP and general consumers' resistance to buy low quality products. As an example we can mention Polish apples that are better quality and lower priced than the Moldovan apples however still only having a very small share of the German market due to the quality that is generally lower than what German consumers prefer.
3. ability to consolidate export volumes since importers require fresh consistent supply for large and small orders alike.
4. ability to provide produce with pesticide residual levels being sometimes 30% of the maximum EU permitted ones.
5. to accept payment terms of at least 30-45 days

1. INTRODUCTION

About ACED

ACED is a five year project, co-funded by the United States Agency for International Development (USAID) and the Millennium Challenge Corporation (MCC), and implemented by Development Alternatives, Inc. (DAI) to increase the success of the Moldovan agriculture sector in the production and marketing of high value crops both in the domestic market and internationally. ACED focuses on a limited number of high value agriculture value chains that will take advantage of new programs, supported by MCC to increase irrigation capacity in the country and provide positive returns to farmers and the rural economy. The program will provide a combination of technical and managerial training, technical assistance and marketing services to strengthen existing value chains and encourage the development of new ones.

Objectives of the study

The goal of this End Market Study is to enable Moldovan fruit value chain participants (producers, packers, consolidators and others) to get a better understanding of the market for their products in Germany and the requirements for entering that market. The products included in this EMS are fresh apples, table grapes, peaches, plums, sweet cherries, tomatoes, shelled walnuts and dried plums.

The general objectives of this End Market Study are to:

- Analyze demand in a specific market—size, trends, consumer preferences, and requirements, and overall structure (product categories, price segments, and distribution channels).
- Determine retailer/wholesaler sourcing requirements (packaging, grading, varieties, volumes, price points, etc.)
- Benchmark Moldovan products against competitive products already in the market to target competitive strengths and weaknesses.
- Identify key drivers of demand likely to affect the market in the next 5-10 years.

Achieving the objectives of this EMS assume properly answering the following questions:

- What are the specific buyers' critical requirements for each product being analyzed (varieties, quality, pricing, volume, delivery, packaging, certifications)?
- What are the strengths and weaknesses of these specific items in the German market?
- What is the incremental "pricing ladder" for the entire distribution channel-importer, wholesaler, and retailer?
- What are packaging requirements for wholesale and retail markets?
- What are local consumer preferences and trends with regard to varieties, sizing and other product attributes?
- Are there important market niches such as organic or Fair Trade and if so what are their characteristics with regard to products, volumes, price differentials and distribution channels?
- Who are the most important buyers for each product in the market studied?

- What reputation does Moldova have as a source of fresh produce in this market?
- What are the normal payment terms for imported fresh produce in the German market?

Methodology used

The findings of this report are based on primary and secondary information collected from different sources. For collecting secondary information, ACED used desk research to gather information on production, trade statistics and legislative requirements. The sources of information used included UN Comtrade database, Global Trade Atlas, Eurostat, Euromonitor and other sources.

In order to derive primary information directly from the source, the ACED research team visited Berlin (during the international trade show FruitLogistica) and Munich during the period of February 7-16, 2012 and had meetings with importers, wholesalers of fresh and dried fruits and representatives of retail chains. In addition, the research team carried out numerous retail store checks and visited the wholesale markets in Berlin and Munich.

Report structure

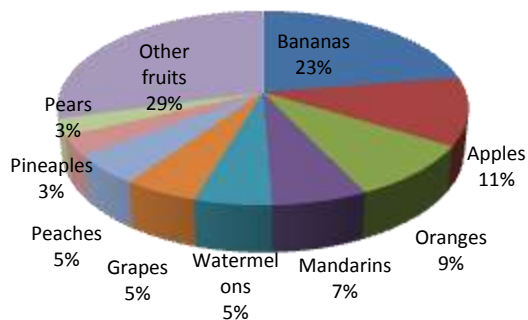
This report consists of a brief executive summary, introduction, general description of the German fruit market, product related market information section specifically for each studied fruit. In addition it presents a description of distribution channels, requirements of buyers and governmental import requirements. At the end of the report, specific conclusions and recommendations for Moldovan producers are provided. Annexes include a contact list of potential buyers, EU customs duties and EU marketing standards.

2. GENERAL DESCRIPTION OF THE MARKET

Germany is the 6th largest fruit producer and consumes more fruit than any other country within the EU. With a population of 82 million inhabitants and high discretionary income, Germany is the number one target for all European and many international fruit and vegetable producers.

Total fruit imports into Germany amounted to 5.5 mil. tons in 2010. The percentage share for the main fruits imported into Germany are shown on the figure below.

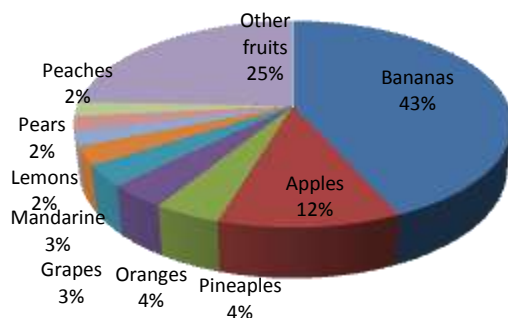
Figure 1. Main fruits imported to Germany by volume, 2010:



Source: UN Comtrade database

As we can see from figure 1, the main fruit imported into Germany were bananas with a share of 23% of all fruit imports in 2010. It was followed by apples (11%), oranges (9%) and mandarins (7%). Grapes, peaches and watermelons all had 5% import share followed by pears and pineapples with 3% each.

Figure 2. Main fruits exported from Germany by volume, 2010:

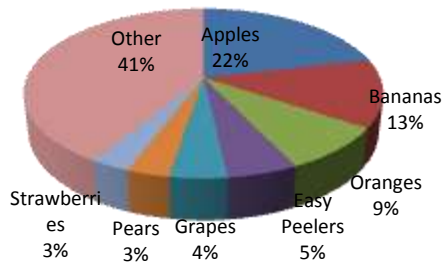


Source: UN Comtrade database

Export of fruits from Germany accounted for about 16% of imports and totaled 0.89 mil. tons in 2010. The figure above shows that the main exported fruits, excluding apples, are fruit items produced outside Germany (like bananas, pineapples, citruses and peaches). Therefore it is clear to see that Germany is an important hub for re-exported produce.

The figure below shows the main fruits consumed in Germany including imports and domestically grown. As we see from this figure apples is the only fruit consumed in big volumes that is produced in Germany with the rest being imported.

Figure 3. Shares of commercially grown fruits consumed in Germany



Source: Based on USDA GAIN Report GM7041

The fruit consumption per household in Germany, as in many countries in Europe, is in a slight decline falling to 81.5 kg in 2010. Per capita fruit consumption in Germany is below other EU countries but the market remains attractive to suppliers due to the large population and their relatively high discretionary income.

The German market is dominated by retail chains especially in the discount format. The market is characterized by very stringent safety requirements but is also very competitive on price. This puts a lot of pressure on the grower community to do the required things in a cost effective way.

For locally grown fruits and vegetables such as apples and tomatoes there is a very narrow “window” for new suppliers to penetrate the German market during the high production season. This is due to consumers’ general conservatism along with the strong preference for locally grown products.

The local consumer preferences are largely dependent on incomes. In Eastern Germany, where incomes are lowest consumers prefer cheaper fruits, whereas in Berlin and Hamburg incomes are somewhat higher and consumers are open to a wider array of product offerings. Certain cities such as Stuttgart, Frankfurt, Dusseldorf and Munich, the most prosperous German cities require more upscale products based on the ability of consumers to afford them.

The biggest logistic hub for overseas products delivered by vessel is Hamburg. The main hub for European, Turkish, and Egyptian products delivered by trucks is Munich.

The market for organic products definitely exists but accounts for only a very small percentage of total fruits and vegetables. The market for Fair Trade products is also very small and mostly exists for exotic products such as bananas and pineapples.

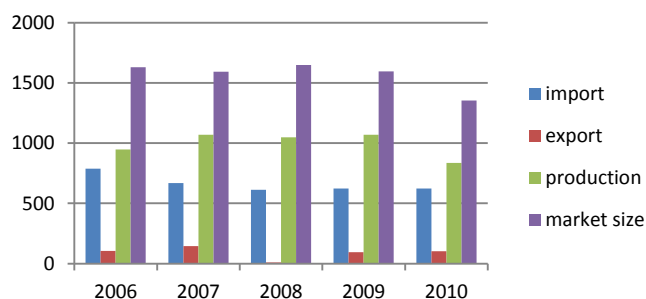
3. MARKET INFORMATION OF STUDIED FRUITS

3.1. APPLES

3.1.1. Characteristics of the apple market

Germany is the fourth largest apple producer within the European Union. During the period of 2006-2010 average total commercial apple production was slightly less than one million tons per year. Approximately 80% of all apples harvested in Germany are channeled to processing. The figure below reflects these main indicators of the apple market in Germany for this period.

Figure 4. Production, external trade and market size dynamics of apples in Germany, th. tons.



Source: Based on UN COMTRADE and FAOSTAT data

The figure above reflects a shrinkage in the apple market of nearly 18%, from 1,648 thousand tons in 2008 to 1,355 thousand tons in 2010. During the same period local production decreased and imports were rather constant at 600-620 th. tons per year. Exports were insignificant, rarely exceeding 100 th. tons.

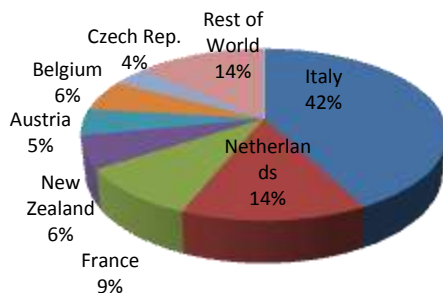
There are no official statistics regarding non-commercial production of apples in Germany although it is estimated to be 750 thousand tons per year from which roughly half is consumed fresh. This volume is not included in figure 4, because non-commercial apples, although contributing to the overall consumption figures, are not traded and therefore are not part of this commercial market analysis.

3.1.2. Competition and prices

Competition

The main countries exporting apples to Germany are presented in Figure 5 below.

Figure 5. Market shares of apples supply countries in Germany in 2010



Source: UN COMTRADE database

Price is the second most important criteria for apple consumers with product origin being the most significant factor. German consumers have very strong regional preferences. There are five apple production regions in Germany and the local regional product will always be the first option for consumers of that region. An interesting fact is that regions are not geographically limited to the borders of Germany. For example, consumers from South Germany prefer apples from South Tyrol Region (that belongs to Italy and is one the most important apple production regions in Europe) rather than apples from other production regions in Germany. The importance of where the apple is grown is so critical that many times the specific region becomes part of the brand name for better differentiation and identification.

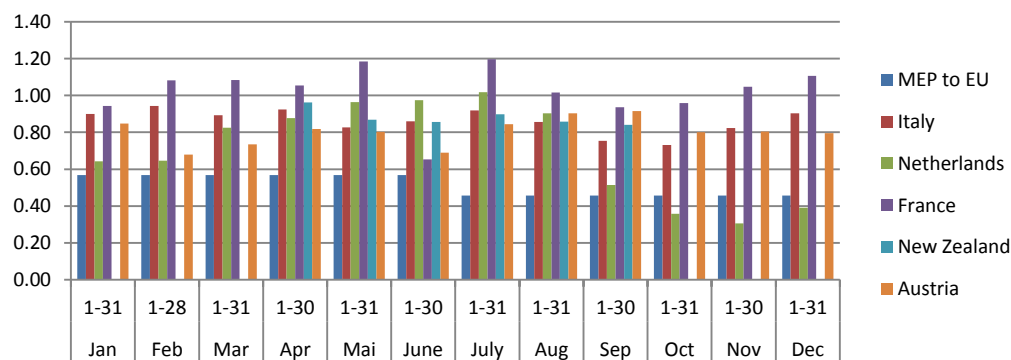
Local German apple production accounts for 20% to 40% of the entire country's fresh apple consumption. Italy, mainly due to the high demand for South Tyrolean apples, is the biggest exporter of apples to Germany accounting for 42% of all apple imports in 2010 (see figure 5).

The two other important apple suppliers are the Netherlands (that ship both apples produced in the Netherlands and re-exported apples from S. America) and France with import market shares of 14% and 9% respectively. This is followed by New Zealand, Belgium, Austria and Czech Republic with market shares approximating 4-6%. Polish apple's despite being very competitive on price are imported in smaller volumes, which again confirms that price is not the most important factor shaping the consumption pattern for apples in Germany.

Price competitiveness of Moldovan apples

The figure below shows the fluctuation of the Minimum Entry Price (MEP) in EU¹ and the average import price (AIP) for apples supplied to Germany. As we can see from this figure, no significant monthly price fluctuation was recorded during 2011 except during the period from September to December when prices although not fluctuating within this period were on average 10-15% lower.

Figure 6. Average monthly price per country of import in 2011 and MEP fluctuation for fresh apples in Germany, euro/kg



Source: Based on EUROSTAT and EU TARIC data

¹ The majority of the Moldovan products including apples benefit from the Asymmetric Trade Agreement when exported to EU and 0% of import duty is applied. In order to benefit from this the price of imported goods needs to be equal to or higher than the stipulated price for that specific period of the year. If the price is lower it is automatically adjusted to the minimum entry price (MEP) by applying a corresponding import duty which when applied will equate to the MEP. This protects the local EU producers from product being dumped in the market and sometimes can be a barrier for Moldovan products to enter certain EU markets.

As we see from the figure 6, the AIP fluctuation is not high during the year although a certain decline approximating 10-15% can be observed during the last four months of the year. The average import prices for apples shipped into Germany were in most instances higher than the MEP except for fruit arriving in October-December from the Netherlands which were below the MEP. Generally this would indicate that MEP is not an important barrier for Moldovan apples targeted for the German market. This being said, there are three important considerations that must be taken into account when analyzing the competitiveness of Moldovan apples in Germany. The first is that during the 2010/2011 production season the price for apples in Europe were generally higher than in previous years however when the average price for European apples are lower than MEP this can be a problem for Moldovan apples.

A second consideration is that, as already mentioned, price is not the main factor that determines the final consumer's choice. With the preference for local/regional apples and the price for apples from German producers being equal to 0.20-0.30 €/kg (which was the case of autumn 2011) Moldovan apples have basically no chance to compete in the lower priced market segment.

The third consideration is that, in order to compete in the higher priced market segment, Moldovan producers have to be able to supply apples of at least the same quality as Italy, New Zealand, France and Austria and build a reputation for supplying product of this quality. Significant time and promotional investment will be required to stimulate a significant change in consumption patterns. People will not change unless the Moldovan apples are better tasting and perceived as a more attractive offer.

Italy usually dictates the price in the higher priced market segment and other quality suppliers customarily follow this lead. During 2011 the average import price of Italian apples fluctuated in the range of 0.70-0.90 €/kg. French apples were on average 10-30% more expensive than the Italian ones. Regarding the other suppliers of quality apples there was no real correlation to the Italian pricing with pricing being sometimes lower whilst higher at other times which is difficult to account for. During the market visitation (mid-February 2011) the wholesale prices for German apples varied from 0.30 €/kg excl. VAT, for small random sized low quality apples, to 0.60-0.70 €/kg for big random sized medium quality fruits, and reaching 0.90 €/kg for sized 70-80 mm good looking fruit. Wholesalers usually have a supply of German apples almost all year round with no significant price fluctuations. The wholesale price for high quality imported apples were in the range of 0.80 -1.60 €/kg (with the average price of 1-1.25 €/kg) depending on country of origin, size, quality and packaging.

Germany due to its population size and overall purchasing power is a target market for many European and overseas producers. Several market operators claimed that due to an oversupply situation prices often fall significantly in a short period of time in order to reduce the oversupply strain.

Retail prices observed during the market visitation (February 2011) showed that there is not a big price differential for the "standard apples" seen in stores. By "standard apples" we mean the most commonly merchandised fruits that are generally I class quality, 70-80 mm size with the most popular varieties, such as Golden Delicious, Braeburn, Granny Smith, Elstar, Crisps Pink, Champion, Gloster, Royal Gala, Jonagold and others. The price for these apples was generally 1.99 €/kg incl. VAT, but depending on the store format (supermarket, discounter etc.), the price could vary by +/- 10%. During in-store promotions, the price for these same quality apples can be as low as 0.99 €/kg. For lower quality,

small, random sized German apples packed in a 2 kg plastic carry bag the price was 0.99 €/kg. The price for the elite “club apples”, such as Pink Lady were much higher at 2.77 €/kg.

While visiting the central green market of Munich (Viktualienmarkt), we noticed that those “standard apples” were basically not present at all and there was a bigger selection of both more expensive (Honey Crunch and Pink Lady for 4.90 - 5.95 €/kg as well as cheaper local unsorted German for 0.99 €/kg. It must be noted that the green market in Germany is not an indicator of the price competitiveness for products as this is a very small market channel and is really more of a meeting place where price is not the main concern for most.

3.1.3. Specific product requirements for apples

Sizing and grading

Apples of all sizes and quality can be found in the German market. Generally, random-sized unsorted apples can sell for a fraction compared to those properly sized and graded. According to the key market players interviewed as well as what was seen at retail, the size of the apples should be 70 mm+, with the most preferred size being 75-80 mm. Most of the imported apples in the market are of 1st class quality.

Color and varieties

The three main varieties of apples grown in Germany are Elstar, Jonagold and Jonagored, collectively accounting for half of all apple production. The other popular varieties are Golden Delicious, Gala, Boskoop, Braeburn, Idared and Gloster, according to FAS data.

Red, sweet and crunchy apples are generally preferred by consumers and the market share of green and yellow varieties is declining. Among the most popular varieties we can mention are Red Delicious, Royal Gala and Braeburn. Green and yellow apples, in spite of market share decline, are still in demand with the main varieties being Granny Smith and Golden Delicious which (for the German market must have more green color than usual).

The market is open for new varieties, like Rubens, and they can successfully compete if they meet the consumer preference profile. There is also a niche for expensive “club apples”, such as Pink Lady, although this market continues to be small.

Packaging

The best packaging is considered to be open carton boxes of 5-10 kg. Carton packaging enables the apples to be positioned in a higher price segment of the market. The more expensive fruits are usually packed in open carton boxes with individual plastic cells for each fruit (see picture 1). The plastic covering film, as it is shown on the picture 3, can be used as a more sophisticated approach to packaging providing a more elite look to the fruits. The bulk packaging in open carton boxes is also widely used for less expensive apples (see picture 2).

Picture 1. Open carton box for apples, Picture 2. Open carton box for apples, Picture 3. Picture. Open carton box for

8.9 kg, one layer with cells



11 kg, in bulk



apples, 5 kg, one layer with cells and protective film



Wooden and plastic packaging is also present in the market although to a lesser extent than the carton boxes. The most popular volumes for wooden boxes are 10, 15 and 21 kg with fruits being packed in bulk with a protective cushioning paper (see picture 4). The wooden box/crate is mostly used for less expensive apples coming mainly from local (German) producers and also from some other countries. Because of the lower cost of packaging (0.50 €/10kg box), HoReCa prefers to buy apples in wooden box/crates as well.

Picture 4. Picture. Wooden box for apples, 10 kg



Picture 5. Wooden box for apples, 15 kg



Picture 6. Plastic returnable box for apples, 11 kg



Apples in plastic boxes (see picture 6) ship mainly from the Netherlands. German wholesalers mention that these boxes are rather expensive (3.86 €/11 kg box) but the same box can be used many times over as they participate in a box exchange programs with Dutch suppliers.

The types and dimensions of apple packaging are diverse and some examples of other types of carton packaging are presented in the pictures 7-8.

Picture 7. Carton box for apples, 10 kg



Picture 8. Carton box for big apples, 5 kg



Picture 9. Apples pre-packed in 3 kg plastic bags



Sometimes apples are pre-packed in 2-3 kg plastic carry bags or small carton boxes with plastic film shrink wrapped (see picture 9). The plastic carry bags are usually used for randomized low cost apples. The pre-packing for higher quality apples is usually a plastic tray with 6 individual fruits wrapped in a plastic film weighing 0.9-1 kg.

The products must be palletized using euro-pallets with standard dimensions (1.2x0.8 m) and each box should be labeled with the minimum required information according to the EU rules (further described in the chapter 6.3 of this report).

Trends

Germans are generally conservative and consume produce that they have become familiar with over time. Even a significantly lower price for a similar product may not be a factor influencing their buying decision. The origin (where the product is grown) is the main decision factor for German consumers who prefer to eat apples from any one of the five producing regions where they may reside. A distinct example of this are Polish apples which are very cheap, in close geographical proximity to Germany, with no trade barriers which have not gained any significant market share. The countries that export apples to Germany have earned their reputation over the course of many years and the common opinion is that the market doesn't really need any new apple suppliers.

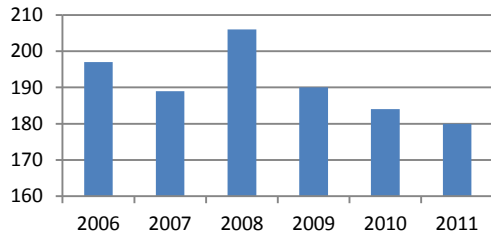
Concerning the consumer preferences, sweet crunchy red apples are preferred and the consumption of green and yellow apples is in decline. Consumers are very open to new red varieties coming from the traditional suppliers and the consumption of the traditional apple varieties has fallen off slightly.

3.2. TABLE GRAPES

3.2.1. Characteristics of the table grapes market

Grapes grown in Germany are almost exclusively for wine production and the cultivation of table grapes basically does not exist. Overall market size is determined entirely by the volume of grapes imported.

Figure 7. Import of table grapes in Germany, th. tons.



Source: based on EUROSTAT data

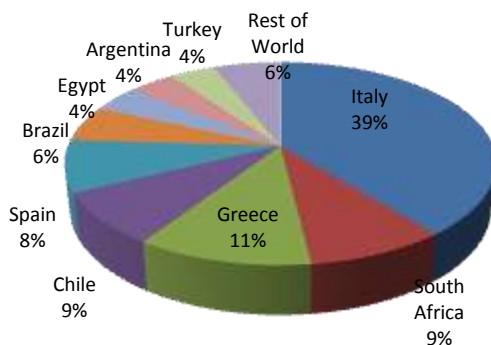
The figure above shows that the table grape imports have been steadily declining from 206 thousand tons in 2008 to 180 thousand tons in 2011.

3.2.2. Competition and prices

Competition

The main countries supplying table grapes to the German market are presented in the figure below. Italy dominates this market especially in the high production season with a total market share of 39% in 2010. Other key EU suppliers are Greece and Spain with market shares of 11% and 8% respectively. The most important overseas table grape suppliers are Chile, South Arica, Brazil and Argentina. Other suppliers such as Turkey and Egypt have 4% market share and the balance of imports from other countries such as India and Israel are very small indeed, mainly during the low production season.

Figure 8. Market shares of fresh grapes supply countries in Germany in 2010



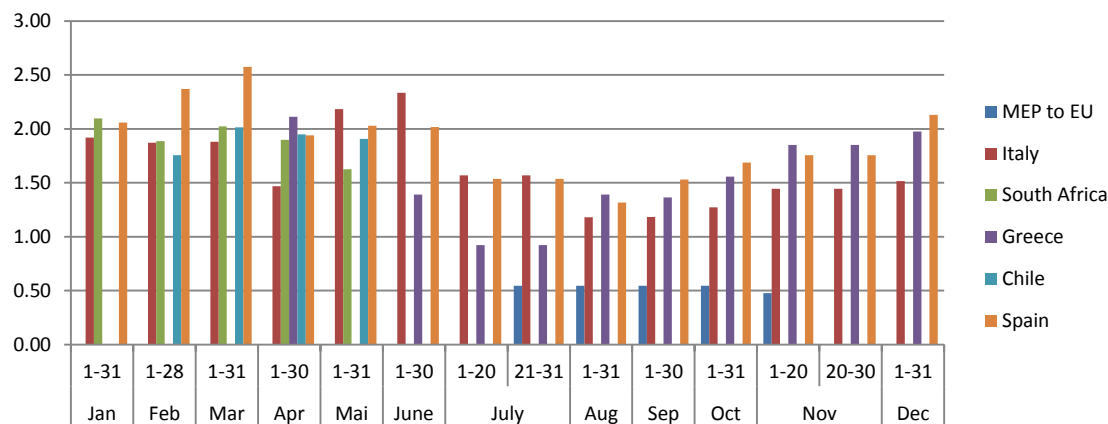
Source: UN COMTRADE database

The table grape supply cycle in Germany appears like this: the first European grapes arrive in June from Spain, followed by Italy and Greece. The first winter supplier is Peru, followed by Brazil, Chile, Argentina and South African arrivals. Afterwards shipments start to arrive from India, Israel, Egypt and Morocco.

Price competitiveness of Moldovan table grapes

The figure below shows the fluctuation of the Minimum Entry Price (MEP) in EU and the average import price (AIP) for table grapes supplied to Germany. As we can see from this figure, MEP is far below the average import prices for the different supply countries. With this being the case the MEP doesn't represent a trade barrier for Moldovan grapes during any part of the year.

Figure 9. Average monthly price per country of import in 2011 and MEP fluctuation for table grapes in Germany, euro/kg



Source: Based on EUROSTAT and EU TARIC data

Italian grape suppliers work with open pricing where they often change the issued invoice according to the actual market price. Many key market players stated that it is difficult for other suppliers to compete effectively against Italian shippers for this reason. Figure 9 shows that, in the high season, August through November, when 80% of all grapes are imported into Germany, the import price of Italian grapes were the lowest in the market varying between 1.20 to 1.45 €/kg. The import price of other table grape suppliers in this season (Spain and Greece) was approximately 20% higher. The AIP during the last six months of 2011 was 1.25-1.80€/kg, while the AIP in the first part of the year was 1.90 – 2.30€/kg. Italy and Spain still represent the main grape suppliers starting in January while from February through May bigger volumes also arrive from Chile and South Africa.

During the market visitation (mid-February 2012) the average import price for grapes (Thompson Seedless variety) was 1.80-2.20€/kg, which generally repeated those prices experienced in 2011. The wholesale prices in the same period for most of grapes were on the level of 11€ per 4.5 kg box, or 2.45€/kg excl. VAT. The wholesale price for organic grapes was as high as 4€/kg.

The prices at retail varied a lot depending on the different store formats (supermarket vs. discounter) and in-store promotions. The most common price found in the supermarkets was 2.59 - 2.99€/kg incl. VAT for all pre-packed grapes in paper bags or plastic carry bags. The highest price within the supermarket was 3.99 €/kg for grapes pre-packed in 500 gram plastic punnets and generally within the discounter formats the price for grapes could be as low as 1.99€/kg on promotions.

The prices in green markets (ex. Viktualienmarkt in Munich) varied from an astounding 9.90 to 11.90€/kg for the same varieties of grapes that were found in the supermarkets. These high prices do not, however, reflect the general market prices for any variety of grape.

3.2.3. Specific product requirements for table grapes

Quality requirements

There are no specific market quality requirements for table grapes in Germany and the produce simply has to correspond to the stated and claimed quality class as outlined in the EU marketing standards guidelines which is annexed in this report. Market players do not really specify the required size of the bunch or the berry (grape). The general requirement is that grapes should “look good” with no visual defects. Generally, we observed that the grapes seen in German supermarkets had big bunches (over 400 grams) and the size of the berries was equal to or bigger than 20 mm in diameter. The Germans do like big grapes but more important is the overall cosmetic appeal.

Table grapes are considered one of the most dangerous products from the pesticide residuals point of view and importers and supermarkets pay very special attention to MRL's.

There is a certain potential for organic grapes although small which is mostly covered by Italian suppliers. The share of this segment is not more than 5% of the market but is relatively stable.

Color and varieties

In Germany the most demanded table grapes varieties are those that are white and seedless. The preference of table grapes by color is around 70% for white grapes, 15% for red grapes and 15% for black grapes. The overall share of black grapes is declining in favor of white and red grapes. Some supermarket chains refuse to deal with black grapes and have switched to red varieties instead due to lack of demand.

Presently seedless grapes command 70% of the market and this number is growing at the expense of the seeded varieties which makes up the balance. The demand for seeded grapes is almost totally covered by supplies from Italy during the high production season.

The most popular varieties during the high season are Italia, Vittoria and Thompson Seedless. One of the market players mentioned that Crimson Seedless was the “consumers’ choice” variety in Germany in 2011. Black varieties such as Black Magic are imported mainly from Italy but in small volumes. It was mentioned that seeded black varieties are known and appreciated by the Turkish community in Germany but this is indeed a niche market that is not easy to penetrate and would have to be very competitively priced.

The varieties seen in the market during the visitation (low production season, mid- February 2012) were predominantly White Seedless from Argentina; Red Seedless, Flame Seedless and Dessert from South Africa; Thompson Seedless and Dan Ben Hannah from Namibia and Napoleon from Spain. Besides those main varieties such varieties like Red Globe, Imperial Seedless and Rich Lady could be also found on the market.

Packaging

The standard packaging for grapes is a 4.5 kg carton box and market operators often use this box as a unit of volume measurement. Plastic and wooden boxes of the same size (see pictures 11-12) are also used although to a lesser degree with carton being generally preferred.

Picture 10. Grapes from Namibia in closed carton box of 4.5 kg with sulphate pad



Picture 11. Grapes from Peru in closed plastic box of 4.5 kg with sulphate pad



Picture 12. Grapes from Spain in closed wooden box of 4.5 kg with sulphate pad



During the winter months all grapes are shipped in closed packaging wrapped in plastic film and accompanied by a sulphate pad (see pictures 10, 12). In the high season the sulphate pads are not used and the open box packing is well accepted.

Loose package for grapes is accepted in the high season but the bunches should be separated by styrofoam as shown in the picture 13. The bulk packaging without separation of bunches is still used in the high season but this trend is declining.

Picture 13. Grapes from Namibia with separated bunches



Picture 14. Grapes from Namibia with separated bunches



The general rule is that grapes should be pre-packed by supplier and this is important even in the high season although there are sometimes exceptions. The best pre-packing option is a perforated plastic carry bag with one bunch weighing around 500 grams (see picture 15) or a 500 gram plastic punnet. These are the only accepted pre-pack options for the discounters although for supermarkets the open end paper bags with bunches are a well-accepted option also (see picture 14).

Picture 15. Grapes pre-packed in perorated plastic bag



Picture 16. Grapes pre-packed in perorated plastic bag



The grapes should be loaded on euro-pallets of standard dimensions (1.2x0.8 m), with the standard dimensions of the box being 30 x 40 cm. This allows loading 96 boxes per pallet. Labeling of each box must meet the minimum EU requirements.

Trends

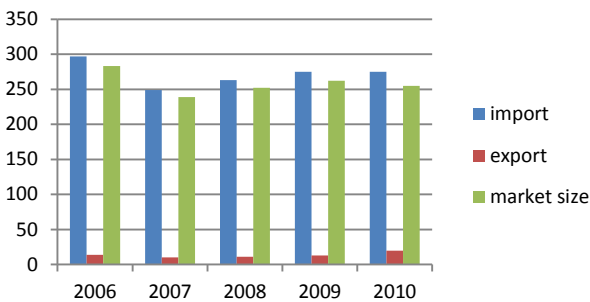
The trend with table grape consumption in Germany is moving from seeded grapes to seedless ones and from black varieties to white and red ones. Preference is still with the larger bunches over 400 grams and berry size minimums of 20 mm in diameter. Generally, bulk packaging is in decline. The share of organic table grapes has stabilized at 5% and the growth has indeed leveled off.

3.3. PEACHES

3.3.1. Characteristics of the peach market

In Germany significant peach production does not exist and the market size is determined for the most part by imports. From the figure below we can see that the size of the market was rather stable during 2008-2010 fluctuating around 250 thousand tons per year.

Figure 10. External trade and market size dynamics of peaches in Germany, th. tons.



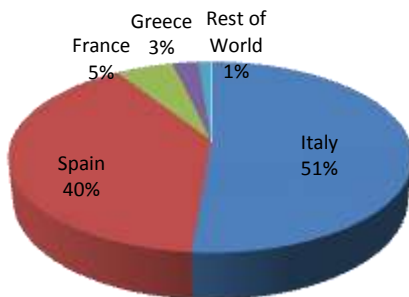
Source: UN COMTRADE database

3.3.2. Competition and prices

Competition

The figure 11 shows the main countries that supply peaches to Germany. The two dominant suppliers - Italy and Spain - control the market with a collective market share of over 90%. France and Greece have small market shares of 5 and 3% respectively with the other suppliers contributing only 1% of the market.

Figure 11. Market shares of peaches supply countries in Germany in 2010

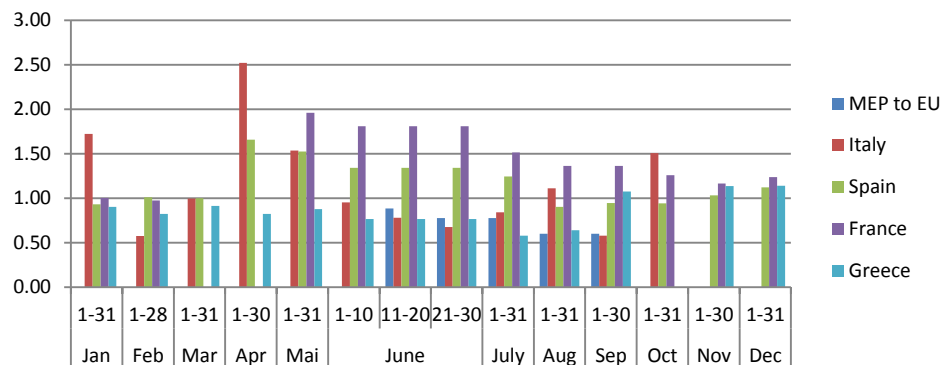


Source: UN COMTRADE database

Turkish peaches, which are very competitive in some other EU countries, are not present in Germany. The market players explained this as a result of the “low safety” (high level of pesticide residues) of Turkish peaches. For this reason importers do not want to risk their reputation dealing with Turkish peach suppliers and stay away.

Price competitiveness of Moldovan peaches

Figure 12. Average monthly price per country of import in 2011 and MEP fluctuation for fresh peaches in Germany, euro/kg



Source: Based on EUROSTAT and EU TARIC data

The peak season for peach imports to Germany is from June to September when approximately 85% of all peach imports take place. The average import price in June is 1.20 €/kg then falling to 1 €/kg in July and then lowering to 0.85-0.90 €/kg in August-September. Excluding the month of August the import price of Spanish peaches was more than 40% higher than the Italian ones. Moldovan peaches are grown from mid-July till late August and in this period the AIP was slightly higher than MEP in 2011. This gives a theoretical chance for Moldovan peaches to enter the market although other major barriers besides MEP significantly diminishes this opportunity. German importers prefer to deal with traditional peach suppliers for the following reasons:

- faster delivery and fresher product which is important for this perishable product
- no need to pay VAT immediately when bringing in product
- need for mixer loads from wholesale markets in Spain and Italy, which provides buyers more flexibility.
- sometimes a really low price offer (0.10-0.20 €/kg, which is far below the MEP) for Italian and Spanish suppliers
- risk adverse related to the safety and quality of products coming from new suppliers from other countries

At the time of the market visit (mid-February 2012) there were not any peaches found at retail nor at wholesale level. Wholesalers claimed that the small volumes of peaches from S. Africa were sold at the beginning of February with the wholesale price of 3 €/kg and by the mid-February few market operators were selling Chilean peaches for a much higher price.

3.3.3. Specific product requirements for peaches

Quality requirements

During the peach season all sizes are imported into Germany starting from size B at the beginning of the season (June) until July-September when AA and AAA sizes appear. The fruit dimensions corresponding to those sizes can be seen in the table 1. Usually very big peaches of AAA size are sold more expensively

mostly in the green markets where large premium products are sold and price is not a critical factor. This pattern was confirmed by Edeka retail chain that operates two green markets (besides the supermarket chain) and sells extra-large peaches exclusively through these markets.

Table 1. Size classification of peaches

Diameter, mm	Size category	length of circumference, cm
≥90	AAAA	≥28
80 – 90	AAA	25 -28
73 – 80	AA	23 - 25
67 – 73	A	21 - 23
61 – 67	B	19 -21
56 – 61	C	17.5 - 19
51 – 56	D	16 – 17.5

The 1st quality class is the “standard” quality level found in the market although the “extra” and 2nd quality classes are also present. Consumers prefer red peaches with not much “hair on the skin”.

The required shelf life at “normal room temperature” should be at least 4 days.

The market for organic peaches basically does not exist in Germany.

Packaging

The best packaging for peaches sold in the high production season is a one-layer 4-5 kg carton box with or without individual cells. Carton packaging is preferred although 4-5 kg wooden boxes are also accepted and are present on the market during the high season. Open 4-5 kg boxes are considered to be the best packaging for soft peaches. Harder fruits are often pre-packed in 1 kg plastic punnets (4-8 fruits in each depending on size) with 9 punnets in one open carton box.

Other smaller packaging options, such as 2.3 kg carton boxes with 20-23 fruits per box for peaches from S. Africa, can be found in the low season.

Trends

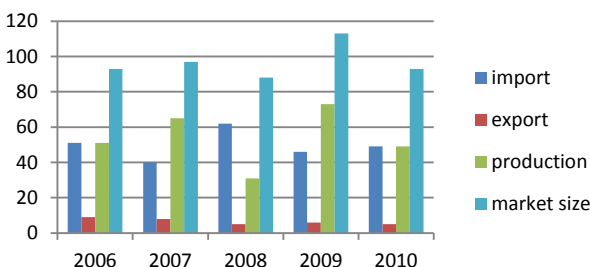
The peach market seems to be stable with traditional suppliers and no evident trends. Due to its very competitive pricing, general conservatism and other barriers as outlined there is really no chance for Moldovan peaches to enter this market in the near future.

3.4. PLUMS

3.4.1. Characteristics of the plum market

Germany is a big producer as well as an importer of plums. Figure 13 shows that in some years imports exceed production and in other years production is greater than imports. The total market size of plums for Germany has fluctuated in the range of 88-113 thousand tons for the period 2008-2010 with no recognizable trend.

Figure 13. Production, external trade and market size dynamics of plums in Germany, th. tons.



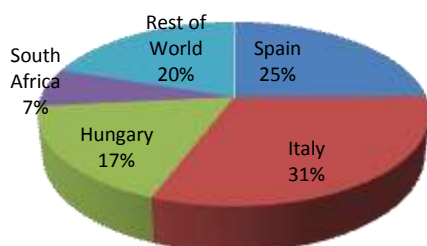
Source: Based on UN COMTRADE and FAOSTAT data

A significant part of the produced and imported plums are channeled for processing although neither the official statistics nor any estimates of these volumes are available. This explains the high fluctuation of the market size and absence of evident trends as in case of overproduction when the excess volumes of fruits are processed.

3.4.2. Competition and prices

Competition

Figure 14. Market shares of plums supply countries in Germany in 2010

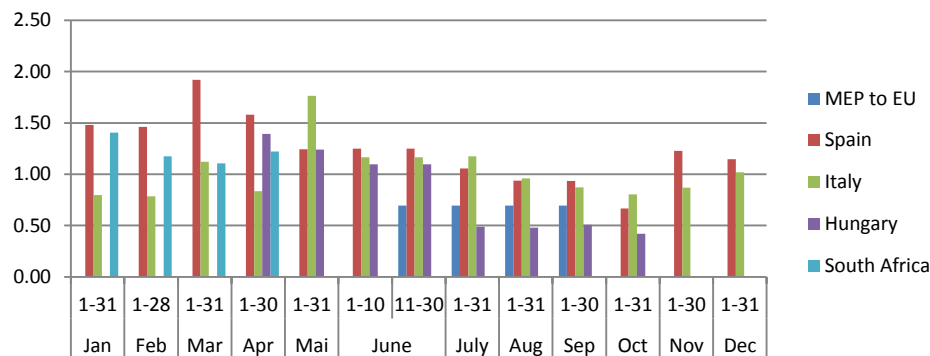


Source: UN COMTRADE database

Imported plums account for half of the German plum market. The two biggest suppliers in this market are Italy and Spain collectively supplying 56% of the imported plums. These countries are followed by Hungary and S. Africa with all the other supply countries being numerous, but with very small volumes.

Price competitiveness of Moldovan plums

Figure 15. Average monthly price per country of import in 2011 and MEP fluctuation for fresh plums in Germany, euro/kg



Source: Based on EUROSTAT and EU TARIC data

Plums are a seasonal product and 90% of them are imported into Germany from July to November with the peak being in the August-October time period. The Spanish and Italian plums were imported in July for 1.05-1.20 €/kg and then in August their price fell to 0.95 €/kg. In September-October-November the AIP was 0.84, 0.76 and 0.91 €/kg respectfully with the Spanish plums (excluding Oct.) being around 10% more expensive than the Italian ones.

During the whole production season the Spanish and Italian plums were imported at prices that were far higher than MEP. To the contrary the Hungarian plums were 0.40-0.50 €/kg, which was much lower than the MEP of 0.70 €/kg for the same time period. Moldova, as a new supplier, would compete directly with Hungary in this lower priced market segment and with the protective MEP system would have no potential in this market.

During the visit in mid-February 2012 the assortment of plums at German wholesalers was very limited. We found yellow plums from Chile and red plums from S. Africa at the wholesale price of 1.70-1.90 €/kg excl. VAT. At the retail level plums were also very scarce and present in one store with round red plums for 3.99 €/kg from S. Africa. In a different store, there were Chilean plums in a 500 gram plastic punnets for 1.78 €/kg.

3.4.3. Specific product requirements for plums

Quality requirements

German consumers clearly distinguish between two different types of plums: 1) the round plums that are imported and are referred to as “plums”, and 2) the oval plums that they call “Zwetschge”. These are German varieties and also the varieties coming from Hungary and Serbia. Both types of plums have their distinct customers with their market share being divided equally. The first type of plum(round) is used only for fresh consumption while the second one is used both for fresh consumption and cooking/baking.

The most popular round shaped varieties are Black Amber and Black Diamond. A popular oval variety used for cooking is Chachak with the Stanley variety used for both purposes. Almost all Moldovan plums are oval varieties (Stanley and Chachak) that are sold cheaper than the round plums.

One of the importer's key requirements is that the minimum shelf life for fresh plums at "normal room temperature" for product leaving the wholesaler's cold storage should be at least 4 days.

Packaging

Plums supplied in the high production season are packed in open carton or wooden boxes of 3.5 – 7 kg. Loose packaging is accepted as well as packs with individual cells.

The fruits arriving in the off-season should be protected by either using closed boxes (see picture 17) or being pre-packed.

A good example of the pre-packing is a 10 kg carton box with 1 kg plastic punnets. Pre-packing in 1-5 kg plastic bags is also used.

Picture 17. S. African plums in 5 kg carton box with cells



Trends

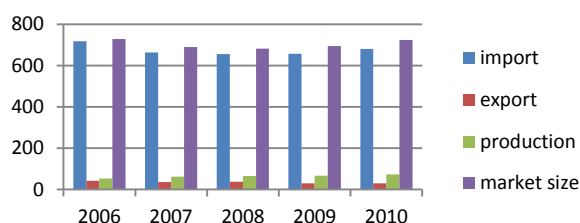
German importers are generally open to explore possibilities to work with new suppliers and new varieties. Importers are sometimes successful in collaborating with new producing countries as evidenced by inroads made by Macedonia and Romania. There is a definite need for new plum varieties and Chile was mentioned as a positive example in that each year they introduce new varieties to the market. The best potential along with higher pricing are round shaped plum varieties that are not grown in Germany. Oval fruit is also in demand if the prices are competitive which is not the case for Moldovan plums because of the MEP and therefore very difficult to ship into the German market.

3.5. TOMATOES

3.5.1. Characteristics of the tomato market

Production of tomatoes in Germany is very limited. Approximately 90% of all tomatoes sold in the market are imported. The figure below shows that in the period 2008-2010 the overall market size has grown slightly from 682 thousand tons to 724 thousand tons.

Figure 16. Production, external trade and market size dynamics of tomatoes in Germany, th. tons.



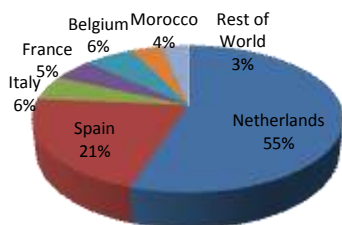
Source: Based on UN COMTRADE and FAOSTAT data

3.5.2. Competition and prices

Competition

Figure 17 shows that the Netherlands dominates the German tomato market with a commanding 55% market share of all tomato imports. The next biggest supplier is Spain with a respectable market share of 21%. The balance of suppliers with smaller market presence are Belgium, France, Italy and Morocco with market shares varying in the range of 4-6%.

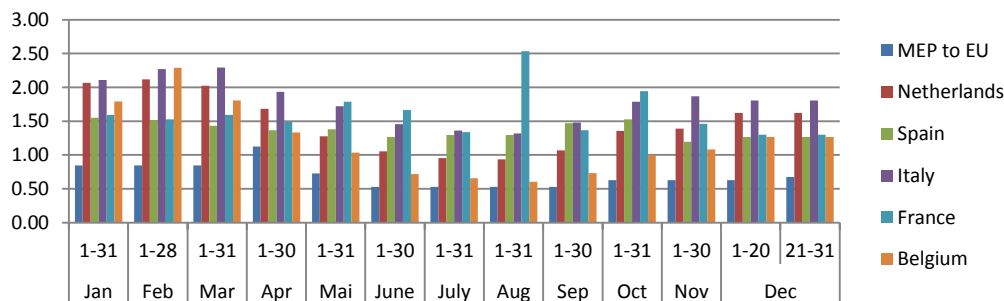
Figure 17. Market shares of tomatoes supply countries in Germany in 2010



Source: UN COMTRADE database

Price competitiveness of Moldovan tomatoes

Figure 18. Average monthly price per country of import in 2011 and MEP fluctuation for fresh tomatoes in Germany, euro/kg



Source: Based on EUROSTAT and EU TARIC data

Figure 18 clearly shows that MEP is not a barrier for tomatoes shipping from non-EU countries into Germany because the average import price of all main supply countries was higher than the MEP during the whole year 2011.

Tomatoes are not a seasonal fruit in Germany the imports are rather stable fluctuating in the range of 50-70 thousand tons per month. The lowest average import price was registered in the high production season of July-August and was equal to 1 €/kg in 2011. The AIP in September was 1.10 €/kg. The last three months of the year the AIP was around 1.40 €/kg. In January-March the AIP ranged from 1.70-1.80 €/kg and then decreased slightly to 1.35€/kg in May and 1.10 €/kg in June.

The lowest registered import price for tomatoes were Belgium tomatoes that were sold within the range of 0.60-0.65 €/kg in July and August. Tomatoes from the Netherlands were 20% higher in price. Spanish tomatoes were 5-10% cheaper than the Dutch ones however, the price fluctuation of the Spanish tomatoes is less pronounced ranging from 1.20 to 1.55 €/kg during a year, while the price of the Dutch ones started from 0.95 €/kg and reached 2 -2.10 €/kg in January - March. Italian and French tomatoes are usually more expensive than those arriving from the Netherlands, Spain and Belgium.

German tomatoes are harvested from May till November and are usually more price competitive than the imported ones. Retail chains have long term contracts with consolidated German growers and the purchase price can be as low as 0.40 €/kg during the whole production season.

Moldovan greenhouse tomatoes are available at the beginning of May at the ex-works price of 2 €/kg. By the middle of June the price falls to 1 €/kg. From the end of June and till the end of August the price for Moldovan tomatoes fluctuates a lot, but is generally in the range of 0.20 - 0.45 €/kg. In September the price of Moldovan tomatoes increases to 0.50-0.65 €/kg and in October – to 0.65 -1.00 €/kg. Comparing the price evolution of the Moldovan tomatoes with the German ones and other imports to Germany we can see that there is a theoretical chance for Moldovan tomatoes to be exported to Germany in July –August period.

During the market visit (mid-February 2012) the most common retail price point for loose tomatoes was 1.99 €/kg. This price was for big (65+mm) loose Spanish tomatoes and for pre-packed smaller (45-57 mm) tomatoes in 500 gram plastic punnets shipped from Morocco. The retail price point for vine tomatoes was more varied with the minimum price being 1.99 €/kg and as high as 4.99€/kg contingent on the store format and whether there was in-store promotions. In most instances vine tomatoes were priced in the range 2.99 – 3.49 €/kg. Organic tomatoes were sold for 4.58 €/kg for 2nd quality class loose packs and 5.98 for 1st quality organic product. In addition there were “specialty” green tomatoes priced at 4.78 €/kg. at retail store level.

Overall as can be expected tomato prices at the “green market” were much higher than in the supermarkets and were priced in the 7.50 – 11 €/kg range.

3.5.3. Specific product requirements for tomatoes

Quality requirements

The market share of vine tomatoes has grown significantly during the last few years. According to different estimates the market share of vine tomatoes now approximates 60-70% as compared to the 30-40% share for the loose ones. Cherry tomatoes and small plum tomatoes are positioned for assortment and their market share is very small.

Generally tomato varieties are not very important for consumers and the fruits are distinguished by type. Beef type tomatoes are most popular among the loose tomatoes and these are supplied mostly from the Netherlands. The vine and cherry tomatoes arrive mostly from Spain, Italy and Morocco.

Depending on type of tomato the price varies significantly. Loose tomatoes are used as a base point and for example: if loose tomatoes cost 1 €/kg then the vine tomatoes would cost 1.10 - 1.25 €/kg and cherry tomatoes – 1.5€/kg with the little loose plum tomatoes priced at 1.75 €/kg.

In terms of quality class the 1st class is the most popular in Germany and can be referred as “standard quality”.

The minimum size of loose tomatoes should be 45 mm and the bigger (65-70 mm) are the most popular. The diameter of cherry tomatoes should approximate 25 mm.

Packaging

The standard and most commonly used packaging for loose tomatoes is a 5 kg open carton box (see pictures 18-19). Plastic packaging (picture 20) is also accepted but less popular with cartons being considered a more “natural” option.

Picture 18. Standard 5 kg carton box for loose tomatoes from Spain



Picture 19. Purple loose French tomatoes in 5 kg carton box



Picture 20. Spanish vine tomatoes two layers pack, 5 kg plastic box



Bulk packaging is well accepted for loose tomatoes although sometimes loose tomatoes are packed in two layers with a thin foam rubber sheet in-between.

For bigger and more expensive loose tomatoes (beef type) a 7 kg open box with one layer of fruits in individual cells can be used as presented in picture 23.

Picture 21. Spanish vine tomatoes one layer pack, 5 kg carton box



Picture 22. Dutch vine tomatoes two layers pack, 5 kg carton box



Picture 23. Tomatoes packed one layers in carton box with cells



Vine tomatoes are usually packed in one or two layers as it is shown in the pictures 21-22. Cherry tomatoes are usually sold pre-packed in a plastic bag with two vines each having 8-9 fruits or in different types of creative packaging (see picture 25).

Loose tomatoes sometimes are also sold pre-packed in 0.5 or 1 kg plastic punnets as shown in the picture 24.

Small loose plum tomatoes are sold in 250 gr plastic punnets.

Picture 24. Loose tomatoes pre-packed in 1 kg plastic punnet



Picture 25. Original pre-pack of cherry tomatoes



Trends

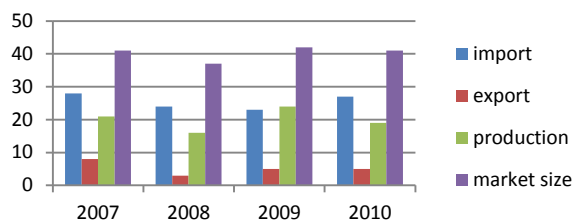
German consumers increasingly prefer vine tomatoes despite the higher price compared to loose pack tomatoes. During the last few years Germany has made a lot of investments in tomato production and the price of German tomatoes is significantly lower than imported tomatoes and often below the MEP, although the volumes still do not meet overall demand. The market is open for external suppliers in the period from November through April. Moldovan suppliers are not competitive on quality/price relationship (value) during this period of the year and do not produce vine tomatoes. There is a theoretical opportunity to export Moldovan tomatoes in July-August period when the ex-works prices are low however the related issues of GlobalGAP certification, MRLs, consolidated shipments, and strong promotional efforts must be intact.

3.6. SWEET CHERRIES

3.6.1. Characteristics of the sweet cherry market

Germany has a developed production of sweet cherries with volumes varying between 16 and 24 thousand tons within the 2007 through 2010 time period. Throughout most of Germany including the major cherry-growing region of Franconia, sweet cherry orchards are small parcels ranging from four to eight acres. The significant exceptions to these small orchards are situated in what was previously East Germany where the former collective farms have been privatized. According to various market estimates and indicators, from 30 to 45% of the sweet cherries grown in Germany are processed with the rest being consumed fresh.

Figure 19. Production, external trade and market size dynamics of sweet cherries in Germany, th. tons.



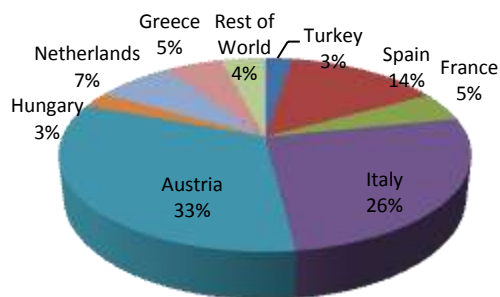
Source: Based on UN COMTRADE and FAOSTAT data

Figure 19 shows that the market size of sweet cherries in Germany is rather stable fluctuating around 40 thousand tons per year. More than a half of the market is supplied by imports that arrive in the same period when the German products are available.

3.6.2. Competition and prices

Competition

Figure 20. Market shares of sweet cherries supply countries in Germany in 2011, by volume



Source: UN COMTRADE database

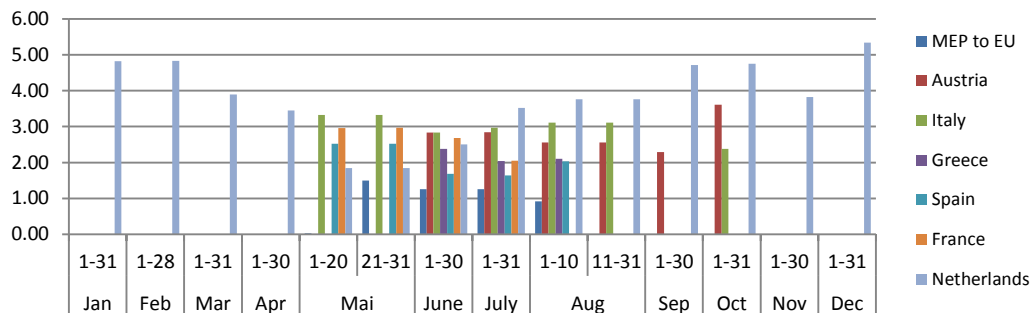
From the figure above we can see that Austria and Italy are the main sweet cherry suppliers to the German market followed by Spain. The cumulative market share of these three supply countries totals

73% for all imports in 2011. The other smaller supply countries are the Netherlands (mainly re-exporting cherries from the Southern Hemisphere), France, Greece, Turkey and Hungary.

Price competitiveness of Moldovan sweet cherries

As we see from figure 21, MEP cannot be considered as a trade barrier for the non-EU sweet cherry producers because the average import prices for all main supply countries are significantly higher than MEP.

Figure 21. Average monthly price per country of import in 2011 and MEP fluctuation for sweet cherries in Germany, euro/kg



Source: Based on EUROSTAT and EU TARIC data

Sweet cherries are highly seasonal with almost 80% of all imports taking place within the two months of June and July. Significantly smaller volumes are imported in the months of May, August, September and October with imports from November through April accounting for less than 1% of total imports for the year.

The average import price for sweet cherries in the period June through September ranged from 2.40 to 2.80 €/kg. In June and July when the main volume of imports arrived the import price for Austrian and Italian sweet cherries was 2.80- 3.00 €/kg while the Spanish sweet cherries were sold considerably cheaper (1.60 – 1.70 €/kg).

Starting in October the import price for sweet cherries increases and reaches a ceiling price of 4-5 €/kg, which continues from November through April with very small volumes sold mainly the re-exported product coming from the Netherlands. The market “wakes up” in May when the first Italian, Spanish and French sweet cherries appear in the market with the average import price usually around 3.00 €/kg.

German sweet cherries appear in the market from late June and continue through August.

Potentially there is place in the market for Moldovan sweet cherries if they are competitively priced and meet the stringent quality requirements as MEP is not a factor.

3.6.3. Specific product requirements for sweet cherries

Quality requirements

Due to the highly perishable nature of sweet cherries they are considered a very risky product to deal with as the shelf life is short and there is a risk that the product may be damaged during

transportation/arrival. Not all market players are willing to trade in sweet cherries due to the short shelf life and overall perishability. On the contrary those importers who deal with sweet cherries consider them a very interesting product where good money can be made. Most importers prefer to deal with hard sweet cherries that have a longer shelf life with the exception being the first sweet cherries that appear in the market in May that may be soft. Supermarkets guarantee to their customers shelf life minimums of one week after purchase so producers should handle and store sweet cherries accordingly as to provide the required shelf life. One of the market operators claimed that his biggest concern with sweet cherries besides the shelf life are good arrivals and the fear of rejections.

The size for sweet cherries follows the rule “the bigger the better”, so importers deal with 24-26-28 mm sized berries with 30 mm berries being the most preferred. The price difference amongst the different size sweet cherries is considerable.

Generally consumers prefer dark, big and meaty sweet cherries like Napoleon variety. The most popular varieties grown in Germany are Hedelfinger, Knorpelkirsche, Schneider's Spate and Regina. The early Burlat variety is also grown in Germany but is considered very risky with limited shelf life since it breaks down quickly. The end consumer does not distinguish sweet cherries by variety and evaluates them based on size, darkness and consistency.

Packaging

The common packaging for sweet cherries in the high production season is 2 to 5 (often 2.5) kg carton box with the fruits being protected by plastic film as shown in picture 26. The cherries in loose packages should be the 26 mm size and bigger, while for the smaller berries (22 -24 mm) the more preferred option is the 500 gram plastic punnet.

Picture 26. Del Monte sweet cherries in 2.5 kg carton box



Picture 27. Del Monte sweet cherries in 2.5 kg carton box



Trends

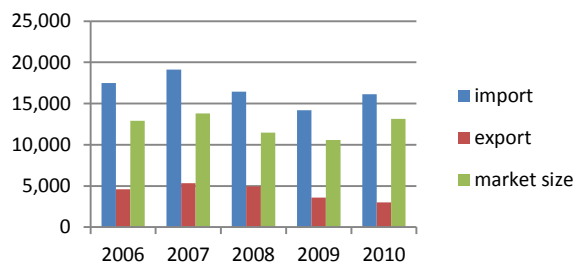
The production and imports of sweet cherries in Germany are stable with no visible trends. The best opportunity to enter this market is in May although Moldovan producers do not have appropriate varieties and climate conditions in order to do this. The market is open as well in the high season if the sweet cherries are priced competitively and the stringent quality requirements are met.

3.7. DRIED PLUMS

3.7.1. Characteristics of the dried plum market

Germany is an important producer of fresh plums. There is however, no significant dried plum production within the country. The overall market size for dried plums is determined entirely by imports and further re-exports. During 2006-2010 the size of the dried plum market in Germany fluctuated in the range from 10.6 – 13.8 thousand tons with no evident trend being recognized (see figure below).

Figure 22. External trade and market size dynamics of dried plums in Germany, tons.



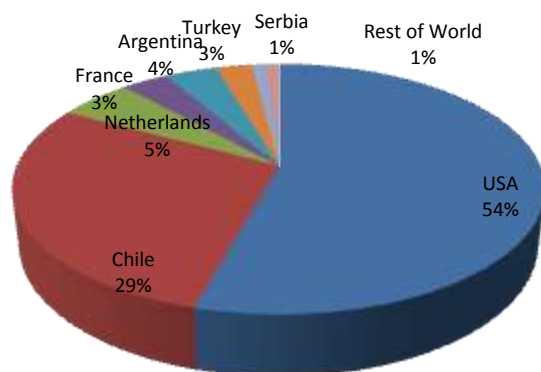
Source: UN COMTRADE database

3.7.2. Competition and prices

Competition

The U.S.A. is the major supplier of dried plums to Germany with the dominant market share of 54% in 2010. The second biggest supplier is Chile accounting for 29% of the market. Netherlands has a market share of 5% which are the re-exports of dried plums from South America. The other smaller direct supply countries are Argentina, France, Turkey and Serbia with market shares of 1-4% as shown in the graph below.

Figure 23. Market shares of dried plums supply countries in Germany in 2010

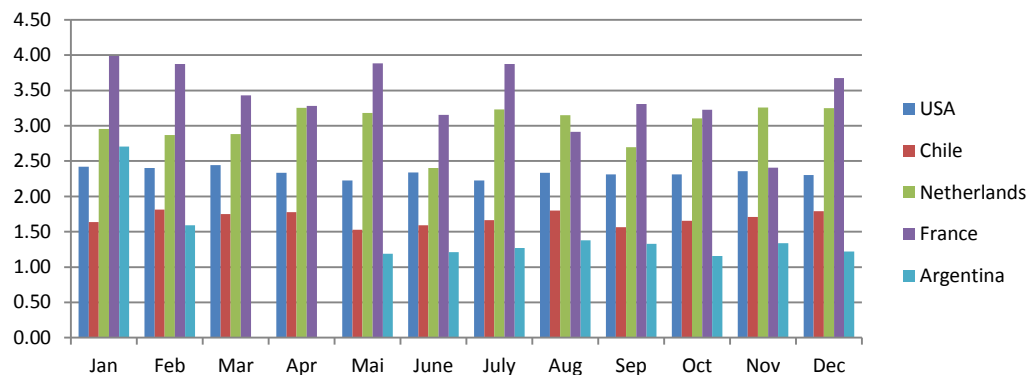


Source: UN COMTRADE database

Price competitiveness of Moldovan dried plums

The seasonality of dried plum imports is very minimal though slightly bigger volumes are imported during the September through December time period (1.100 – 1.300 tons/month) compared to lower volumes approximating 900 -1.100 tons/month in other months.

Figure 24. Average monthly price per country of import fluctuation for dried plums in Germany in 2011, euro/kg



Source: Based on EUROSTAT data

The average import price is not influenced by seasonality and it fluctuated in the range of 2-2.30 €/kg during 2011.

The import price of the U.S. dried plums was higher than the average import price and the range was 2.20 to 2.40 €/kg. The most expensive plums were shipped from France and then the Netherlands with general prices of 2.70-3.20 €/kg with some small exceptions of higher prices with French product. Dried plums shipped from Argentina had the lowest average price of 1.20-1.60 €/kg and the Chilean dried plums were 15-20% more expensive than the Argentine dried plums.

No MEP is applied for dried plums imported from Moldova to the EU and therefore this is not a barrier to trade for this product. The main concern for the Moldovan dried plum producers is to be able to offer a competitive price with the South American suppliers being the benchmark for quality and price. Moldovan product generally is not as sweet as the South American dried plums and are not as soft which is always a consideration which relates to the variety.

During the market visit (mid-February 2012) the wholesale price was 6.5- 6.7 €/kg, excl. VAT for the high quality French dried pitted plums. These were sized at 30-40 ct. per pound with 35% humidity and pre-packed in 3 kg plastic punnets. Wholesalers claimed that they buy such products for 3-3.5 €/kg from the importers.

We didn't observe dried plums in the supermarkets. The dried plums that were seen at a green market were priced 9 €/kg for high quality pitted French dried plums.

3.7.3. Specific product requirements for dried plums

Quality and packaging requirements

Most of dried plums sold in Germany are pitted. The most common size is 30-40 (dried plums per pound) and the humidity must be high (30-35%).

Dried plums are shipped into Germany in standard 10 kg box (see picture 28) with the product being wrapped in plastic film. Importers or wholesalers usually pre-pack dried plums in 1 kg plastic punnets or plastic bags as shown in the pictures 29-30 if they are targeted to end consumers.

Picture 28. Dried plums from Chile, carton box of 10 kg



Picture 29. Dried plums pre-packed in 1 kg plastic punnet



Picture 30. Dried plums pre-packed in 1 kg plastic sack



Trends

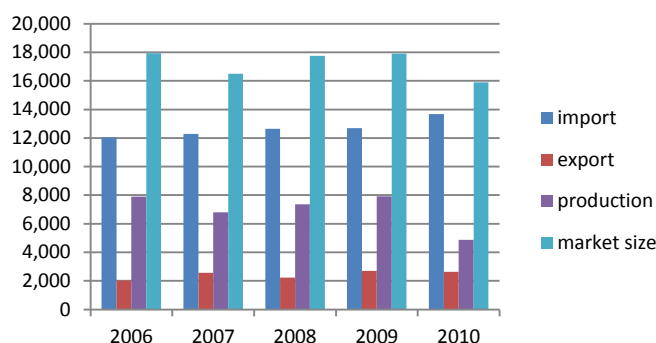
The dried plum market in Germany seems to be stable and dominated by the U.S. and South American suppliers. Moldovan suppliers have a chance to be present in this market if they can compete on price with Chile and Argentina. Most of the product is pitted but there are some buyers for dried whole plums with pits. The target clients should be big importers who can take full load quantities as medium and small wholesalers prefer partials as full truck loads many times is simply too much product.

3.8. SHELLED WALNUTS

3.7.1. Characteristics of the walnut market

Germany has its own walnut production but well over half of their market is supplied by imports as shown in the figure below. For the period 2006 through 2010 the size of the shelled walnut market fluctuated from 15.9 to 16.5 thousand tons per year with no significant trend. The exports ranged from 2 – 2.7 thousand tons per year and production fluctuated from 4.9 to 7.9 thousand tons. Imports increased slightly with an average annual growth rate of around 3%, ranging from 12-13.5 thousand tons.

Figure 25. External trade and market size dynamics of shelled walnuts in Germany, tons.



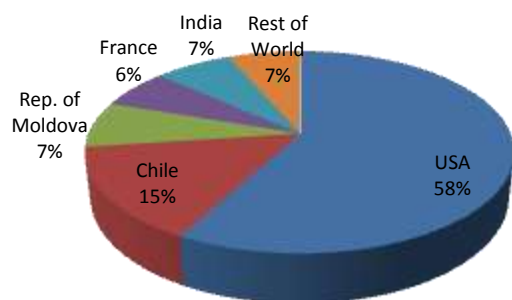
Source: based on UN COMTRADE database, FAOSTAT database and ACED estimations

3.7.2. Competition and prices

Competition

The U.S.A. is the biggest walnut supplier to the German market with a market share of 58% of all walnuts imported in 2010. It is followed by Chile with a market share of 15% and other important suppliers are Moldova, India and France each having a share of 6-7% of walnut imports.

Figure 26. Market shares of shelled walnuts supply countries in Germany in 2010

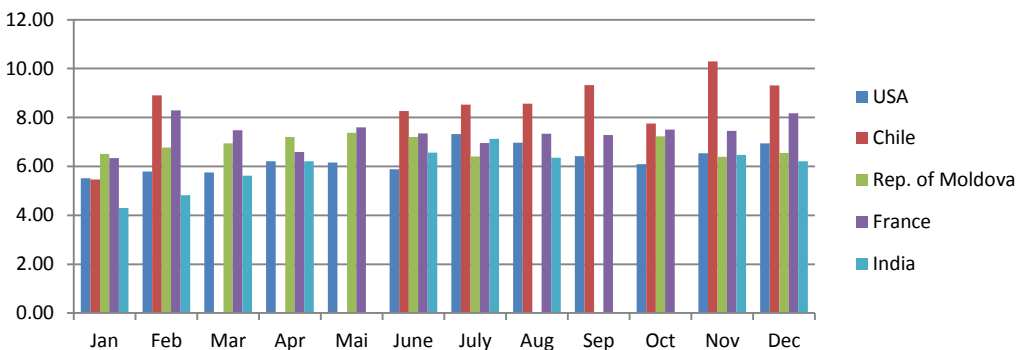


Source: UN COMTRADE database

Price competitiveness of Moldovan shelled walnuts

Imports of shelled walnuts to Germany have certain seasonality. Most walnuts are supplied from December through May with volumes falling off from August-October. The seasonality factor pertaining to the average monthly import prices was not observed.

Figure 27. Average monthly price per country of import fluctuation for shelled walnuts in Germany in 2011, euro/kg



Source: Based on EUROSTAT data

The U.S.A. being the leading walnut supplier to the market sets the competitive reference price point for the rest of the suppliers. The average import price of the U.S. walnut kernels was 5.50 -7.30 €/kg with the highest price being in the low import season (August-September) and in November/December. Chilean walnuts on average were priced 30% more expensive than the U.S. ones. The Moldovan and French walnuts were priced on average 10-15% more expensive than the U.S. walnuts. The only important supplier who shipped less expensive walnuts than U.S. walnuts was India with its price being approximately 5% lower.

There is no MEP for Moldovan walnuts exported into the EU. We can affirm that Moldovan walnuts have their distinct market share in Germany and can successfully compete.

During the market visit (mid-February 2012) the price for pre-packed shelled walnuts from German importers was 8-10 €/kg excl. VAT depending on quality. For pre-packed light walnut halves from Chile, U.S.A. and Romania the wholesalers price ranged from 15.00 - 17.90 €/kg.

3.7.3. Specific product requirements for shelled walnuts

Quality and packaging requirements

Walnuts of different quality are accepted by the market players although the general preference is to have the higher quality even if the price is higher. The best items for the German market are the light and extra-light big halves that have the strongest customer following.

Exporters mainly ship walnuts in 10 kg (or sometimes 12 kg) carton boxes with the product being wrapped in plastic sacks or two 5 kg vacuum packages (see pictures 32-33).

Walnuts in shell are also present on the market being packed in 1-5 kg plastic sacks, as shown on the picture 31.

Picture 31. French walnuts in shells,5 kg plastic sack



Picture 32. Shelled walnuts in 10 kg carton box with plastic sack



Picture 33. Shelled walnuts in 5 kg carton box with vacuum package



Walnut kernels for industrial use are sold further in the original exporter's boxes. The ones intended for end consumers are pre-packed in 1-2 kg plastic bags or punnets (see pictures 35-36), or 3 kg carton boxes (picture 34). Pre-packing is usually done by the importers or wholesalers.

Picture 34. Pre-packed walnuts in 3 kg carton box



Picture 35. Pre-packed walnuts in 1 kg plastic sack



Picture 36. Pre-packed walnuts in 1 kg plastic punnet



Trends

The walnut market in Germany seems to be stable with the imported products slowly gaining market share at the expense of local German production. Moldovan walnuts are present and successfully competing in the market. The exporters seeking new buyers in Germany should contact big importers because average and small wholesalers cannot handle full load quantities of walnuts and prefer to buy partials or mixed loads. Although all quality walnuts are accepted in the market the definite trend is for big walnut halves either light or extra light which command a higher price point.

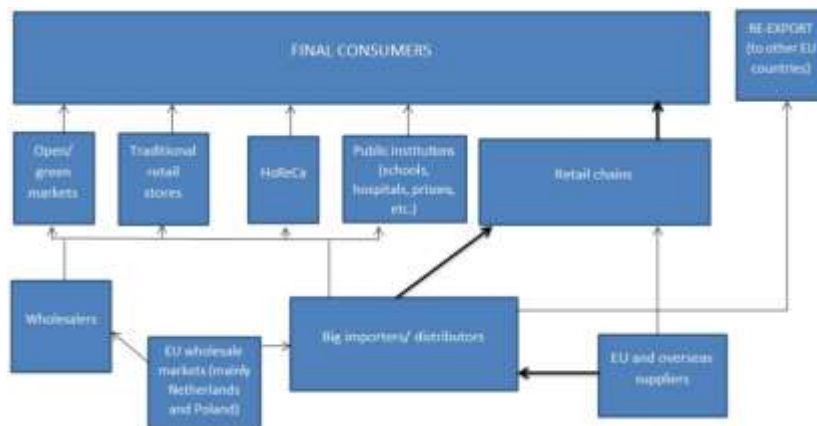
4. DISTRIBUTION CHANNELS

4.1. MARKET STRUCTURE

Distribution channels

The German market is dominated by large retail chains who account for more than 75% of all fruit and vegetable sales. Approximately 20% of the market are the smaller grocery shops and green markets with the balance being HoReCa with a cumulative market share of 3-5%. The figure below presents the flow of fresh produce through the main distribution channels in Germany.

Figure 28. Distribution scheme for imported fresh fruits and vegetables in Germany



As we see from Figure 28, the main channel for imported fruits are the big importers/distributors who supply product directly to the retail chains. Green markets, individual shops and HoReCa are mostly supplied by average size wholesalers who are very active in the 18 wholesale markets situated in various strategic locations throughout Germany. Generally the wholesale distribution channel is in decline as individual shops which are their main clients are under relentless pressure from the larger retail chains that are supplied by the big importers/distributors.

Modern retail

The four biggest retail groups in Germany are Edeka, Schwartz-Gruppe (Lidl and Kaufland) Rewe and Aldi. Discount store retail formats are the most popular among all retail chain formats in Germany and accounts for almost half of all sales of fruits and vegetables. The biggest retail chain discounter is Aldi, followed by Edeka and Lidl. Discount store formats are characterized by reduced assortment approximating 50 fresh fruit and vegetable items, simpler store design and packaging and very competitive prices. During the meetings with market operators they mentioned that the produce assortment in Aldi can many times be a strong indicator of what German consumers prefer to buy.

In Germany the only true hypermarket is Kaufland that along with traditional supermarkets and Cash & Carry formats collectively account for about 50% of what is sold.

Wholesalers

Around 20% of all fresh fruits and vegetables are sold via wholesalers that are situated in big wholesale markets throughout Germany. This distribution channel is under strong pressure and in decline due to the increasing dominance of retailers who are securing their produce from large importers or sometimes buying direct from source. These wholesale markets still have a distinct presence because they are very convenient and practical for small individual shops, HoReCa and green markets due to the smaller quantities that can be secured on an “as needed” basis. Retail chains will occasionally purchase product from these wholesalers but usually in small volumes to fill in their “shorts” until they receive their next regular order.

Wholesalers usually do not import full truckloads preferring mixed loads that they purchase from big wholesale markets of producing countries like Perpignon in France, which specializes in Spanish products, or Verona in Italy. The second option is when wholesalers mix a load directly from several fruit producers from a certain region. This enables the wholesaler to manage different volumes easier and helps reduce spoilage by not being forced to buy more than what is needed of any one item.

Picture 37. Munich wholesale market



Wholesale markets usually follow the supermarkets lead in determining its assortment of products . The general market operators consensus is that the wholesale market as stated is in definite decline.

Traditional green markets

Traditional green markets, with their small market share play mostly the role of a place for socializing rather than of an important distribution channel. Green markets are not price sensitive compared to retail chains and certainly discounters and consumers can find a broad range of premium quality products with the price being an amazing 2-5 times higher than in supermarkets. Traders working within the green markets usually practice a mark-up on 100% or higher because of the high spoilage, low volumes sold, and the imminent need to keep shelves full with an attractive display.

Picture 38. Green market in Munich



4.2. PRICE FORMATION

For the bigger importers when working on longer term supply programs with producers the margins can be very tight within a 2-8% range. This is the situation when product is sold “on paper” not physically passing through the importer’s depot commonly called “bill to ship to” with different addresses and is nothing more than a handling of paperwork. If product physically passes through the importer’s depot the gross margin can reach 8-10%. When product has quality problems and has to be sorted and re-packed or when product is imported without being pre-ordered by a retail chain the margins are greater and approximate 12-20%. Different options of working with suppliers exist including a fixed commission per box.

Depending on the particular retail chain marketing costs may vary in the range of 0-15%. When this exists importers simply build these costs into their price model and work with a gross margin of around 20% or higher.

Many importers claimed that due to the very competitive nature of the market they have to work with very low margins minimizing their profitability.

The wholesalers margins can vary from 5 to 20% but usually are within the range of 10-15%. With some specialty items the margins can be considerable higher.

Discount retail chains usually have mark-ups of 15-25%. Supermarket chains establish their prices based on discounters’ prices and their mark-ups are usually 25 percentage points higher in the range of 40-50% although reaching 70-80% for certain items. In order to attract consumers and build traffic flow supermarket chains often practice in-store promotions where their mark-ups can be as low as 0% and sometimes even sell below cost even though this practice is forbidden by law.

Small individual shops and traders from the green market usually practice mark-ups of 100% due to big losses (spoilage) and the small volumes sold.

V.A.T. for most of agricultural products in Germany including fresh fruits and vegetables is 7%.

Table 2. Eventual price formation for Moldovan table grapes delivered to Germany

	Producer	Transport	Importer	Retail chain (discounter)	VAT (7%)
Price breakdown, euro/kg	1.00	0.18	0.24	0.36	0.12
Price ladder, euro/kg	1.00	1.18	1.42	1.78	1.90

Moldovan fresh produce is currently not sold in Germany. In table 2 we have presented a hypothetical price breakdown for Moldovan table grapes if they were to be delivered to Germany. This table shows that in order to quantify and determine their price competitiveness Moldovan producers would have to establish an ex-works price for their table grapes at a price that would be approximately half the sales price found within the discount format.

5. REQUIREMENTS AFFECTING SUPPLIERS

Safety and certification requirements

German retail chains are extremely concerned regarding the safety of all products they sell. Their corporate rules require that products have MRLs of pesticides much lower than the legally permitted MRL in the EU and sometimes being as low as 30% of the EU norms.

When retail chains find MRLs' exceeding the EU permitted norms they stop buying produce from that producer immediately and the commercial relationship is lost for a very long time, perhaps forever. If the MRLs are lower than the EU permitted level but higher than the chain's own standards, retail chains impose a penalty that the supplier has to pay and exclude them from their list of suppliers for that product for a certain period of time that could be several months.

There is a 4 step process that is taken for safety control of all produce:

1. Producers have to test MRLs while receiving the sanitary certification in the country of origin.
2. Supermarkets demand that importers verify each product/each batch in laboratories.
3. Supermarkets periodically (can be once per month) verify products from each supplier.
4. Controlling authorities periodically take samples from wholesale markets or supermarkets. One company mentioned that when controlling authorities take samples from them, the company does a parallel analysis of the same product in order to have the information on its safety prior to the official results and possible sanctions that will follow.

It is well understood that German market operators only trust their national certification bodies. Therefore the laboratories in other countries even within the EU (Italy, Spain, Greece) should be accredited by a certified German laboratory. This is a commercial condition and not a legal requirement.

It is absolutely mandatory that all suppliers shipping fresh produce to retail chains in Germany must be GlobalGAP certified. Retail chains also require their private label suppliers to have BRC (or similar) certification. Suppliers shipping pre-packed products in small packaging must comply with the Green Dot system requirements and pay fees for packaging recycling.

With retail chains being the biggest distribution channel for fresh fruits and vegetables in Germany all importers and distributors dealing with these retail chains impose the same safety and certification requirements on their suppliers. These requirements are in essence mandatory for the whole sector.

Quality requirements

The 1st class quality for fresh produce is "assumed" in Germany and therefore can be considered as a "standard quality" level.

The retail chains general quality tolerance is 5% (with absolutely zero tolerance towards MRLs non-compliance).

Retail chains prefer to deal with carton and wooden packaging. Plastic packaging is accepted but with some reservation. Produce that is packed in plastic is mostly shipped from South America. Retail chains

sometimes send assembled returnable plastic boxes to their suppliers (example: pineapples from S. Africa) but this is more in order to show their social responsibility rather than their real willingness to work with such packaging.

Produce needs to be palletized. The generally accepted standard for pallets is the euro-pallet (1.20 X 0.80 m) although the bigger pallets (1.20 X 1.00 m) sometimes can be accepted. All pallets should be certified and stamped according to the existing international rules.

The required shelf life at room temperature for produce leaving the retail chain's depot is four days for highly perishable products such as peaches, table grapes and plums.

Working patterns

For most of their fresh produce needs retail chains buy from big importers. Retail chains don't like to deal with the initial development of direct imports and all the associated "start up" work. Once a channel is established through importers and sales have been verified to be good at store level they sometimes start looking to import directly. For core products retail chains take into consideration what a producer really is representing to them in the long term. When comparing supply offers retail chains analyze not only the price but also the service/reputation of the supplier as they expect that orders be fulfilled with "no surprises" although there may be exceptions. To start a supply program with a supermarket the producer has to be convincing that he/she has the quality and volume required.

Initially when starting imports from a new country a retail chain has 2-3 suppliers of the same product in order to make sure that the volume, quality and price of the product are adequate and competitive.

Some retail chains are more keen to seek direct contacts with foreign producers and still others prefer to work via intermediaries. For example, there is Aldi who usually doesn't source direct and buys from importers and wholesalers. Aldi was characterized by market operators as being very well organized and basically not having its own depots, however managing effectively everyday delivery of fresh produce to its stores. Edeka's approach is quite different as they try to buy direct from producers and when need be sell any excess product that cannot ship to its stores to the free market. Lidl mostly sources direct using its own contacts but also buys from importers/wholesalers when needed. Rewe ships to its stores both products that are sourced directly from producers as well as product that is secured from importers.

Distributors usually provide an offer sheet for the whole assortment of products to the supermarkets once per week. The tentative price can be stipulated in the contract but the real price is decided at the last moment. If the market price is lower than the tentative one the supermarket will oblige the supplier to lower its price according to the market, but if the market price is higher, then the tentative price will actualize and the supermarket will have comparative savings. This is the reason why distributors prefer to sign contracts with supermarkets only indicating the volumes but not the price, which is determined later on.

Supermarkets usually make buying decisions based on the whole offer rather than a separate produce item because there is always a risk that some new supplier will try to offer very low prices for certain

items in order to “buy their way” into the retail chain. With this being the case the lower price is not always a guarantee that a new supplier will win the bid.

Distributors when involved with long term supply programs with producers receive updated prices weekly.

Supermarkets do not want other competitive chains to have exactly the same produce from the same supplier. Brand diversification can help suppliers solve this issue.

Even the big distributors prefer to buy mixed loads from different direct suppliers. Full truck load quantities of one item are only imported when there is a concrete order from a big customer already confirmed. Three days is the maximum time period that importers can afford for product to be delivered to Germany. Generally importers receive orders from their clients (retail chains) four days in advance.

Market operators mentioned that sometimes retail chains can return goods justifying the rejection on inferior quality when in essence it is nothing more than an oversupply situation due to poor demand forecasting

Sometimes distributors do re-pack product if part of the load has some defects but generally prefer not to deal with questionable loads.

Both retail chains and importers/distributors prefer not to get involved with transportation issues leaving them to be handled by the producer.

Importers can work with their suppliers on a per box fixed rate or a fixed percent commission (6% was mentioned by one importer). Importers may ask for additional discounts (2%) if they pay their suppliers quickly.

The general rules of commercial collaboration with retail chains who import directly include the following steps:

1. Producer has to be GlobalGAP certified. This is a minimum requirement although other voluntary quality control and food safety certifications are encouraged and sometimes important.
2. Producer has to send produce samples and make a price offer.
3. Retail chain identifies which specific retail stores can “test” the new products.
4. Producer appears on the “list of suppliers” and starts to deliver produce.

Marketing costs and payments

Retail chains pay fresh produce suppliers within 30-90 days with the most common period being 30-45 days. Importers also pay foreign producers in 30-45 days irrespective of the size of the order.

Normally the cumulative retail chains marketing costs (all bonuses and discounts) do not exceed 10% although sometimes this escalates to 15%. Retro bonuses being a part of marketing costs and legal in Germany can represent up to 2.5% of turnover. In addition retail chains charge suppliers for recycling/destruction of packaging and these discounts range of 0.6-0.8%. All these costs must be taken into consideration and are built into the suppliers’ price. The marketing costs usually depend on the

specific chain but not on a specific product. Distributors have customized price lists for the different retail chains and their price already includes the marketing costs “built in” for that particular chain.

Discount retail chains usually allocate these supplier marketing costs as savings passed on to the end consumer which results in a lower price while supermarket chains normally leave those bonuses for themselves as additional profit. This partially explains the significant difference (approx. 20-25%) in consumer prices between discounters and supermarkets.

6. LEGAL REQUIREMENTS OF IMPORT AND TRADE

6.1. IMPORT REGULATIONS

The fruit export regulations/procedure into the German market follows the same requirements as other EU countries.

Standardization of fruits

In order for producers from other countries to be able to export fruits into Germany their products have to follow strictly the norms established within the European Union. These rules are outlined in the marketing standards of the fruit and vegetable sector, which are specifically developed for each product. These standards cover the following aspects: minimum quality requirements, fruit development, classification, calibration, presentation, labeling and specific tolerances of harmful substances. The EU marketing standards for fresh fruits and vegetables were enforced by the Commission Regulation (EC) No. 1221/2008. The Commission Regulation (EC) No. 543/2011 has since modified those requirements for all but ten products. The products covered by this study that are subject to those Specific Marketing Standards (EC No.543/2011) are apples, table grapes, peaches and tomatoes. The specific Marketing Standards for these products are presented in the Annex 2 of this report

The other fresh fruits and vegetables studied are covered either by General Marketing Standards (Commission Regulation (EC) No. 1221/2008) or by the applicable UNECE standards (sometimes less strict than the EU standard) and the market operators are free to choose which standard to comply with.

The UNECE standards concerning the marketing and commercial quality control of the certain studied products are as follows:

- Plums – No. 1961/ 2011
- Cherries - No. 1962/ 2010
- Prunes/ dried plums - No. 1988/ 2003
- Walnut kernels – No. 1983/ 2001

These UNECE standards are presented in the Annex 3 of this report.

Certification of fruits

In order to import fruits into the European Union, foreign producers have to possess the following certificates:

- Goods circulation certificate EUR.1 (Certificate of origin) – issued by the Customs Service of the Republic of Moldova according to the Regulation on Completing, Authenticating and Issuing Certificates of Origins for Goods Exported from the Republic of Moldova under preferential trade agreements with the European Union (ATP) and by the countries that grant the Republic of Moldova Generalized System of Preferences (GSP). This certificate represents a valid document officially confirming the country of origin for the exported goods. In case the fruits exported do not fall under the ATP they need to be documented with Non-preferential

Certificate of Origin. This document is issued by the Chamber of Commerce and Industry of the Republic of Moldova.

- Certificate of Conformity for exported goods - this document is intended to confirm products compliance with the conditions set by certain standards (eg. GOST or SM). Producers can obtain the Conformity Certificate from one of the certified bodies. It is the only document that confirms the correlation of the product meeting the EU marketing standards which were adopted by the local legislation (regulation #1221) and applied starting in November 2011.
- Phytosanitary Certificate - this document is issued by the Regional State Inspectorate for Plant Protection;
- Hygienic Certificate - The Hygienic Certificate is issued by the Moldovan Ministry of Health based on products being tested by certified laboratories. It quantifies the level of pesticide residuals of the product. The minimum level of residuals adopted by the Moldovan authorities corresponds to those of the EU. It is important to note that environmental issues are a big concern for supermarkets and they are competing among themselves as to who can provide the most natural products. Due to this critical concern, supermarket chains adopt their own tolerance to MRL's and sometimes the MRL they accept can be as low as 30% of the MRL officially allowed in EU.
- CMR - transportation document confirming the existence of a contract between the transportation company and expeditor regarding road shipment services.

Besides the certificates mentioned above in order to perform customs procedures each shipment must be accompanied also by an invoice and contract for export-import. Customs declaration is prepared at the customs office.

Customs duties

On January 21, 2008, the Republic of Moldova concluded a new agreement with EU, under which autonomous trade preferences are provided according to the Regulation nr. 55/2008 of the Council of Europe. According to the agreement all of the studied fruits (fresh apples, table grapes, peaches, plums, tomatoes, sweet cherries, dried plums and walnuts) are exempt from the ad valorem component of import duties. Importantly, the specific component of the customs duty remains intact (anti-dumping mechanism) applied to all fruits and vegetables from non-EU countries if the import price is below certain minimum entry prices (MEP). The minimum entry prices and specific components of customs duties are presented in the Annex 1 of this report.

6.2. INDUSTRY CERTIFICATION

Suppliers to the German market usually have no problems with the national German regulations but the business community requirements although often voluntary, can be a serious barrier to entry into the market. The EU business environment requires producers and traders of fresh fruits to be certified according to several international standards. The main certificates are described below:

- a) GlobalGAP- a voluntary standard that is primarily designed to reassure consumers about how food is produced on the farm. This is intended to minimize detrimental environmental impacts

of farming operations, reduce the use of chemical inputs and insure a responsible approach to worker health and safety as well as animal welfare. GlobalGAP, despite being a voluntary standard, is demanded by supermarket and a producer simply cannot deliver produce to a modern retail buyer in Germany without this certificate. Only small independent shops and green market traders do not require GlobalGAP.

- b) HACCP is a food safety management system based on the principles of hazard analysis and critical control points. Standard food safety HACCP principles are imposed by legislation on all participants in the marketing chain of fresh and dried fruits, specifically the operations of handling, sorting, washing, cold storage, and transport. There are a number of specific critical control points for the entire production process.
- c) Green Dot (Der Grüne Punkt) - is the licensed symbol of a European network of industry-funded systems for recycling consumer goods packaging materials. This voluntary standard requires manufacturers to recover their own packaging. In many instances this is impossible and the manufacturer has to pay a certain fee for packaging recycling and apply the Green Dot symbol on their package if they want to deal with major retailers. The market operators claimed that Green Dot is applicable for small plastic packages (0.5-1.0 kg), so producers usually pack/pre-pack products in bigger packages in order to avoid paying fees.
- d) International Food Standard (IFS) – this is a voluntary standard developed by the German Retail Federation in 2003. It is applied to companies performing food processing, handling of loose products and primary packing activity. The objectives of IFS are:
 - To establish a common standard with uniform evaluation systems;
 - to work with accredited Certification Bodies;
 - to ensure comparability and transparency throughout the entire supply chain;
 - to reduce costs and time for both suppliers and retailers.

Although voluntary, this standard is actively promoted by German retail chains and importers prefer that their long term suppliers have this certification.

- e) QS (Quality Assurance) –this is another voluntary standard for fresh foodstuff that involves all value chain participants from farm to shop. Some supermarket chains (ex. Rewe) prefer their suppliers to have this certification.
- f) BRC Global Standards – the standards developed in 1998 by the British Retail Consortium and it specifies the requirements to be met by an organization related to the production, packaging, storage and distribution of safe food and consumer products. Initially it was a standard developed to evaluate retail chains suppliers of private label products in UK. This then was adopted and became widespread in other EU countries and North America. Retail chains require their long term private label suppliers to comply with and to be certified by BRC standards.

- g) Besides those certificates already mentioned the following certifications are desirable for companies dealing with commercial transactions of fruits and vegetables:
- ISO 9001:2008 (quality)
 - ISO 14001:2004 (environmental)
 - OHSAS 18001:2007 (occupational health and safety).

6.3. PACKAGING AND LABELING REQUIREMENTS

In order to properly commercialize trade in fruits and vegetables, certain packaging and labeling legislation must be adhered to as detailed below:

Homogeneity

The contents of each package must be uniform and contain vegetables or fruits of the same origin, variety, and quality. The visible part of the product package must be representative of the entire contents.

Packaging

Fruit and vegetables must be packed so as to protect them properly. The materials used inside the package must be new, clean and of such quality as to avoid causing any external or internal damage to the product. Use of materials, particularly paper or labels, bearing trade specifications is allowed provided the printing or labeling has been done with non-toxic ink or glue. If fruits and vegetables are wrapped you must use paper thin, dry, new and odorless packaging material. The use of any substance that tends to modify the natural characteristics of the fruit and vegetables especially the taste and smell is prohibited. Packages must be totally free of foreign objects.

Labeling

Each package must be labeled individually and legibly and clearly disclose the following:

- identify the packer and / or dispatcher: name and address or code mark issued or recognized by an official;
- Nature of product (species and variety name on a voluntary basis);
- Product origin (country of origin and any production area whether national, regional or local);

Picture 39. Label of Namibian grapes



Picture 40. Label of Moroccan tomatoes

- Commercial specifications: quality class and if the standard is required size and / or number of fruits in box;
- Official control mark (optional).

For pre-packaged products, information should be provided pertaining to quality standards and net weight.



7. CONCLUSIONS AND RECOMMENDATIONS

7.1. GENERAL CONSLUSIONS

The carried on study can conclude on the following:

- Germany is the biggest European importer and the biggest EU market for fresh fruits and vegetables. This is mostly due to a large population base (82 mil.) and high purchasing power rather than per capita consumption which is lower than in many other EU countries.
- Germany is a very price competitive market and most European and many overseas producers attempt to sell their produce there.
- Per capita consumption of fruits and vegetables in Germany is in a slight decline as in other European countries
- Produce safety is a very big concern within all levels of the market. Retail chains adopt their corporate MRL limits for pesticides that are sometimes just 30% of the EU's allowable MRL limits. This is a very stringent control mechanism and is taken very seriously even to the extent of retail safety policy differentiation amongst the retailers themselves that is conveyed to the public.
- German corporate buyers require their suppliers to have many certifications. The minimum requirement is to be GlobalGAP certified although some other certifications like BRC, HACCP, IFS, QS and others are also often required.
- Consumers are used to and demand that standard produce looks good. The specific produce treatment applied by producers in order to get "that look" (rich color, bigger size etc.) often detracts from the products taste as cosmetic appearance still being considered more important than taste. German importers are not looking for new suppliers unless one can offer something distinctly different or of great value that cannot be overlooked. Producers must provide a serious reason for supply base change short/long term.
- German consumers are conservative with very strong regional preferences. These regional preferences many times are more important than price and limit offerings from other parts of the world for like product.
- Minimum Entry Price in most instances is not a barrier for Moldovan products as average import prices are usually higher than MEP.
- A new supplier entering the German market would definitely require a long term strategy to build their reputation/brand which would imply substantial marketing costs.

- At present Moldovan products have very little opportunity to penetrate the German market due to the following reasons:
 - Apples and tomatoes – Both of these products are grown in Germany during the same period as in Moldova. The market is currently oversaturated and certainly does not need additional suppliers with “like” product.
 - Table grapes – Moldova has comparatively little volumes of white and seedless grapes that are demanded by the market. There is a small opportunity for dark seeded grapes with the Turkish community but a specific marketing plan tailored to this clientele would need to be developed.
 - Sweet cherries – Moldovan sweet cherries are not available in May during the very early “window” before there is intense competition. Big cherries 30 mm commanding the highest price are not available either with proper “cold chain” being a limiting factor.
 - Peaches – Very strong competition from such EU producing countries as Italy and Spain and without proper cold chain management, the quality of Moldovan peaches will break down too quickly and not be accepted in the market.
 - Plums – Moldova produces oval type plums which are also grown in Germany as well as Hungary, Serbia, Romania and other countries and therefore very tough competition driving pricing down. Round shaped plums that are sold at higher prices with less competition are not available in Moldova.
 - Dried plums – although being competitive on quality Moldovan dried plums in recent years have not been competitive on price as compared to the sweeter/softer South American offerings.

- Besides the above mentioned specific reasons, there are also some general reasons why Moldovan fresh produce has little chance of German market entry:
 - Lack of necessary certification – only a few Moldovan producers are GlobalGAP certified. The other required certifications (BRC, IFS etc.) are not even known in Moldova.
 - Lack of quality control – few Moldovan producers sort and grade within the specified quality tolerance accepted by the German retail chains and have low level of cold chain management.
 - Difficult to comply with the “brutally stringent” MRL’s for pesticides set by German retail chains.
 - There are limited possibilities to ship mixed loads, which are important for some items.
 - German importers need to pay VAT immediately when the imports arrive from outside the EU, which is not the case with shipments coming from EU.

- The only Moldovan product (as studied) that is competitive both on quality and price are shelled walnuts. No additional actions are required for this product.

7.2. RECOMMENDATIONS

The current state of the Moldovan fresh fruit and vegetable sector generally does not measure up to the requirements demanded by the German market excluding walnuts and dried plums. Due to the variance between what Moldovan producers can offer and what the German market demands entering the market should be a long term objective and would not be realistic for the most part in the immediate future. The process of upgrading Moldovan product is indeed ongoing and making definite advances as the long term goal of shipping to this demanding market needs to continue. The German market is a place to benchmark product competitiveness within Europe and producers that succeed to enter this market will be able to sell their produce everywhere in Europe.

The set of recommendations provided in this report mainly concern longer term activities to upgrade Moldovan products rather than a list of specific actions that may lead to immediate success.

Types and varieties of product

The varieties of apples peaches and tomatoes grown in Moldova are generally well accepted in Germany and no radical varietal changes are required for these specific items. For tomatoes specific analysis should be conducted for specialty tomatoes such as vine ripe and perhaps cherry tomatoes to explore niche opportunities.

For table grapes, the long term perspective should be to further analyze the possibility of planting white seedless varieties as well as red varieties where the shift in demand has taken place. In the short term, continue to explore the niche Turkish market in Germany, who can still enjoy the dark seeded Moldovan variety.

Regarding sweet cherries, Moldovan producers should investigate the possibility to plant early varieties (available in May) and take advantage of this “window of opportunity”. In addition if possible harvest bigger size berries with a minimum of 26mm and ideally 28-30 mm as bigger is perceived better. Dark, sweet, meaty varieties such as Napoleon should be further investigated as size, darkness, sweetness and consistency are the important characteristics.

Moldovan producers should analyze the possibility of growing other “round shaped” varieties of plums (ie:Black Diamond or Black Amber) that command a higher price in the market. Ideally this would be other varieties not grown in Germany shying away from the fierce competition as with oval plums (Stanley and Chachak) that are grown in Germany and other neighboring countries.

Safety issues and certification

Minimum certification requirement for the German market GlobalGap must be secured by all those who want to ship to Germany and generally within EU. Produce safety must be fully ensured and stringent MRL’s must be adhered to at. Samples of products should be sent for analysis to German labs to negate possible rejection upon arrival. This additional cost must be recognized as a cost of doing business in Germany.

Cold chain management

Proper cold chain management is imperative from harvest to arrival at buyer's depot for Moldovan table grapes, peaches, sweet cherries and plums for any possible entry into the German market. Minimum shelf life as specified for market entry will then be met.

Competitive price

Price analysis must be carefully done as to the merits of shipping into Germany comparative to other markets such as Russia. Although price is not the most important factor influencing German consumption it is extremely important based on the German view of "value" specifically affecting new supply countries trying to penetrate this competitive market.

Consolidated marketing effort

Establish a long-term marketing effort based on continuous supply of fresh produce with good arrivals that consistently meet minimum quality and safety requirements. Should be a joint effort (growers associations, exporters' associations and possibly the Moldovan Government) to properly combat other supply countries who have built their reputation over the years with solid performance with quality deliveries.

Terms of payment

With full understanding of payment terms of 30-45 days and all minimum requirements as mentioned initial shipments should be targeted to Munich which is the biggest over the road hub for Germany. This will create the best channel for both German importers to retail chains as well as entry into the biggest wholesale market for HoReCa and smaller independents.

ANNEXES

ANNEX 1. EU CUSTOMS DUTIES FOR MOLDOVAN FRESH FRUITS

FRESH APPLES (HS Code: 0808108090)

(01-07-2012 - 15-07-2012)

V1	If the declared entry price is equal to or greater than 45.70 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 44.80 EUR / 100 kg	Apply a duty of 0 % + 0.90 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 43.90 EUR / 100 kg	Apply a duty of 0 % + 1.80 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 43.00 EUR / 100 kg	Apply a duty of 0 % + 2.70 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 42.00 EUR / 100 kg	Apply a duty of 0 % + 3.70 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 41.10 EUR / 100 kg	Apply a duty of 0 % + 4.60 EUR / 100 kg
V7	If the declared entry price is equal to or greater than 40.20 EUR / 100 kg	Apply a duty of 0 % + 5.50 EUR / 100 kg
V8	If the declared entry price is equal to or greater than 39.30 EUR / 100 kg	Apply a duty of 0 % + 6.40 EUR / 100 kg
V9	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 23.80 EUR / 100 kg

01-09-2012 - 31-12-2012

V1	If the declared entry price is equal to or greater than 45.70 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 44.80 EUR / 100 kg	Apply a duty of 0 % + 0.90 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 43.90 EUR / 100 kg	Apply a duty of 0 % + 1.80 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 43.00 EUR / 100 kg	Apply a duty of 0 % + 2.70 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 42.00 EUR / 100 kg	Apply a duty of 0 % + 3.70 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 23.80 EUR / 100 kg

FRESH PEACHES (HS Code: 0809309000)

Tariff preference (01-01-2012 - 10-06-2012) : **0 %**

(21-06-2012 - 31-07-2012)

V1	If the declared entry price is equal to or greater than 77.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 76.00 EUR / 100 kg	Apply a duty of 0 % + 1.60 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 74.50 EUR / 100 kg	Apply a duty of 0 % + 3.10 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 72.90 EUR / 100 kg	Apply a duty of 0 % + 4.70 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 71.40 EUR / 100 kg	Apply a duty of 0 % + 6.20 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 13.00 EUR / 100 kg

(01-08-2012 - 30-09-2012)

V1	If the declared entry price is equal to or greater than 60.00 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 58.80 EUR / 100 kg	Apply a duty of 0 % + 1.20 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 57.60 EUR / 100 kg	Apply a duty of 0 % + 2.40 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 56.40 EUR / 100 kg	Apply a duty of 0 % + 3.60 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 55.20 EUR / 100 kg	Apply a duty of 0 % + 4.80 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 13.00 EUR / 100 kg

Tariff preference (01-10-2012 - 31-12-2012) : **0 %**

FRESH TABLE GRAPES (HS Code: 080610)

Tariff preference (01-01-2012 - 20-07-2012) : 0 %

(21-07-2012 – 31.10.2012)

V1	If the declared entry price is equal to or greater than 54.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 53.50 EUR / 100 kg	Apply a duty of 0 % + 1.10 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 52.40 EUR / 100 kg	Apply a duty of 0 % + 2.20 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 51.30 EUR / 100 kg	Apply a duty of 0 % + 3.30 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 50.20 EUR / 100 kg	Apply a duty of 0 % + 4.40 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 9.60 EUR / 100 kg

(01-11-2012 - 20-11-2012)

V1	If the declared entry price is equal to or greater than 47.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 46.60 EUR / 100 kg	Apply a duty of 0 % + 1.00 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 45.70 EUR / 100 kg	Apply a duty of 0 % + 1.90 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 44.70 EUR / 100 kg	Apply a duty of 0 % + 2.90 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 43.80 EUR / 100 kg	Apply a duty of 0 % + 3.80 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 9.60 EUR / 100 kg

Tariff preference (21-11-2012 - 31-12-2012) : **0 %****FRESH PLUMS (HS Code: 0809400500)**

Tariff preference (01-01-2012 - 10-06-2012) : 0%

(11-06-2012 - 30-06-2012)

V1	If the declared entry price is equal to or greater than 69.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 68.20 EUR / 100 kg	Apply a duty of 0 % + 1.40 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 66.80 EUR / 100 kg	Apply a duty of 0 % + 2.80 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 65.40 EUR / 100 kg	Apply a duty of 0 % + 4.20 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 64.00 EUR / 100 kg	Apply a duty of 0 % + 5.60 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 10.30 EUR / 100 kg

(01-07-2012 - 30-09-2012)

V1	If the declared entry price is equal to or greater than 69.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 68.20 EUR / 100 kg	Apply a duty of 0 % + 1.40 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 66.80 EUR / 100 kg	Apply a duty of 0 % + 2.80 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 65.40 EUR / 100 kg	Apply a duty of 0 % + 4.20 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 64.00 EUR / 100 kg	Apply a duty of 0 % + 5.60 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 10.30 EUR / 100 kg

Tariff preference (01-10-2012 - 31-12-2012): 0%

FRESH SWEET CHERRIES (HS Code: 0809290000)

Tariff preference (01-01-2012 - 30-04-2012): 0%

Tariff preference (01-05-2012 - 20-05-2012): 2.4 EUR/ 100kg

(21-05-2012 - 31-05-2012)

V1	If the declared entry price is equal to or greater than 149.40 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 146.40 EUR / 100 kg	Apply a duty of 0 % + 3.00 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 143.40 EUR / 100 kg	Apply a duty of 0 % + 6.00 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 140.40 EUR / 100 kg	Apply a duty of 0 % + 9.00 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 137.40 EUR / 100 kg	Apply a duty of 0 % + 12.00 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 27.40 EUR / 100 kg

(01-06-2012 - 31-07-2012)

V1	If the declared entry price is equal to or greater than 125.40 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 122.90 EUR / 100 kg	Apply a duty of 0 % + 2.50 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 120.40 EUR / 100 kg	Apply a duty of 0 % + 5.00 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 117.90 EUR / 100 kg	Apply a duty of 0 % + 7.50 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 115.40 EUR / 100 kg	Apply a duty of 0 % + 10.00 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 27.40 EUR / 100 kg

(01-08-2012 - 10-08-2012)

V1	If the declared entry price is equal to or greater than 91.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 89.80 EUR / 100 kg	Apply a duty of 0 % + 1.80 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 87.90 EUR / 100 kg	Apply a duty of 0 % + 3.70 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 86.10 EUR / 100 kg	Apply a duty of 0 % + 5.50 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 84.10 EUR / 100 kg	Apply a duty of 0 % + 7.30 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 27.40 EUR / 100 kg

Tariff preference (11-08-2012 - 31-12-2012): 0%

FRESH OR CHILLED TOMATOES (HS Code: 0702000099)

(01-01-2012 – 31.03.2012)

V1	If the declared entry price is equal to or greater than 84.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 82.90 EUR / 100 kg	Apply a duty of 0 % + 1.70 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 81.20 EUR / 100 kg	Apply a duty of 0 % + 3.40 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 79.50 EUR / 100 kg	Apply a duty of 0 % + 5.10 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 77.80 EUR / 100 kg	Apply a duty of 0 % + 6.80 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 29.80 EUR / 100 kg

(01-04-2012 – 30.04.2012)

V1	If the declared entry price is equal to or greater than 112.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 110.30 EUR / 100 kg	Apply a duty of 0 % + 2.30 EUR / 100 kg

V3	If the declared entry price is equal to or greater than 108.10 EUR / 100 kg	Apply a duty of 0 % + 4.50 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 105.80 EUR / 100 kg	Apply a duty of 0 % + 6.80 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 103.60 EUR / 100 kg	Apply a duty of 0 % + 9.00 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 29.80 EUR / 100 kg

(01-05-2012 – 31.05.2012)

V1	If the declared entry price is equal to or greater than 72.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 71.10 EUR / 100 kg	Apply a duty of 0 % + 1.50 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 69.70 EUR / 100 kg	Apply a duty of 0 % + 2.90 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 68.20 EUR / 100 kg	Apply a duty of 0 % + 4.40 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 66.80 EUR / 100 kg	Apply a duty of 0 % + 5.80 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 29.80 EUR / 100 kg

(01-06-2012 – 30.09.2012)

V1	If the declared entry price is equal to or greater than 52.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 51.50 EUR / 100 kg	Apply a duty of 0 % + 1.10 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 50.50 EUR / 100 kg	Apply a duty of 0 % + 2.10 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 49.40 EUR / 100 kg	Apply a duty of 0 % + 3.20 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 48.40 EUR / 100 kg	Apply a duty of 0 % + 4.20 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 29.80 EUR / 100 kg

(01-10-2012 – 20.12.2012)

V1	If the declared entry price is equal to or greater than 62.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 61.30 EUR / 100 kg	Apply a duty of 0 % + 1.30 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 60.10 EUR / 100 kg	Apply a duty of 0 % + 2.50 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 58.80 EUR / 100 kg	Apply a duty of 0 % + 3.80 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 57.60 EUR / 100 kg	Apply a duty of 0 % + 5.00 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 29.80 EUR / 100 kg

(21-12-2012 – 31.12.2012)

V1	If the declared entry price is equal to or greater than 67.60 EUR / 100 kg	Apply a duty of 0 %
V2	If the declared entry price is equal to or greater than 66.20 EUR / 100 kg	Apply a duty of 0 % + 1.40 EUR / 100 kg
V3	If the declared entry price is equal to or greater than 64.90 EUR / 100 kg	Apply a duty of 0 % + 2.70 EUR / 100 kg
V4	If the declared entry price is equal to or greater than 63.50 EUR / 100 kg	Apply a duty of 0 % + 4.10 EUR / 100 kg
V5	If the declared entry price is equal to or greater than 62.20 EUR / 100 kg	Apply a duty of 0 % + 5.40 EUR / 100 kg
V6	If the declared entry price is equal to or greater than 0 EUR / 100 kg	Apply a duty of 0 % + 29.80 EUR / 100 kg

ANNEX 2. EU MARKETING STANDARDS FOR APPLES, PEACHES, TABLE GRAPES AND TOMATOES

MARKETING STANDARD FOR APPLES

I. DEFINITION OF PRODUCE

This standard applies to apples of varieties (cultivars) grown from *Malus domestica* Borkh. To be supplied fresh to the consumer, apples for industrial processing being excluded.

II. PROVISIONS CONCERNING QUALITY

Purpose of the standard is to define quality requirements that must provide apples after preparation and packaging.

A. Minimum requirements

In all classes, subject to special provisions for each class and the tolerances allowed, the apples must be:

- Whole
- Sound, produce affected by rotting or altered so that it unfit for consumption;
- Clean, without any visible foreign matter,
- Free from pests
- Free from damage caused by pests affecting the flesh,
- No serious forms of vitescence except Fuji variety and its mutations,
- Free of abnormal external moisture,
- Odor and / or taste.

Developing and apples should allow state:

- To withstand transport and handling and
- To arrive in satisfactory condition at destination.

B. Maturity requirements

Apples must be sufficiently developed to provide a satisfactory degree of ripeness.

Development of apples and their stage of maturity to enable them to continue baking process and achieve ripeness required in relation to the varietal characteristics.

To verify the minimum maturity requirements, may be taken into account more parameters (eg, morphological appearance, taste, firmness and refractive index).

C. Classification

Apples are classified in three classes defined below:

(I) "Extra"

Apples in this class must be of superior quality. Must be characteristic of the variety [2], and the stalk must be intact.

Apples must provide the following minimum surface color characteristic of the variety:

- Three quarters of the total red color for group A,

- Half of the total red color mixed for group B
- 1 / 3 of the total area of slightly red color, red or black ribbed for group C.

The flesh must be perfectly healthy.

Apples should be free from defects with the exception of very slight superficial defects, provided these do not affect the general appearance of products, quality, maintenance and their presentation in the package:

- Very slight skin defects,
- Very slight roughness [3], for example:
- Brown spots not exceeding the stem cavity and can not be harsh and / or
- Slight traces and isolated roughness.

(li) Class I

Apples in this class must be of good quality. Must be characteristic of the variety [4].

Apples must provide the following minimum surface color characteristic of the variety:

- Half of the total red color for group A,
- One third of the total red color mixed for group B
- 1 / 10 of total area of slightly red color, red or black ribbed for group C.

The flesh must be perfectly healthy.

However, following slight defects may be allowed, provided these do not affect the general appearance of products, quality, maintenance and their presentation in the package:

- A slight defect in shape,
- A slight defect in development
- A slight defect in coloring,
- Slight dents whose total area does not exceed 1 cm², without fading,
- Slight skin defects not exceeding:
 - 2 cm long, oblong-shaped defects,
 - 1 cm² in total area for other defects, except rapanui (*Venturia inaequalis*), which, overall, should not affect a larger area of 0.25 cm²
- Slight roughness [5], for example:
 - Brown spots that can exceed the stem cavity or cavities than blossom, but can be severe and / or
 - Roughness thin hairs not exceeding one fifth of the total fruit and not color contrast with general fruit and / or
 - Dense roughness not exceeding one twentieth of the total fruit, together roughness of thin hairs and dense roughness can not exceed a maximum of one fifth of the total fruit.

Stalk may be missing, provided that section adjacent skin is clean and not damaged.

(lii) Class II

This class includes apples which do not fall in the higher classes but satisfy the minimum requirements specified above.

The pulp must not have major defects.

The following defects may be allowed, provided that the apples retain their essential characteristics of quality, preservation and presentation:

- Defects in shape,
- Defects in development
- Defects in coloring,
- Slight dents not exceed 1.5 cm² surface area, which may be slightly discolored skin,
- Skin defects not exceeding:
 - 4 cm long, oblong-shaped defects,
 - 2.5 cm² in total area for other defects, except rapanui (*Venturia inaequalis*), which, overall, should not affect an area greater than 1 cm²;
- Slight roughness [6], for example:
 - Brown spots that can exceed the stem cavity or cavities and are slightly rough blossom and / or
 - Roughness thin hairs not exceeding half of the total fruit and not color contrast with general fruit and / or
 - Dense roughness not exceeding one third of the total fruit;
 - Together roughness of thin hairs and dense roughness cannot exceed more than half of the total fruit.

III. PROVISIONS CONCERNING SIZING

Size is determined either by the maximum diameter of the equatorial section or by weight.

Minimum size is 60 mm, if one takes into account the diameter, or 90 g if weight is taken into account. You can accept smaller fruit sizes, if the Brix of the products is equal to or greater than 10.5 ° Brix and the size is at least 50 mm or 70 g.

To ensure homogeneity of the size, size differences between the products of the same package must not exceed:

(A) for fruit sized according to diameter:

- 5 mm fruit of 'Extra' Class and Classes I and II fruit packed in rows and layers. However, for Bramley's Seedling apple varieties (Bramley, Triomphe of Kiel) and Horneburger, the difference in diameter can be up to 10 mm
- 10 mm for Class I fruit packed loose in the container or packaging for sale. However, for Bramley's Seedling apple varieties (Bramley, Triomphe of Kiel) and Horneburger, the difference in diameter can be up to 20 mm or

(B) for fruit sized according to weight:

- For apples in the "Extra" Class and Class I and II packed in rows and layers:

Interval (g) | difference in weight (g) |

70-90 | 15 g |

91-135 | 20 g |

136-200 | 30 g |

201-300 | 40 g |

> 300 | 50 g |

- For Class I apples in bulk packaging or in packaging for sale.

Interval (g) | Uniformity (g) |

70-135 | 35 |

136-300 | 70 |

> 300 | 100 |

There is no sizing uniformity requirement for Class II fruit packed loose in the container or packaging for sale.

IV. PROVISIONS CONCERNING TOLERANCES

In all stages of marketing, the tolerance on the quality and size for each lot for produce not satisfying the requirements of the class indicated.

A. Quality tolerances

(i) "Extra"

It allows a total of 5 percent of the apples (by number or weight) do not meet the class, but meet those of Class I. Within this tolerance, up 0.5 percent in total can be produced which meet the quality requirements of Class II.

(ii) Class I

It allows a total of 10 percent of the apples (by number or weight) may not meet the class, but meet those of Class II. Within this tolerance, not more than 1 percent in total can be produced that do not meet any quality requirements of Class II nor the minimum requirements, or altered products.

(iii) Class II

It allows a total of 10 percent of the apples (by number or weight) to do nothing requirements of the class nor the minimum requirements. Within this tolerance, the total proportion of altered products can not exceed 2%.

B. Calibration Tolerances

For all classes: it allows a total of 10% of the apples (by number or weight) do not meet size requirements. This tolerance can be extended to include products with a size of:

- 5 mm or more below the minimum diameter

- 10 g or more below the minimum weight.

V. PROVISIONS CONCERNING PRESENTATION

A. Uniformity

Each package must contain uniform and contain only apples of the same origin, variety, quality and size (if sized) and the same degree of ripeness.

Also, if the category 'Extra' uniformity in terms of color.

However, it can be packed together in a package selling a mixture of apples of different varieties, provided they have a homogeneous quality and, for each variety, the same origin.

The visible part of the contents of the package must be representative of the entire content.

B. Packaging

Apples must be packed so as to ensure adequate protection of products. In particular, sales packaging with a net weight over 3 kg should be sufficiently rigid to protect the produce properly.

The materials used inside the package must be clean and quality so as to avoid causing any external or internal damage products. Use of materials, particularly paper or stamps bearing trade specifications is allowed provided the printing or labeling has been done with non-toxic ink or glue.

Stickers individually affixed on product shall be removed without leaving visible traces of glue and without causing skin defects.

Packages must not contain foreign materials.

VI. PROVISIONS CONCERNING MARKING

Each package must bear the following particulars in letters grouped on the same side, the marking is legible, indelible and visible from the outside.

A. Identification

Name and address of the packer and / or the dispatcher.

The name may be replaced:

- For all packages, except for pre-packages, the code representing the packer and / or sender, issued or recognized by an official body, indicated with the reference "packer and / or Dispatcher '(or equivalent abbreviations);
- Only if pre-packages, the name and address of a seller established within the Union, indicated with the mention 'Packed for:' or an equivalent mention. In this case, the labeling must also contain a code representing the packer and / or the dispatcher. In connection with the meaning of this code, the vendor shall provide all information deemed necessary by the inspection body.

B. Nature of produce

- "Apples" if the contents are not visible from the outside;
- Denomination. If a mixture of apples of different varieties, the names of these varieties.
- The denomination may be replaced by a synonym. Mutation name or trade name may only be provided in addition to the variety or its synonym.

C. Origin of produce

Country of origin [7] and, optionally, district where grown, or national area, regional or local level.

If a mixture of different varieties of apples of different origins, indicating each of the countries of origin must appear next to the name of the variety concerned.

D. Commercial specifications

- Category
- Size or, for fruit packed in rows and layers, number of units.

If the identification is carried out according to the size it should be indicated:

(A) for products subject to the uniformity rules, the minimum and maximum diameter or minimum and maximum weight;

(B) for products not subject to the uniformity rules, the diameter or weight of fruit in the smallest package, followed by (a) the words "and over" or some equivalent or, where appropriate, the diameter or weight of the most great fruit in the package.

E. Official control mark (optional)

The reference to indications in the first paragraph is not required for packages containing sales packages, clearly visible from the outside, all wearing these indications. These packages must not bear

indications that mislead. When these packages are placed on pallets, these particulars must appear on a card placed visibly at least two sides of the pallet.

MARKETING STANDARD FOR PEACHES AND NECTARINES

I. DEFINITION OF PRODUCE

This standard applies to peaches and nectarines of varieties (cultivars) grown from *Prunus persica* Sieb. and Zucca. to be supplied fresh to consumers, peaches and nectarines for industrial processing being excluded.

II. PROVISIONS CONCERNING QUALITY

Purpose of the standard is to define quality requirements that must peaches and nectarines, after preparation and packaging.

A. Minimum requirements

In all classes, subject to special provisions for each class and the tolerances allowed, peaches and nectarines must be:

- Whole
- Sound, produce affected by rotting or altered so as unfit for consumption
- Clean, without any visible foreign matter,
- Free from pests
- Free from damage caused by pests affecting the flesh,
- Without fruit split in stem cavity,
- Free of abnormal external moisture,
- Odor and / or taste.
- Development and condition of peaches and nectarines should allow:
 - To withstand transport and handling and
 - To arrive in satisfactory condition at destination.

B. Maturity requirements

Fruits should be sufficiently developed to provide a satisfactory degree of ripeness. Refractive index of the pulp minimum must be at least 8 ° Brix.

C. Classification

Peaches and nectarines are classified into three classes defined below:

(I) "Extra"

Peaches and nectarines in this class must be of superior quality. Must be characteristic of the variety. The flesh must be perfectly healthy.

Peaches and nectarines should be free from defects with the exception of very slight superficial defects, provided these do not affect the general appearance of products, quality, preservation and presentation of their packaging.

(li) Class I

Peaches and nectarines in this class must be of good quality. Must be characteristic of the variety. The flesh must be perfectly healthy.

However, defects may be allowed following slight defects, provided these do not affect the general appearance of products, quality, maintenance and their presentation in the package:

- A slight defect in shape,
- A slight defect in development
- Slight defect in coloring,
- Slight traces of surface area caused by pressure does not exceed 1 cm²,
- Slight skin defects not exceeding:
 - 1.5 cm long, oblong-shaped defects,
 - 1 cm² in total area for other defects.

(lii) Class II

This category includes peaches and nectarines which do not fall in the higher classes but satisfy the minimum requirements specified above.

The pulp must not have major defects. May be allowed following skin defects, provided that peaches and nectarines to retain the essential characteristics of quality, preservation and presentation:

- Defects in shape,
- Developmental defects, including split stones, provided the fruit is closed and the pulp is healthy
- Defects in coloring,
- Dents, whose total area not exceeding 2 cm² skin may be slightly discolored,
- Skin defects not exceeding:
 - 2.5 cm long, shaped defects elongated
 - 2 cm² in total area for other defects.

III. PROVISIONS CONCERNING SIZING

Size is determined either by the maximum diameter of the equatorial section or by weight or by count.

Minimum size is:

- 56 mm or 85 g for 'Extra' class,
- 51 mm or 65 g for groups I and II (if sized).

However, fruits with sizes smaller than 56 mm or 85 g is not sold in the period July 1 to October 31 (Northern hemisphere) and between 1 January and 30 April (in Southern hemisphere).

If Class II, the following provisions are optional:

To ensure homogeneity of the size, size differences between the products of the same package must not exceed:

(A) In the case of fruit sized according to diameter:

- 5 mm for fruit diameter below 70 mm
- 10 mm for 70 mm fruit diameter.

(B) In the case of fruit sized according to weight:

- 30 g for fruit weighing less than 180 g,
- 80 g for fruit weighing over 180 g.

(C) In the case of fruit graded by size, the difference in size must comply with the provisions of paragraph (a) or (b).

Where the calibration code must be respected the table below.

	Code	diameter	weight		
	from	to	from	to	
	(Mm)	(mm)	(g)	(g)	
1	D	51	56	65	85
2	C	56	61	85	105
3	B	61	67	105	135
4	A	67	73	135	180
5	AA	73	80	180	220
6	AAA	80	90	220	300
7	YYYY	> 90	> 300		

IV. PROVISIONS CONCERNING TOLERANCES

In all stages of marketing, the tolerance on the quality and size in each lot for produce not satisfying the requirements of the class indicated.

A. Quality tolerances

(i) "Extra"

It allows a total of 5 percent of the peaches or nectarines (number or weight) do not meet the class, but meet those of Class I. Within this tolerance, up 0.5 percent of total can be Class II products that meet quality requirements.

(ii) Class I

It allows a total of 10 percent of the peaches or nectarines (number or weight) may not meet the class, but meet those of Class II. Within this tolerance, not more than 1 percent in total can be produced that do not meet any quality requirements of Class II nor the minimum requirements, or altered products.

(iii) Class II

It allows a total of 10 percent of the peaches or nectarines (number or weight) to do nothing requirements of the class nor the minimum requirements. Within this tolerance, the total proportion of altered products can not exceed 2%.

B. Calibration Tolerances

For all classes (if sized): it allows a total of 10% of peaches or nectarines (number or weight) do not meet size requirements.

V. PROVISIONS CONCERNING PRESENTATION

A. Uniformity

Each package must contain uniform and contain only peaches or nectarines of the same origin, variety, quality, ripeness and size (if sized) and for category 'Extra' content must also be , homogeneous in terms of color.

The visible part of the contents of the package must be representative of the entire content.

B. Packaging

Peaches and nectarines must be packed so as to ensure adequate protection of products.

The materials used inside the package must be clean and high quality to avoid causing any external or internal damage products. Use of materials, particularly paper or stamps bearing trade specifications is allowed provided the printing or labeling has been done with non-toxic ink or glue.

Stickers individually affixed on product shall be removed without leaving visible traces of glue and without causing skin defects. Packages must not contain foreign materials.

VI. PROVISIONS CONCERNING MARKING

Each package must bear the following particulars in letters grouped on the same side, the marking is legible, indelible and visible from the outside:

A. Identification

Name and address of the packer and / or the dispatcher.

The name may be replaced:

- For all packages, except for pre-packages, the code representing the packer and / or sender, issued or recognized by an official body, indicated with the reference "packer and / or Dispatcher '(or equivalent abbreviations);
- Only if pre-packages, the name and address of a seller established within the Union, indicated with the mention 'Packed for:' or an equivalent mention. In this case, the labeling must also contain a code representing the packer and / or the dispatcher. In connection with the meaning of this code, the vendor shall provide all information deemed necessary by the inspection body.

B. Nature of produce

- "Peaches" or "Nectarines" if the contents are not visible from the outside.
- Color of flesh.
- Name of variety (optional).

C. Origin of produce

Country of origin [16] and, optionally, district where grown, or national area, regional or local level.

D. Commercial specifications

- Category.
- Size (for calibration), expressed by minimum and maximum diameter (in mm) by minimum and maximum weight (g) or code size.
- Number of units (optional)

E. Official control mark (optional)

The reference to indications in the first paragraph is not required for packages containing sales packages, clearly visible from the outside, all wearing these indications. These packages must not bear indications that mislead. When these packages are placed on pallets, these particulars must appear on a card placed visibly at least two sides of the pallet.

MARKETING STANDARD FOR TABLE GRAPES

I. DEFINITION OF PRODUCE

This standard applies to table grapes of varieties (cultivars) grown from *Vitis vinifera* L. to be supplied fresh to consumers, table grapes for industrial processing being excluded.

II. PROVISIONS CONCERNING QUALITY

Purpose of the standard is to define quality requirements that must provide table grapes after preparation and packaging.

A. Minimum requirements

In all classes, subject to special provisions for each class and the tolerances allowed, bunches and berries must be:

- Sound, produce affected by rotting or altered so as unfit for consumption
- Clean, without any visible foreign matter,
- Free from pests
- Free from damage caused by pests,
- Free of abnormal external moisture,
- Odor and / or taste.

Also, the beans must be:

- Whole
- Well formed,
- Normally developed.

Pigmentation due to sun is not a defect.

The development and condition of the table grapes must allow:

- To withstand transport and handling and
- To arrive in satisfactory condition at destination.

B. Maturity requirements

Fruit juice should have a refractive index less than:

- 12 ° Brix in the case of varieties Alphonse Lavallée, Cardinal and Victoria
- 13 ° Brix for all other seeded varieties,
- 14 ° Brix for all seedless varieties.

In addition, all varieties must report sugar / acidity satisfactory.

C. Classification

Table grapes are classified in three classes defined below:

(I) "Extra"

Table grapes in this class must be of superior quality. They must be characteristic variety, given the production area. Berries must be firm, firmly attached, evenly spaced along the stalk and covered with bloom.

The grapes must be free of defects with the exception of very slight superficial defects, provided these do not affect the general appearance of products, quality, preservation and presentation of their packaging.

(ii) Class I

Table grapes in this class must be of good quality. They must be characteristic of the variety, taking into account the production area. Berries must be firm, firmly attached and, if possible, covered with bloom. Distribution of grains per cluster can still be less uniform than in category "Extra."

However, following slight defects may be allowed provided these do not affect the general appearance of products, quality, maintenance and their presentation in the package:

- A slight defect in shape,
- Slight defect in coloring,
- Very mild sunburn, which affects only the epidermis.

(iii) Class II

This class includes table grapes which do not fall in the higher classes but satisfy the minimum requirements specified above.

Bunches may show slight defects in shape, and color development, provided that these do not affect the essential characteristics of the variety, allowing the production area.

Berries must be sufficiently firm and sufficiently firmly attached and, if possible, covered with bloom. Distribution of the cluster may be less uniform than in category I.

The following defects may be allowed, provided the table grapes to retain their essential characteristics of quality, preservation and presentation:

- Defects in shape,
- Defects in coloring,
- Slight sunburn, which affects only the epidermis,
- Slight traces of the impactor,
- Slight skin defects.

III. PROVISIONS CONCERNING SIZING

Size is determined by the weight of the bunch.

Minimum weight of a cluster is 75 g. This does not apply to packages containing single portions.

IV. PROVISIONS CONCERNING TOLERANCES

In all stages of marketing, the tolerance on the quality and size in each lot for produce not satisfying the requirements of the class indicated.

A. Quality tolerances

i) "Extra"

It allows a total of 5 percent of the clusters (in weight) do not meet requirements of the class, but meet those of Class I. Within this tolerance, up 0.5 percent in total can be produced to meet Class II quality.

ii) Class I

It allows a total of 10 percent of the clusters (in weight) do not meet requirements of the class, but meet those of Class II. Within this tolerance, not more than 1 percent in total can be produced that do not meet any quality requirements of Class II nor the minimum requirements, or altered products.

iii) Class II

It allows a total of 10 percent of the clusters (in weight) to do nothing requirements of the class nor the minimum requirements. Within this tolerance, the total proportion of altered products can not exceed 2%.

B. Calibration Tolerances

For all classes: it allows a total of 10% of clusters (in weight) do not meet size requirements. In order to adapt the weight of each sales package may contain a bunch weighing less than 75 g, provided the bunch meets all other requirements of the category specified.

V. PROVISIONS CONCERNING PRESENTATION

A. Uniformity

Each package must contain uniform and contain only bunches of the same origin, variety, quality and degree of ripeness.

When 'Extra' class, the bunches must be approximately homogeneous in terms of size and color.

However, it can be packed together in a container a mixture of grapes of different varieties, provided they have a homogeneous quality and, for each variety, the same origin.

The visible part of the contents of the package must be representative of the entire content.

B. Packaging

Table grapes must be packed so as to ensure adequate protection of products.

The materials used inside the package must be clean and quality so as to avoid causing any external or internal damage products. Use of materials, particularly paper or stamps bearing trade specifications is allowed provided the printing or labeling has been done with non-toxic ink or glue.

Stickers individually affixed on product shall be removed without leaving visible traces of glue and without causing skin defects.

Packages must not contain foreign materials, although a fragment of up to 5 cm long tendril can remain attached to the cluster as a special presentation.

VI. PROVISIONS CONCERNING MARKING

Each package must bear the following particulars in letters grouped on the same side, the marking is legible, indelible and visible from the outside:

A. Identification

Name and address of the packer and / or the dispatcher.

The name may be replaced:

- For all packages, except for pre-packages, the code representing the packer and / or sender, issued or recognized by an official body, indicated with the reference "packer and / or Dispatcher '(or equivalent abbreviations);
- Only if pre-packages, the name and address of a seller established within the Union, indicated with the mention 'Packed for:' or an equivalent mention. In this case, the labeling must also contain a code representing the packer and / or the dispatcher. In connection with the meaning of this code, the vendor shall provide all information deemed necessary by the inspection body.

B. Nature of produce

- "Table grapes" if the contents are not visible from the outside.
- Denomination. If a mixture of grapes from different varieties, the names of these varieties.

C. Origin of produce

- Country of origin and, optionally, district where grown, or national area, regional or local level.
- If a mixture of different varieties of grapes of different origins, indicating each of the countries of origin must appear next to the name of the variety concerned.

D. Commercial specifications

- Category.
- Where appropriate, the words "bunches weighing less than 75 g, representing single portions."

E. Official control mark (optional)

The reference to indications in the first paragraph is not required for packages containing sales packages, clearly visible from the outside, all wearing these indications. These packages must not bear indications that mislead. When these packages are placed on pallets, these particulars must appear on a card placed visibly at least two sides of the pallet.

MARKETING STANDARD FOR TOMATOES

I. DEFINITION OF PRODUCE

This standard applies to tomatoes of varieties (cultivars) grown from *Solanum lycopersicum* L. to be supplied fresh to the consumer, tomatoes for industrial processing being excluded.

Tomatoes may be classified into four commercial types:

- "round",
- "ribbed",
- "oblong" or "elongated",
- "cherry" tomatoes (including "cocktail" tomatoes).

II. PROVISIONS CONCERNING QUALITY

The purpose of the standard is to define the quality requirements for tomatoes, after preparation and packaging.

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, the tomatoes must be:

- intact,
- sound, produce affected by rotting or deterioration such as to make it unfit for consumption is excluded,
- clean, practically free of any visible foreign matter,
- fresh in appearance,
- practically free from pests,
- free from damage caused by pests affecting the flesh,
- free of abnormal external moisture,
- free of any foreign smell and/or taste.

In the case of trusses of tomatoes, the stalks must be fresh, healthy, clean and free from all leaves and any visible foreign matter.

The development and condition of the tomatoes must be such as to enable them:

- to withstand transportation and handling, and
- to arrive in satisfactory condition at the place of destination.

B. Classification

Tomatoes are classified in three classes, as defined below:

(i) "Extra" Class

Tomatoes in this class must be of superior quality. They must be firm and characteristic of the variety and/or commercial type.

Their coloring, according to their state of ripeness, must be such as to satisfy the requirements set out in the third paragraph of point A above.

They must be free from greenbacks and other defects, with the exception of very slight superficial defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

(ii) Class I

Tomatoes in this class must be of good quality. They must be reasonably firm and characteristic of the variety and/or commercial type.

They must be free of cracks and visible greenbacks. The following slight defects, however, may be allowed provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- a slight defect in shape and development,
- slight defects in coloring,
- slight skin defects,
- very slight bruises.

Furthermore, "ribbed" tomatoes may show:

- healed cracks not more than 1 cm long,
- no excessive protuberances,
- small umbilicus, but no suberization,
- suberization of the stigma up to 1 cm²,
- fine blossom scar in elongated form (like a seam), but not longer than two-thirds of the greatest diameter of the fruit.

(iii) Class II

This class includes tomatoes which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified above.

They must be reasonably firm (but may be slightly less firm than in Class I) and must not show unhealed cracks.

The following defects may be allowed provided the tomatoes retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape and development,
- defects in coloring,
- skin defects or bruises, provided the fruit is not seriously affected,
- healed cracks not more than 3 cm in length for round, ribbed or oblong tomatoes.

Furthermore, "ribbed" tomatoes may show:

- more pronounced protuberances than allowed under Class I, but without being misshapen,
- an umbilicus,
- suberization of the stigma up to 2 cm²,
- fine blossom scar in elongated form (like a seam).

III. PROVISIONS CONCERNING SIZING

Size is determined by the maximum diameter of the equatorial section, by weight or by count.

The following provisions shall not apply to trusses of tomatoes and to cherry tomatoes, and are optional for Class II.

To ensure uniformity in size, the range in size between produce in the same package shall not exceed:

(a) For tomatoes sized by diameter:

- 10 mm, if the diameter of the smallest fruit (as indicated on the package) is under 50 mm,

- 15 mm, if the diameter of the smallest fruit (as indicated on the package) is 50 mm and over but under 70 mm,
- 20 mm, if the diameter of the smallest fruit (as indicated on the package) is 70 mm and over but under 100 mm,
- there is no limitation of difference in diameter for fruit equal or over 100 mm.

In case size codes are applied, the codes and ranges in the following table have to be respected: Size Code	Diameter (mm)
0	≤ 20
1	$> 20 \leq 25$
2	$> 25 \leq 30$
3	$> 30 \leq 35$
4	$> 35 \leq 40$
5	$> 40 \leq 47$
6	$> 47 \leq 57$
7	$> 57 \leq 67$
8	$> 67 \leq 82$
9	$> 82 \leq 102$
10	> 102

(b) For tomatoes sized by weight or by count, the difference in size should be consistent with the difference indicated in point (a).

IV. PROVISIONS CONCERNING TOLERANCES

At all marketing stages, tolerances in respect of quality and size shall be allowed in each lot for produce not satisfying the requirements of the class indicated.

A. Quality tolerances

(i) "Extra" Class

A total tolerance of 5 %, by number or weight, of tomatoes not satisfying the requirements of the class but meeting those of Class I is allowed. Within this tolerance not more than 0.5 % in total may consist of produce satisfying the requirements of Class II quality.

(ii) Class I

A total tolerance of 10 %, by number or weight, of tomatoes not satisfying the requirements of the class but meeting those of Class II is allowed. Within this tolerance not more than 1 % in total may consist of

produce neither satisfying the requirements of Class II quality nor the minimum requirements, or of produce affected by decay. In the case of trusses of tomatoes, 5 %, by number or weight, of tomatoes detached from the stalk is allowed.

(iii) Class II

A total tolerance of 10 %, by number or weight, of tomatoes satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance not more than 2 % in total may consist of produce affected by decay. In the case of trusses of tomatoes, 10 %, by number or weight, of tomatoes detached from the stalk is allowed.

B. Size tolerances

For all classes: a total tolerance of 10 %, by number or weight, of tomatoes not satisfying the requirements as regards sizing is allowed.

V. PROVISIONS CONCERNING PRESENTATION

A. Uniformity

The contents of each package must be uniform and contain only tomatoes of the same origin, variety or commercial type, quality and size (if sized).

The ripeness and coloring of tomatoes in "Extra" Class and Class I must be practically uniform. In addition, the length of "oblong" tomatoes must be sufficiently uniform.

However, a mixture of tomatoes of distinctly different colors, varieties and/or commercial types may be packed together in a package, provided they are uniform in quality and, for each color, variety and/or commercial type concerned, in origin.

The visible part of the contents of the package must be representative of the entire contents.

B. Packaging

Tomatoes must be packed in such a way as to protect the produce properly.

The materials used inside the package must be clean and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly paper or stamps bearing trade specifications is allowed provided the printing or labeling has been done with non-toxic ink or glue.

Packages must be free of all foreign matter.

VI. PROVISIONS CONCERNING MARKING

Each package must bear the following particulars in letters grouped on the same side, legibly and indelibly marked and visible from the outside:

A. Identification

The name and the address of the packer and/or the dispatcher.

This mention may be replaced:

- for all packages with the exception of pre-packages, by the officially issued or accepted code mark representing the packer and/or the dispatcher, indicated in close connection with the reference "Packer and/or Dispatcher" (or equivalent abbreviations);
- for pre-packages only, by the name and the address of a seller established within the Union indicated in close connection with the mention "Packed for:" or an equivalent mention. In this case, the labeling shall also include a code representing the packer and/or the dispatcher. The seller shall give all information deemed necessary by the inspection body as to the meaning of this code.

B. Nature of produce

- Tomatoes" or "trusses of tomatoes" and the commercial type if the contents are not visible from the outside. These details must always be provided for "cherry" (or "cocktail") tomatoes, whether in trusses or not.
- "Mixture of tomatoes", or equivalent denomination, in the case of a mixture of distinctly different varieties, commercial types and/or colors of tomatoes. If the produce is not visible from the outside, the colors, varieties or commercial types and the quantity of each in the package must be indicated.
- Name of the variety (optional).

C. Origin of produce

Country of origin 1 and, optionally, district where grown, or national, regional or local place name.

In the case of a mixture of distinctly different colors, varieties and/or commercial types of tomatoes of different origins, the indication of each country of origin shall appear next to the name of the color, variety and/or commercial type concerned.

D. Commercial specifications

- Class.
- Size (if sized) expressed as minimum and maximum diameters.

E. Official control mark (optional)

Packages need not to bear the particulars mentioned in the first subparagraph, when they contain sales packages, clearly visible from the outside, and all bearing these particulars. These packages shall be free from any indications such as could mislead. When these packages are palletised, the particulars shall be given on a notice placed in an obvious position on at least two sides of the pallet.

ANNEX 3. UNECE STANDARDS FOR FRESH PLUMS, CHERRIES, DREID PLUMS, SHELLED WALNUTS

UNECE STANDARD FFV-29 CONCERNING THE MARKETING AND COMMERCIAL QUALITY CONTROL OF PLUMS

I. Definition of produce

This standard applies to plums of varieties (cultivars) grown from:

Prunus domestica L. subsp. *domestica*

Prunus domestica subsp. *insititia* (L.) C. K. Schneid.

Prunus domestica subsp. *italica* (Borkh.) Gams

Prunus domestica subsp. *syriaca* (Borkh.) Janch.

Prunus salicina Lindl.

to be supplied fresh to the consumer, plums for industrial processing being excluded.

II. Provisions concerning quality

The purpose of the standard is to define the quality requirements for plums at the export-control stage after preparation and packaging.

However, if applied at stages following export, products may show in relation to the requirements of the standard:

a slight lack of freshness and turgidity

for products graded in classes other than the “Extra” Class, a slight deterioration due to their development and their tendency to perish.

The holder/seller of products may not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard. The holder/seller shall be responsible for observing such conformity.

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, the plums must be:

intact

sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded

clean, practically free of any visible foreign matter

practically free from pests

free from damage caused by pests affecting the flesh

free of abnormal external moisture

free of any foreign smell and/or taste.

The plums must be sufficiently developed and display satisfactory ripeness.
The development and condition of the plums must be such as to enable them:
to withstand transportation and handling
to arrive in satisfactory condition at the place of destination.

B. Classification

Plums are classified in three classes, as defined below:

(i) "Extra" Class

Plums in this class must be of superior quality. They must be characteristic of the variety.

They must be:

practically covered by their bloom, according to variety

of firm flesh.

They must be free from defects, with the exception of very slight superficial defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

(ii) Class I

Plums in this class must be of good quality. They must be characteristic of the variety.

The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

a slight defect in shape

a slight defect in development

slight defects in coloring

slight skin defects of elongated shape must not exceed in length one-third of the maximum diameter of the fruit. In particular, healed cracks may be allowed for "Golden gage" varieties¹

other slight skin defects of which the total area affected must not exceed one-sixteenth of the whole surface.

(iii) Class II

This class includes plums that do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above.

The following defects may be allowed, provided the plums retain their essential characteristics as regards the quality, the keeping quality and presentation:

defects in shape

defects in development

Definition: Gages (Green Apric`ots, Dauphines, Greengages) having a green skin with a yellowish sheen.

defects in coloring

skin defects of which the total area affected must not exceed one-quarter of the whole surface.

III. Provisions concerning sizing

Size is determined by the maximum diameter of the equatorial section.

The minimum sizes shall be as follows:	Classes "Extra" and I	Class II
Large-fruited varieties	35 mm	30 mm
Other varieties	28 mm	25 mm
Mirabelles and Damsons	20 mm	17 mm

UNECE STANDARD FFV-13 CONCERNING THE MARKETING AND COMMERCIAL QUALITY CONTROL OF CHERRIES

I. Definition of produce

This standard applies to cherries of varieties (cultivars) grown from *Prunus avium* (L.) L. and *Prunus cerasus* L. and their hybrids, to be supplied fresh to the consumer, cherries for industrial processing being excluded.

II. Provisions concerning quality

The purpose of the standard is to define the quality requirements for cherries at the export control stage after preparation and packaging.

However, if applied at stages following export, products may show in relation to the requirements of the standard:

- a slight lack of freshness and turgidity
- for products graded in classes other than the "Extra" Class, a slight deterioration due to their development and their tendency to perish.

The holder/seller of products may not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard. The holder/seller shall be responsible for observing such conformity.

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, the cherries must be:

- intact; missing stems are not regarded as a defect, provided the skin is not damaged and there is no severe leakage of juice
- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded

- clean, practically free of any visible foreign matter
- fresh in appearance
- practically free from pests
- practically free from damage caused by pests
- firm (according to the variety)
- free of abnormal external moisture
- free of any foreign smell and/or taste.

The development and condition of the cherries must be such as to enable them:

- to withstand transportation and handling
- to arrive in satisfactory condition at the place of destination.

B. Maturity requirements

The cherries must be sufficiently developed, and display satisfactory ripeness.

C. Classification

The cherries are classified in three classes, as defined below:

(i) "Extra" Class

Cherries in this class must be of superior quality. They must be characteristic of the variety.

They must be free from defects, with the exception of very slight superficial defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

(ii) Class I

Cherries in this class must be of good quality. They must be characteristic of the variety.

The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- a slight defect in shape
- slight defects in coloring.

(iii) Class II

This class includes cherries that do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above.

The following defects may be allowed, provided the cherries retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape
- defects in coloring
- small, healed surface scars.

III. Provisions concerning sizing

Size is determined by the maximum diameter of the equatorial section.

The minimum size shall be:

- 20 mm in "Extra" Class
- 17 mm in Classes I and II.

IV. Provisions concerning tolerances

At all marketing stages, tolerances in respect of quality and size shall be allowed in each lot for produce not satisfying the requirements of the class indicated.

A. Quality tolerances

(i) "Extra" Class

A total tolerance of 5 per cent, by number or weight, of cherries not satisfying the requirements of the class but meeting those of Class I is allowed. Within this tolerance not more than 0.5 per cent in total may consist of produce satisfying the requirements of Class II quality, and not more than 2 per cent may consist of split and/or worm-eaten fruit.

(ii) Class I

A total tolerance of 10 per cent, by number or weight, of cherries not satisfying the requirements of the class but meeting those of Class II is allowed. Within this tolerance not more than 1 per cent in total may consist of produce satisfying neither the requirements of Class II quality nor the minimum requirements, or of produce affected by decay, and not more than 4 per cent may consist of split and/or worm-eaten fruit.

(iii) Class II

A total tolerance of 10 per cent, by number or weight, of cherries satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance, not more than 4 per cent in total may consist of over-ripe, split, or worm-eaten fruit or of produce affected by decay.

B. Size tolerances

For all classes: a total tolerance of 10 per cent, by number or weight, of cherries not conforming to the minimum size is allowed, provided the diameter is not less than:

- 17 mm in "Extra" Class
- 15 mm in Classes I and II.

V. Provisions concerning presentation

A. Uniformity

The contents of each package must be uniform and contain only cherries of the same origin, variety and quality. The fruit must be reasonably uniform in size.

In addition, cherries in the "Extra" Class must be of uniform coloring and ripeness.

The visible part of the contents of the package must be representative of the entire contents.

B. Packaging

Cherries must be packed in such a way as to protect the produce properly.

The materials used inside the package must be clean and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or stamps bearing trade specifications, is allowed, provided the printing or labeling has been done with non-toxic ink or glue.

Stickers individually affixed to the produce shall be such that, when removed, they neither leave visible traces of glue, nor lead to skin defects.

Packages must be free of all foreign matter.

VI. Provisions concerning marking

Each package¹ must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

A. Identification

Packer and/or dispatcher/shipper:

Name and physical address (e.g. street/city/region/postal code and, if different from the country of origin, the country) or a code mark officially recognized by the national authority.

B. Nature of the produce

- “Cherries” if the contents are not visible from the outside
- “Sour Cherries” where appropriate
- “Stemless cherries”, “Picota” or equivalent denomination, where appropriate
- Name of the variety (optional).

C. Origin of the produce

- Country of origin³ and, optionally, district where grown, or national, regional or local place name.

D. Commercial specifications

- Class

E. Official control mark (optional)

UNECE STANDARD DDP-07 CONCERNING THE MARKETING AND COMMERCIAL QUALITY CONTROL OF PRUNES (DRIED WHOLE PLUMS)

I. DEFINITION OF PRODUCE

This standard applies to prunes from certain varieties of plums grown from *Prunus domestica L.* considered suitable for drying to be supplied for consumption which are with or without pits and have been obtained by controlled dehydration.

No sweeteners or sugar may be added.

It does not apply to prunes which have undergone the normal operations connected with special preparation (prunes in juices, syrup or in brandy or stuffed prunes, etc.).

II. PROVISIONS CONCERNING QUALITY

The purpose of the standard is to define the quality requirements at the export control stage after preparation and packaging.

A. Minimum requirements

(i) In all classes subject to the special provisions for each class and the tolerances allowed, prunes must be:

- prepared from physiologically ripe fruit;
- whole or without pits, without peduncles;
- fleshy, the flesh being elastic and pliable;
- covered with a wrinkled skin;
- sound, fruit being affected by decay or damaged in such a way as to be unfit for consumption being excluded;
- clean and practically free from obvious foreign matter;
- free from living insects and mites, whatever their stage of development;
- free from visible damage by insects, mites or other parasites;
- free of foreign smell and/or taste.

The condition of the dried prunes must be such as to enable them

- to withstand transport and handling
- to arrive in satisfactory condition at the place of destination.

(ii) Moisture content

The moisture content of prunes must not exceed 35 per cent.

For prunes with high moisture content, preservatives may be used depending on the regulations applicable in the importing country.

(iii) Preservatives may be used, in accordance with the legislation of the importing country.

Rehydrated prunes normally contain preservatives.

B. Classification

According to their type of presentation, prunes are classified in one or two classes defined below:

(i) Whole prunes are classified in one class, called

"PRUNES" - "Class I"

They must be of good quality and characteristic of the variety or commercial type of plum used.

They may show slight superficial defects and colour defects, provided that these do not affect

the general appearance of the produce or the quality, keeping quality or its presentation in the package.

(ii) Prunes without pits are classified into two classes defined below:

- "Prunes without pits" - "Class I": Prunes in this class must be depitted by an appropriate process such as to minimize the damage to the skin, and the number of cuts necessary to depit the prunes is limited to two cuts
- "Pressure-pitted prunes" "Type E" or "Class II": Prunes in this class may be pitted by pressure. The number of cuts necessary to depit these prunes is not limited.

III. PROVISIONS CONCERNING SIZING

Whatever their mode of packaging, "prunes" and "depitted prunes" must previously have undergone sizing determined by the minimum and maximum number of prunes in 500 g (or in 1 lb (453 g)), in relation to the moisture content marked on the package according to the following scales:

A. European designations "PRUNES"

Designation	Number of prunes per 500 g	Number of prunes per 453 g
Giant	Not more than 44 prunes	Not more than 40 prunes
Very large	from 44 to 55 "	from 40 to 50 "
Large	from 55 to 66 "	from 50 to 60 "
Medium	from 66 to 77 "	from 60 to 70 "
Small	from 77 to 99 "	from 70 to 90 "
Very Small	more than 99 "	more than 90 "

B. American designations "PRUNES"

Designation	Number of prunes per 500 g	Number of prunes per 453 g
Jumbo	Not more than 28 prunes	Not more than 25 prunes
Extra large	from 28 to 44 "	from 25 to 40 "
Large	from 44 to 66 "	from 40 to 60 "
Medium	from 66 to 94 "	from 60 to 85 "
Small	from 94 to 110 "	from 85 to 100 "

C. "Pitted Prunes - Class I"

For "pitted prunes" the size is determined by the count taken before the pits have been removed from the prunes.

LARGE: not more than 67 prunes in 500 g (not more than 60 in 453 g)

MEDIUM: more than 67 prunes in 500 g (more than 60 in 453 g).

D. "Pressure Pitted Prunes" "Type E", "Class II"

Sizing of pressure pitted prunes is not obligatory unless they are sold in small packages intended for the consumer.

IV. PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality and size shall be allowed in each package for produce not satisfying the requirements of the class indicated.

A. Quality tolerances

Permitted defect (percentages by weight)	PRUNES	PITTED PRUNES	PRESSURE PITTED PRUNES
	Class I	Class I	Class II
A. Total tolerance	12	12	15
B. Individual defect			
Within the limits of the total tolerances, the Maximum allowed are :			
(i) non-characteristic colour and texture	12	12	15
(ii) end cracks	12	12	15
(iii) skin or flesh damage; callouses; heat injury; insect damage	8	2	4
(iv) fermentation	4	2	4
(v) foreign matter of vegetable origin	1	1	1
(vi) slight decay; mould	1	0.5	2
(vii) fruit infested by insects or mites	0.5	0.5	0.5
C. For Pitted Prunes			
(viii) with whole pits	-	2	4
(ix) with fragments of pits	2	2	4

No tolerance is accepted for live parasites.

B. Mineral impurities

Not greater than 1g/kg acid insoluble ash.

C. Size tolerances

The method of determining sizing uniformity is specified in the annex to this standard.

V. PROVISIONS CONCERNING PRESENTATION

A. Uniformity

The contents of each package must be uniform in colour and contain only prunes of the same origin, quality and size.

The visible part of the contents of the package must be representative of the entire contents. In addition, prunes in class "I" must be of the same variety or the same commercial type.

B. Packaging

Prunes must be packed in such a way so as to protect the produce properly.

The materials used inside the package must be new, clean and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper and stamps bearing trade specifications is allowed provided the printing or labelling has been done with non-toxic ink or glue.

Packages must be free of all foreign matter.

C. Presentation

Prunes must be presented:

- either in small packages of 0.125 kg, 0.250 kg, 0.500 kg and 1 kg. The use of other units of weight may be allowed depending on the regulations applicable in the importing country
- or in packages weighing 1.5 kg or more.

VI. PROVISIONS CONCERNING MARKING

Each package must bear the following particulars in letters grouped on the same side, legibly and indelibly marked and visible from the outside:

A. Identification

Packer) Name and address or officially issued or
and/or) accepted code mark
Dispatcher)

B. Nature of the produce

- The word "prunes", "pitted prunes" or "pressure pitted prunes"
- Name of the variety, or commercial designation accepted in reputable commercial practice, for class "I"
- Moisture content indicated by:
 - "Maximum moisture content 29 per cent" and/or by "semi-dry" when the moisture content is between 24 per cent and 29 per cent inclusive
 - "Maximum moisture content 35 per cent" and/or by "ready to eat", when the moisture content is between 29 per cent and 35 per cent inclusive
- No marking indicating moisture content is necessary if this is equal to or less than

24 per cent.

C. Origin of the produce

- Country of origin and, optionally, the district where grown or the national, regional or local place name.

D. Commercial specifications

- class;
- size (if produce is sized) expressed in keeping with the designations specified in section III

“Provisions concerning sizing”:

Either as the minimum and maximum number of prunes contained in 500 g (or in 453 g), by "X/Y prunes per 500 g"

Or by the corresponding designation followed by the minimum and maximum number of prunes contained in 500 g (or in 453 g)

- net weight.

E. Official control mark (optional)

UNECE STANDARD DDP-02 CONCERNING THE MARKETING AND COMMERCIAL QUALITY CONTROL OF WALNUT KERNELS

I. DEFINITION OF PRODUCE

This standard applies to walnut kernels from varieties (cultivars) grown from *Juglans regia* L.

II. PROVISIONS CONCERNING QUALITY

The purpose of the standard is to define the quality requirements for walnut kernels at the export control stage, after preparation and packaging.

A. Minimum requirements

- (i) In all classes, subject to the special provisions for each class and the tolerances allowed, walnut kernels must be:
 - sufficiently dry to ensure keeping quality;
 - sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded
 - firm;
 - sufficiently developed; shrivelled kernels are to be excluded;
 - clean, practically free from any visible foreign matter and from shell;

- free from insects or mites whatever their stage of development;
- free from damage caused by pests;
- free of any rancidity or oily appearance;
- free from mould;
- free of abnormal external moisture;
- free of foreign smell and/or taste.

The condition of the walnut kernels must be such as to enable them:

- to withstand transport and handling, and
- to arrive in satisfactory condition at the place of destination.

(ii) **Moisture content**

The walnut kernels shall have a moisture content of not greater than 5 per cent.

B. Classification

Walnut kernels are classified in the three classes as defined below according to their quality and colour

(i) ***"Extra" Class***

Walnut kernels in this class must be of superior quality, uniformly light-coloured with practically no dark straw and/or lemon-yellow colour and with no dark brown.

They must be characteristic of the variety and/or commercial type. They must be practically free from defects with the exception of very slight superficial defects provided that these do not affect the general appearance of the product, the quality, and its presentation in the package.

Scuffing is allowed on:

- quarters and all pieces,
- halves, provided it covers no more than 10% of the surface area of the skin.

(ii) ***Class I***

Walnut kernels in this class must be of good quality, of a colour not darker than light brown and/or lemon-yellow.

They must be characteristic of the variety and/or commercial type. Slight defects may be allowed provided that these do not affect the general appearance of the produce, the quality, the keeping quality or its presentation in the package. Scuffing is allowed on:

- quarters and all pieces,
- halves, provided it covers no more than 20% of the surface area of the skin.

(iii) ***Class II***

This class includes kernels which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified above. Walnut kernels in this class must be of a colour not

darker than dark brown. Darker kernels may be marketed in this class, provided the colour is indicated on the package. Defects may be allowed, provided that the walnut kernels retain their essential characteristics as regards general appearance, quality, keeping quality and presentation.

This class also includes mixtures of kernels of different colours and designated in the marking by the words 'mixed colours'.

Scuffing is not considered as a defect.

III. PROVISIONS CONCERNING SIZING (STYLES)

Walnut kernels are classified by style as follows:

- (i) halves: kernels separated into two more or less equal and intact parts;
- (ii) quarters: kernels separated lengthways into four more or less equal pieces;
- (iii) large pieces: portions smaller than a "chipped kernel" but larger than a "broken piece";
- (iv) broken pieces: portions of kernels which can pass through an 8mm sizing screen but not through a 3mm sizing screen;
- (v) large pieces and halves: a mixture of kernels corresponding to the styles large pieces (iii) and halves (i) and of which the proportion of halves may be specified in the marking.

The different styles are represented in the Annex relating to colour, shape and size.

In addition to the designation of the style in the marking, an indication of the number of pieces per kg may be given optionally.

IV. PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality, colour and type shall be allowed in each package for produce not satisfying the requirements of the class indicated.

A. Quality and colour tolerances

Defects allowed ^a	Tolerances allowed (per cent by weight of kernels)		
	Extra	Class I	Class II
(1) Kernels not satisfying the minimum requirements, which include not more than:	4	6	8
- Rotten kernels	0.5	1 ^b	2 ^b
- Mouldy kernels	0.5	1 ^b	2 ^b
- Shell fragments or foreign matter	0.1	0.1	0.1
(2) Kernels darker in colour,	8	9	10
(3) Scuffing (halves only)	10	10	-

- a *The definitions of defects are listed in Annex II to this document.*
- b *Reservation of Poland in favour of a tolerance not exceeding 0.5 per cent.*

B. Mineral impurities

Not greater than 1g/kg acid insoluble ash.

C. Size tolerances (styles)

For all styles, a minimum percentage of kernels corresponding to the style indicated in the marking are required and a maximum percentage by weight of kernels different from the style indicated is tolerated:

Style	Minimum percentage and tolerances allowed (per cent by weight of kernels)					
	Halves	Chipped kernels	Quarters	Large pieces	Broken pieces	Fragments
Halves	85 ^a	15 ^b	5 ^c		1 ^c	1 ^c
Quarters			85 ^a	15 ^b	5 ^c	1 ^c
Large pieces				85 ^a	15 ^b	1 ^c
Broken pieces				10 ^b	90 ^a	1 ^d
Large pieces and halves	20 ^b			65 ^a	15 ^b	1 ^c

- a *Minimum percentage*
- b *Tolerances allowed*
- c *Included in 15% tolerance*
- d *Included in 10% tolerance*

V. PROVISIONS CONCERNING PRESENTATION

A. Uniformity

The contents of each package may be uniform and contain only kernels of the same origin, crop year, quality, style and when applicable of the same variety and commercial style.

Uniformity of colour is compulsory for Extra Class and Class I.

However, with regard to shape, "halves" which pass through a 15 mm mesh and "chipped kernels" may be included without limitation in consignments of "large pieces".

The visible part of the contents of the package must be representative of the entire contents.

B. Packaging

Walnut kernels must be packed in such a way as to protect the produce properly.

If wooden packaging is used, the produce must be separated from the bottom, sides and lid by paper or suitable protective material.

The materials used inside the package must be new, clean and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials and particularly of paper or stamps bearing trade specifications is allowed provided that the printing or labelling has been done with non-toxic ink or glue.

Kernels may be packed in airtight sealed containers, in a vacuum or in an inert gas.

C. Presentation

Kernels must be presented:

In small unit packages of uniform weight intended for sale directly to the consumer.

Packaged in bulk.

VI. PROVISIONS CONCERNING MARKING

Each package must bear the following particulars in letters grouped on the same side, legibly and indelibly marked and visible from the outside:

A. Identification

Packer)	Name and address or
and/or)	officially issued or
Dispatcher)	accepted code mark

B. Nature of produce

- "Walnut kernels".
- Name of the variety or commercial type for AExtra@ class and class I where applicable (optional for class II).

C. Origin of produce

- Country of origin and, optionally, district where grown, or the national, regional or local place name.

D. Commercial specifications

- Class and optionally a commercial name; the words Amixed colours@ in class II where applicable;
- Style (Ahalves@, Aquarters@, Alarge pieces@, Abroken pieces@ or Alarge pieces and halves@) and optionally the number of pieces per kg;
- Crop year optional, mandatory according to the legislation of the importing country;
- Net weight;
- Best before followed by the date (optional).

E. Official control mark (optional)