

EU project number 613678

Strategies to develop effective, innovative and practical approaches to protect major European fruit crops from pests and pathogens



Work package 1. Pathways of introduction of fruit pests and pathogens

Deliverable 1.3.

PART 2 - Analysis of fruit production and imports in the EU to select species for pathway studies

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DROPSA is funded by the European Union's Seventh Framework Programme for research, technological development and demonstration (grant agreement no. 613678).

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DROPSA – ANALYSIS OF FRUIT PRODUCTION AND IMPORTS IN THE EU TO SELECT SPECIES FOR PATHWAY STUDIES

1. Background

Fruit species have to be selected in order to produce "Alert lists" of pests. The number of fruit species that could be dealt with during the course of this task was not known, as it depended on the time needed to complete each species. Therefore, priorities were defined to be taken in order until the time available had run out. Criteria taken into account to select fruit species were:

- production area in the EU (from statistical data in Eurostat).
- import volumes into the EU and origins, including importance of imports from other continents versus imports from closer countries (EPPO region), consideration of emerging trades (from Eurostat and detailed trade data provided by some EPPO countries).
- prior history of pest introduction as per the list established in the review (Steffen et al. 2015¹ and the associated Excel file Fruit_pest_list_review_final_xls²).

The overall selection aimed at providing:

- a good geographical coverage of fruit production in the EU
- a balance between species regulated for fruit in the EU, and others.
- species in different broad groups (e.g. pome fruit, stone fruit, citrus, small fruits).
- emerging trades, if such could be identified.

It is worth noting that, for all crops retained, there are some exporters in the Northern hemisphere (i.e. where fruits are produced during the EU fruiting season). In addition, all species retained are grown in gardens as well as in commercial production. Consequently, these two elements were not used as a selection factor.

It was discussed whether the pathway study of some fruit species could focus on some origins only. However, the analysis showed that fruits are imported from a large number of countries and the trade is volatile so that import can occur from different countries depending on years. It was finally concluded that each species would be studied from all origins.

The analysis was originally performed for fruits and nuts. Section 2 and 3 provide details on production areas and imports for fruit and nut species. Section 4 analyzes this data. Section 5 reviews the additional trade data provided by some EPPO member countries. Section 6 identifies priority fruit crops, with a rationale.

2. Production area of fruit and nut species in the EU

Data on production areas and increase/decrease over 2002-2012 were used as a parameter of the relative importance of the crop in the EU. A choice was made to focus on the production area, i.e. the plants to be protected from the introduction of pests, rather than on the production volume or value.

Data on production area needs to be interpreted with caution as figures were missing for major producing countries in some years. Corrected total EU areas were calculated, in order to account for missing figures, and avoid wrongly identifying huge decreases of production areas in one year. The resulting figures are approximate, but nevertheless allow identifying substantial increases/decreases at EU level.

Figures 2a and 2b present production areas for fruit and nut species for 2002, 2008 and 2012 (based on corrected data in Annex 1). The increases/decreases of area of production between 2002-2012 and 2008-2012 are presented in Table 2a (in order of importance of the increase/decrease between 2002 and 2012).

¹ Steffen K, Grousset F, Schrader G, Petter F, Suffert M. 2015. Identification of pests and pathogens recorded in Europe with relation to fruit imports. *EPPO Bulletin*, 45: 223–239.

² Available at <http://upload.eppo.int/download/89oc0736e019>

Figure 2a. Total area (1000 ha) for fruit crops (with corrected data).

Note the figures for vineyards exceed the axis and are given as numbers) (1000 ha)

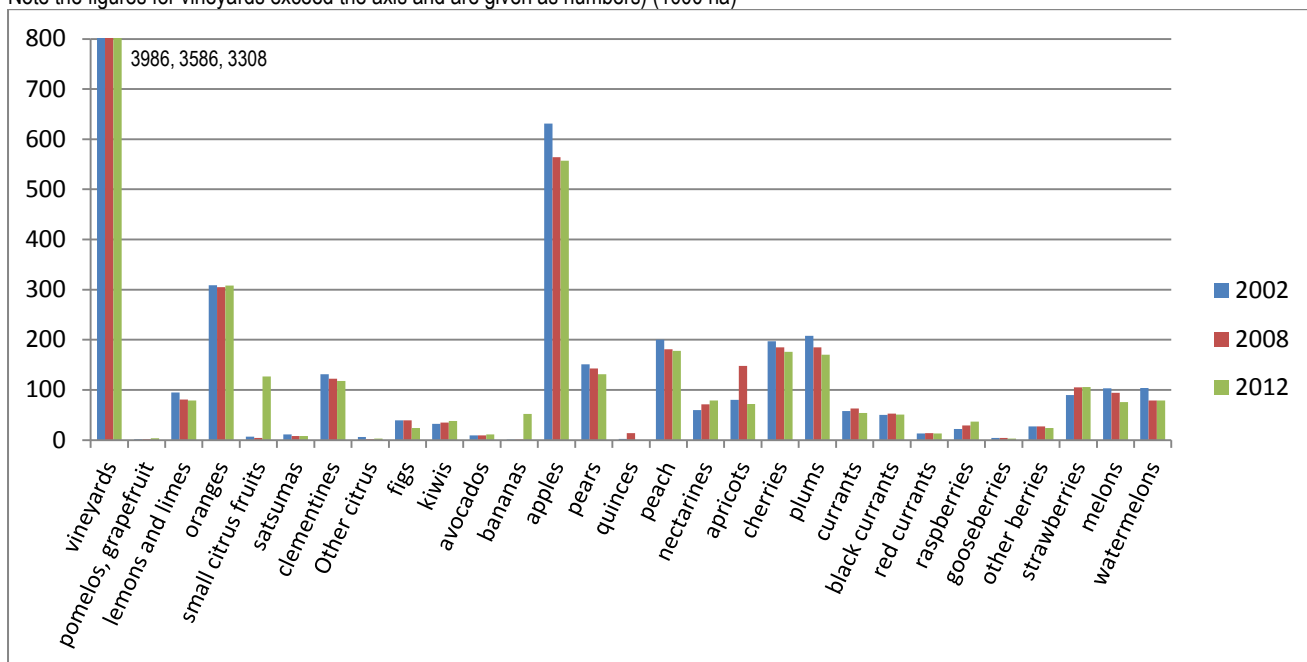


Figure 2b. Total area (1000 ha) for nut crops (with corrected data)

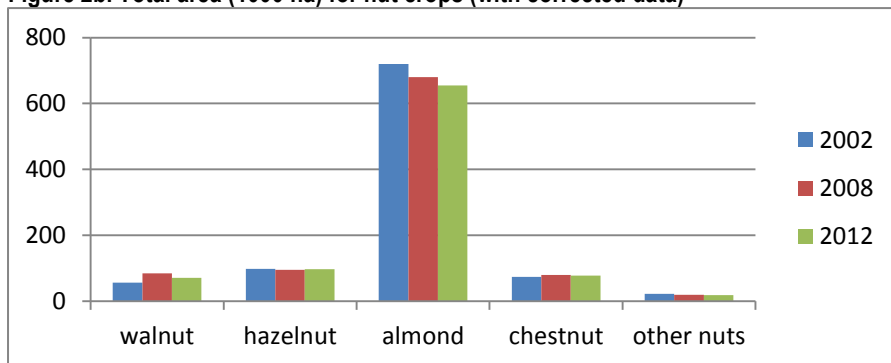


Table 2a. Fruit and nuts: area of production in 2012 and variations in 2002-2012 and 2008-2012

	Area 2012	Variation in %	
	(1000 ha)	2002-2012	2008-2012
vineyards	3308	-17,0	-7,8
apples	557	-11,7	-1,2
oranges	308	-0,3	1,0
peach	178	-11,0	-1,7
cherries	176	-10,7	-4,9
plums	170	-18,3	-8,1
pears	131	-13,2	-8,4
mandarins	118	-9,9	-3,3
strawberries	106	17,8	1,0
lemons and limes	79	-16,8	-2,5
nectarines	79	31,7	11,3
watermelons	79	-24,0	0,0
melons	76	-26,2	-19,1
apricots	72	-10,0	-51,4
currants	54	-6,9	-14,3

	Area 2012	Variation in %	
	(1000 ha)	2002-2012	2008-2012
black currants	51	2,0	-3,8
kiwis	38	18,8	8,6
raspberries	37	68,2	27,6
figs	24	-38,5	-38,8
other berries	24	-11,1	-11,1
quinces*	14		
red currants	13	0,0	-7,1
avocados	11	22,2	22,2
satsumas	8	-27,3	0,0
pomelos, grapefruit	3,4	112,5	78,9
gooseberries	3	-25,0	-25,0
other citrus	2,8	-53,3	47,4
small citrus fruits [‡]	127	1714,3	3075,0
bananas [#]	52	5100	5100

[‡] the data for "small citrus fruit" could not be used. It is not clear if this was previously recorded in other categories, and which species it might be.

* data for quince in 2012 is not available. The figure is for 2008.

data for bananas seems to be an anomaly

Table 2b. Nuts: area of production in 2012 and variations in 2002-2012 and 2008-2012 (corrected values)

	Area 2012	Variation in %	
	(1000 ha)	2002-2012	2008-2012
almond	655	-9,0	-3,7
hazelnut	97	-1,0	2,1
chestnut	78	5,4	-2,5
walnut	71	24,6	-16,5
other nuts	19	-17,4	-5,0

3. Imports of fruits and nuts to EU countries

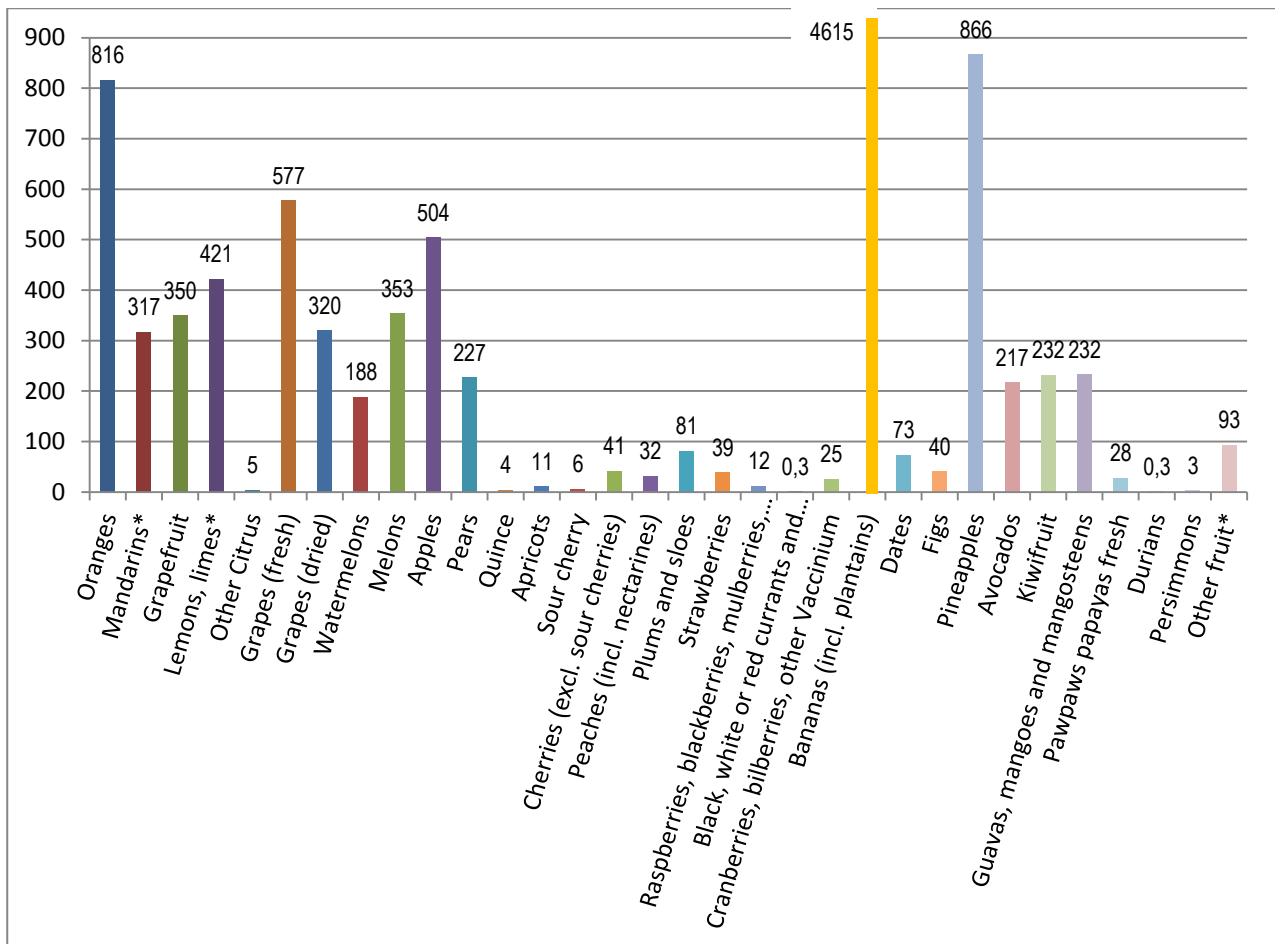
EU countries import a wide variety of fruit and nuts. The fruit categories in Eurostat are shown in Figure 3a. They relate to individual species, e.g. ‘watermelons’, or to small or wider groups of related species, e.g. ‘peaches and nectarines’, ‘cranberries, bilberries, other *Vaccinium*’. The detailed trade data from EPPO countries (section 5) showed that categories that may ‘intuitively’ be understood to cover one species may in fact cover several. All other fruits, not part of other categories, are covered under ‘tamarinds, cashew apples, jackfruit, lychees, sapodillo plums, passion fruit, carambola, pitahaya, other edible fruit (excluding all others listed)’. For some categories, the data separate fresh/dried fruit (e.g. grape, apricots); for others, fresh/dried fruits are combined (e.g. banana, figs, dates). For nuts, data may combine fresh and dried nuts, shelled or not.

Figure 3a presents the volumes of imports into the EU from non-EU countries in 2012 for the fruit categories in Eurostat (in 1000 t), and Figure 3b the internal EU trade of the same fruit categories. Figure 3c (based on data from FAOStat) presents import values. The fruit categories in decreasing order of import volumes from non-EU countries are given in Table 3a. Corresponding data is given for nuts in Figures 3d-e and Table 3b. Detailed data underlying Figures 3 and Tables 3 can be found in Annex 2.

Import volumes from non-EU countries³ for some fruit categories in 2002-2012 are illustrated in Figure 3f, separating EPPO countries and other origins. This was considered relevant as pest risks may differ: the pest spectrum between EU countries and EPPO non-EU countries for given crops is more likely to be similar than from other origins, and the trade to have been in place for a longer period (i.e. having provided opportunities for pest introduction). Increases/decreases of trade from non-EPPO countries may not necessarily represent a long-lasting trend. For example, a bad production year in the Mediterranean Basin may lead to a decrease of production in both EU and EPPO non-EU countries, with corresponding increased imports from other parts of the world; however this may be limited to that year. However, the data seems nevertheless to illustrate some general trends. Note: For each species selected for further study, origins are analyzed in the specific report on that fruit.

Figure 3a. Imports of fruits (volume, in 1000 t) from non-EU countries into the EU (28) in 2012. Note: the value for banana exceeds the axis

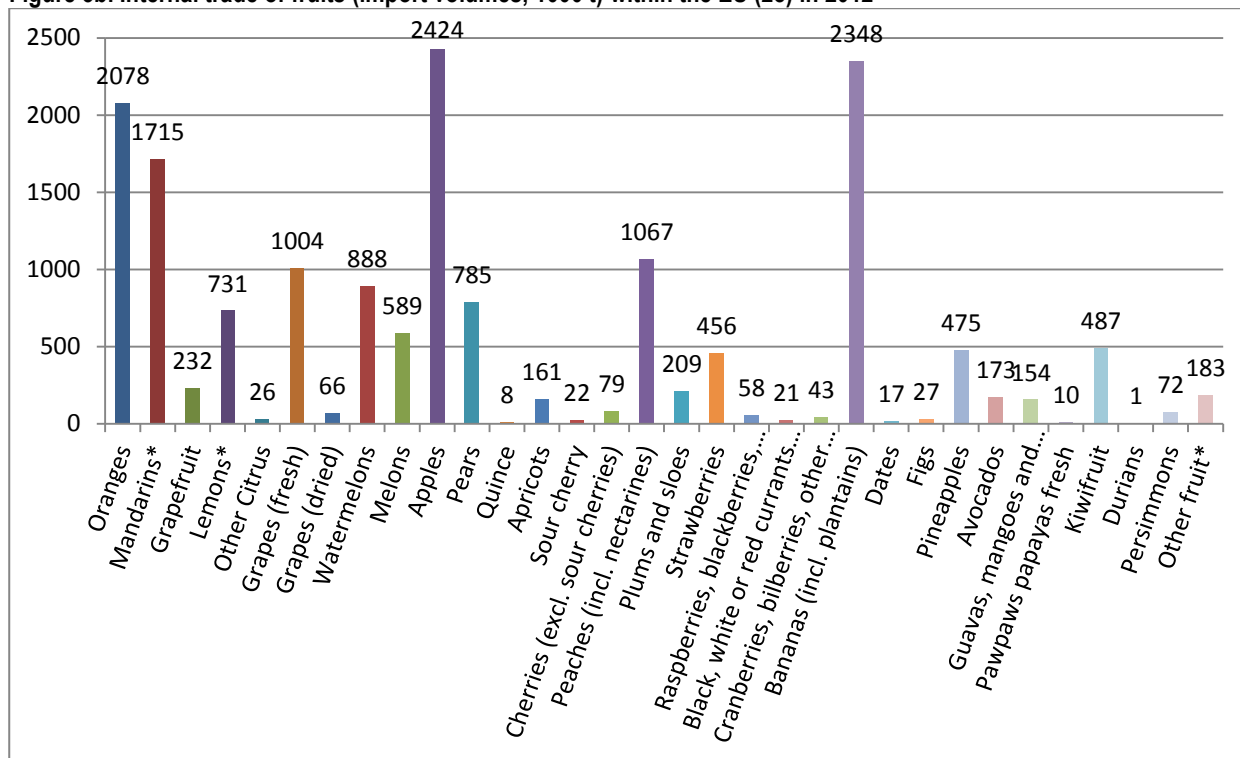
³ As Membership of EU (and EPPO) as evolved over the years, a country is considered as ‘EU’ or ‘EPPO’ according to its status in 2015 (e.g. data for Hungary is considered as data for an EU country, even before it joins in 2004)



* Short names were used for some categories in Eurostat and some names are shortened with ... above, as follows:

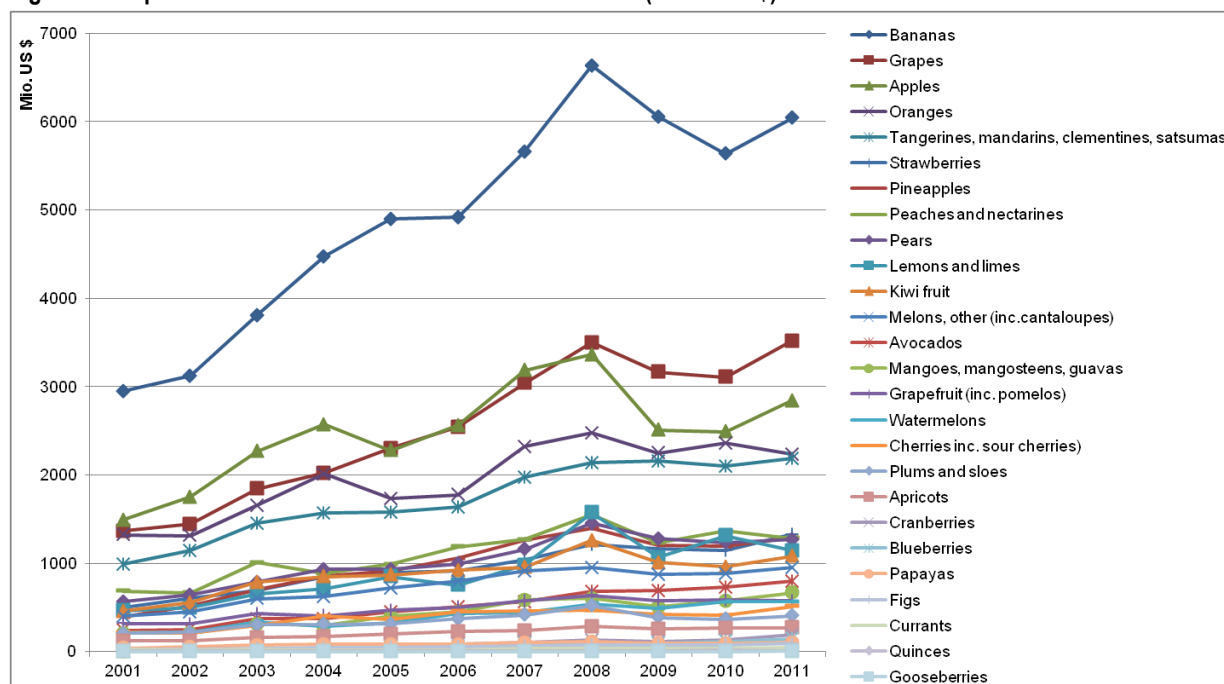
"Mandarins": including tangerines, satsumas, clementines, wilkings and similar *Citrus* hybrids; **"Lemons, limes"**: fresh or dried lemon (*Citrus limon*, *Citrus limonum*) and limes (*Citrus aurantifolia*, *Citrus latifolia*); **"other Citrus"**: excluding other listed; **"black-, white- or redcurrants and"** gooseberries; **"raspberries, blackberries, mulberries"** and loganberries; **"Other fruit"**: tamarinds, cashew apples, jackfruit, lychees, sapodillo plums, passion fruit, carambola, pitahaya, other edible fruit (excl. others listed).

Figure 3b. Internal trade of fruits (import volumes, 1000 t) within the EU (28) in 2012



* Short name for the category in Eurostat. See details under Figure 3a.

Figure 3c. Import of fruits into the EU from non-EU countries (in Mio. US\$)



(Source: FAOstat)

Table 3a. Volumes (1000 t) of imports of fruit into the EU from non-EU countries in 2012

Fruit	1000 t	Fruit	1000 t	Fruit	1000 t
1. Bananas	4615	12. Guavas, mangoes, mangosteens	232	23. Papayas fresh	28
2. Pineapples	866	13. Pears	227	24. Vaccinium	25
3. Oranges	816	14. Avocados	217	25. Raspber., blackber., mulber., loganber.	12
4. Grapes (fresh)	577	15. Watermelons	188	26. Apricots	11
5. Apples	504	16. Other fruit*	93	27. Other Citrus	5
6. Lemons, limes*	421	17. Plums, sloes	81	28. Quince	4
7. Melons	353	18. Dates	73	29. Persimmons	3
8. Grapefruit	350	19. Cherries (incl. sour cherries)	47	30. Black/white/red currants, gooseberry	0,3
9. Grapes (dried)	320	20. Figs	40	31. Durians	0,3
10. Mandarins*	317	21. Strawberries	39		
11. Kiwifruit	232	22. Peaches (incl. nectarines)	32		

* Short name for the category in Eurostat. See details under Figure 3a.

Figure 3d. Imports of nuts to the EU from non-EU countries (in 1000 tonnes) in 2012

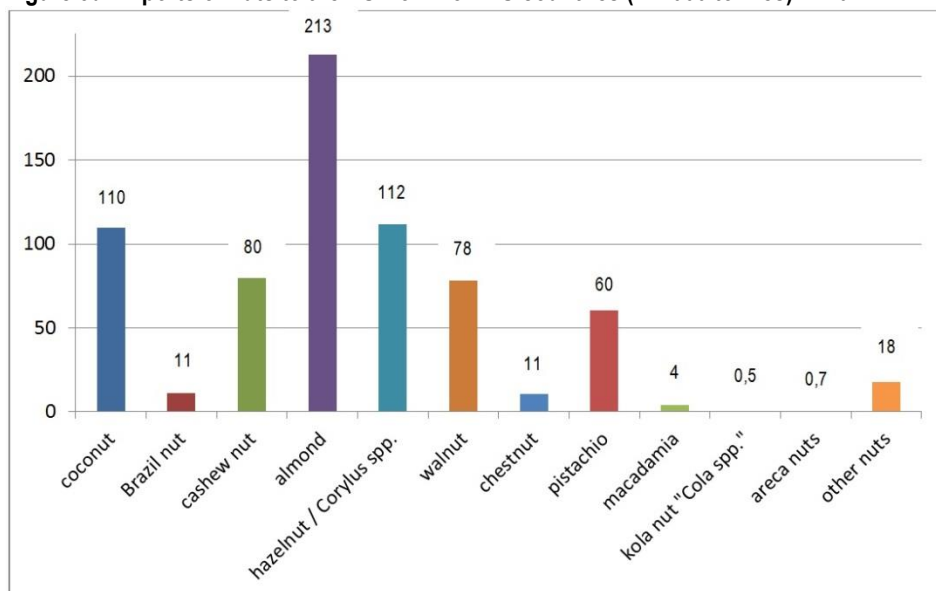


Figure 3e. Trade of nuts within the EU (in 1000 tonnes) in 2012

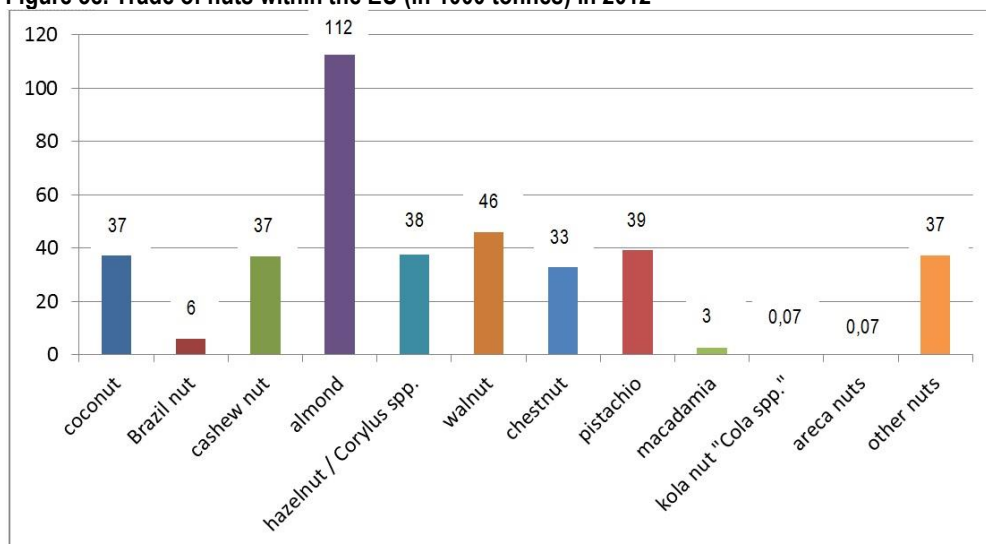


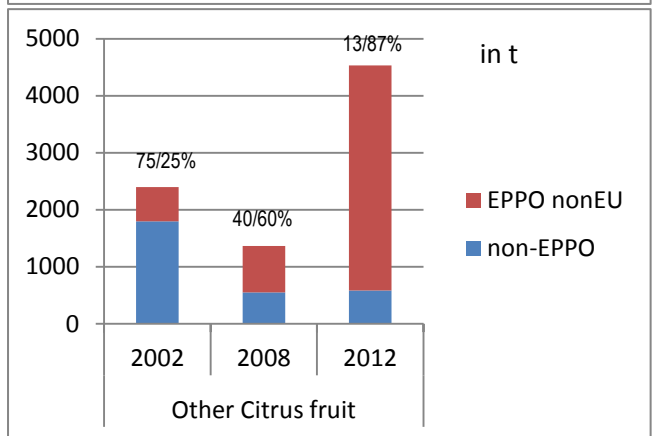
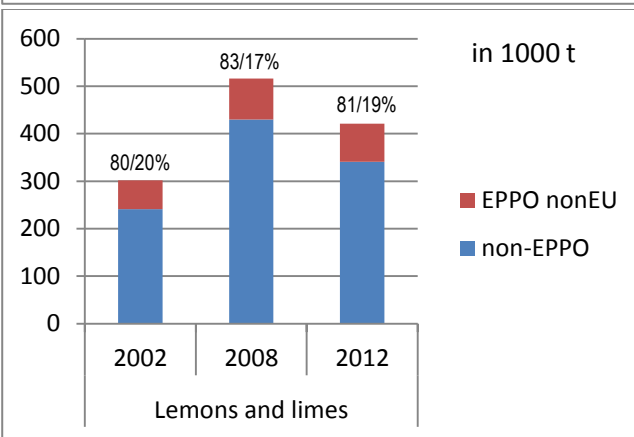
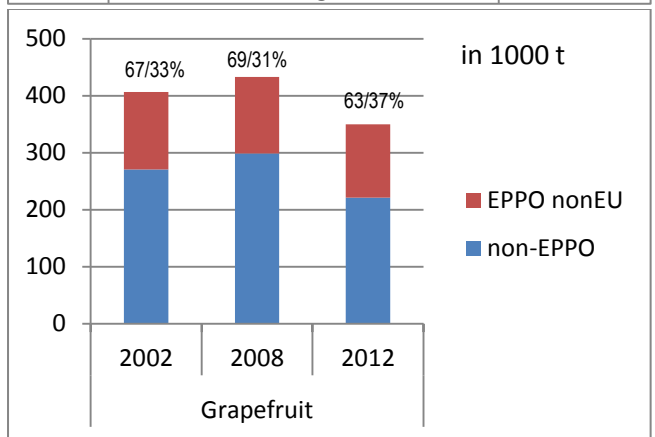
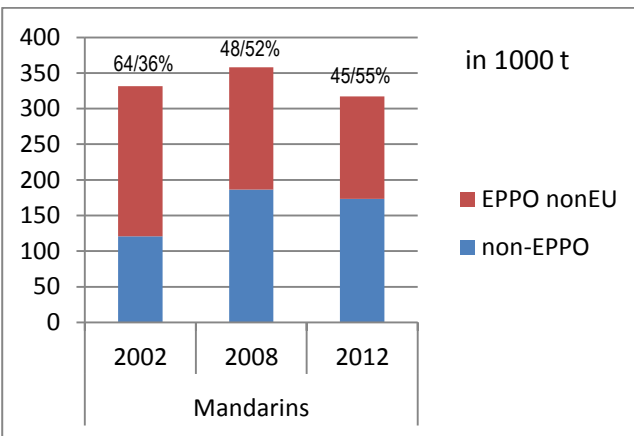
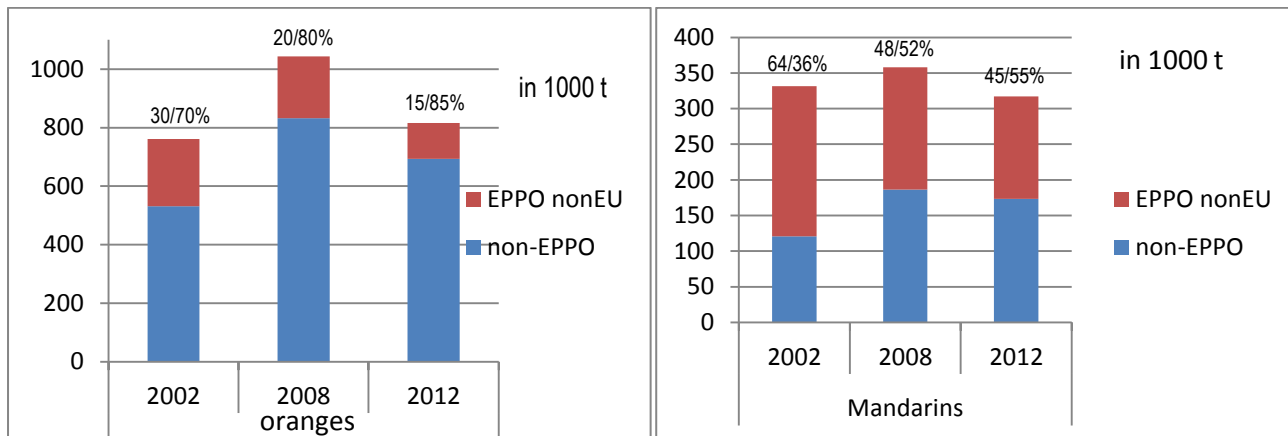
Table 3b. Volumes of imports of nuts from non-EU countries in 2012

Nut species	1000 t
almond	213
hazelnut / <i>Corylus</i> spp.	112
coconut	110
cashew nut	80
walnut	78
pistachio	60

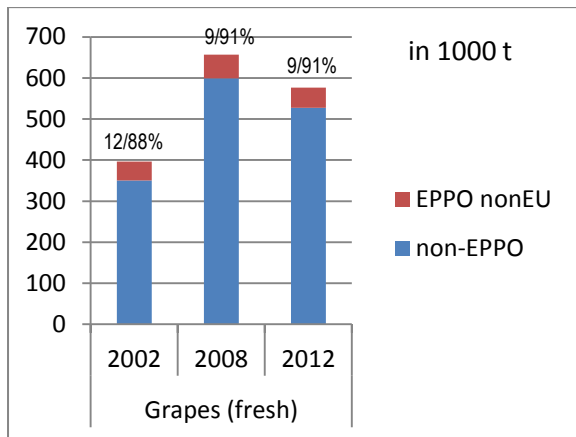
Nut species	1000 t
other nuts	18
Brazil nut	11
chestnut	11
macadamia	4
areca nuts	0,7
kola nut " <i>Cola</i> spp."	0,5

Figure 3f Imports from non-EU countries, divided in EPPO-non EU countries and non-EPPO countries

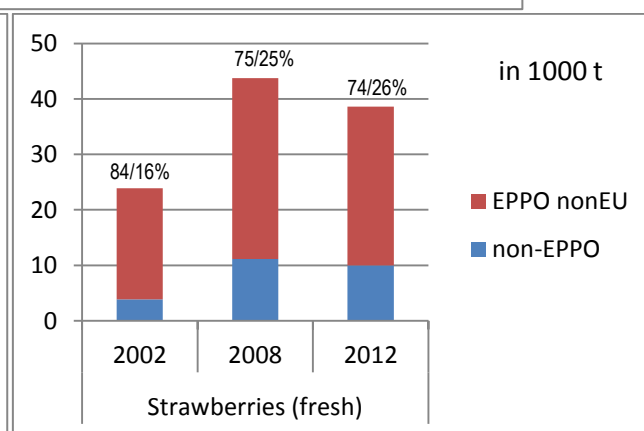
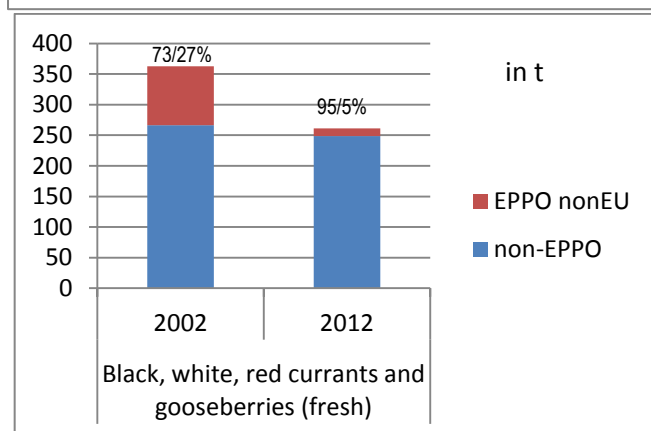
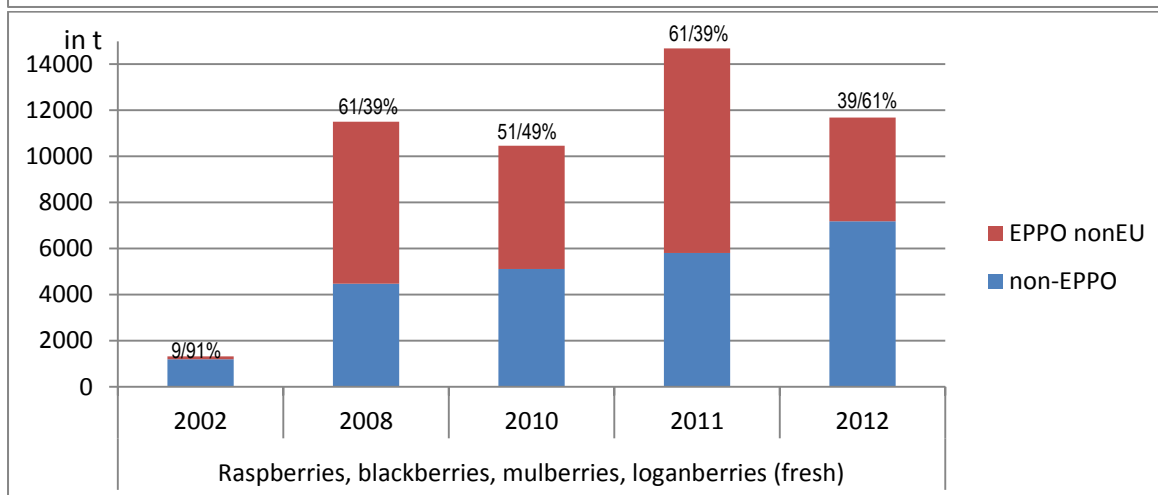
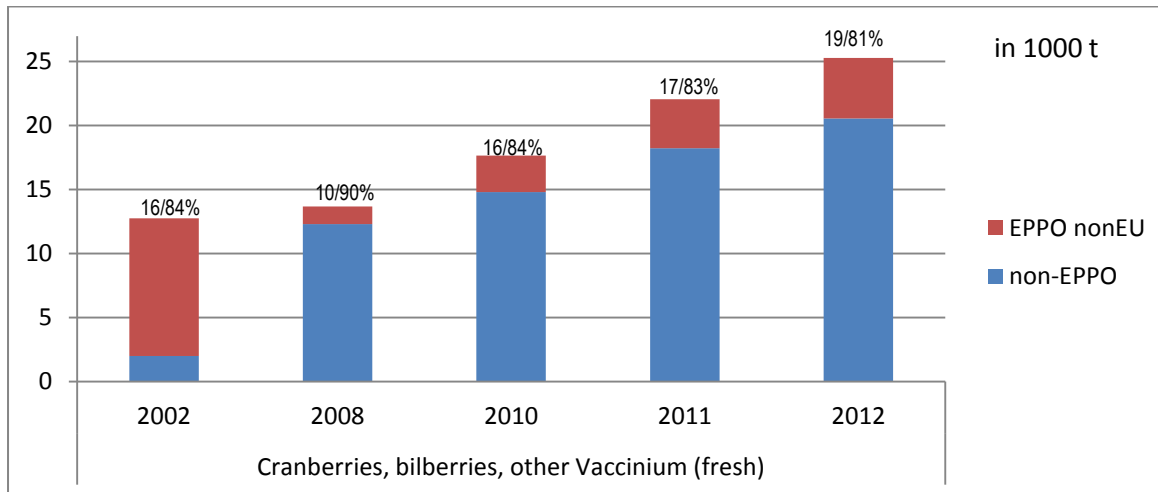
CITRUS



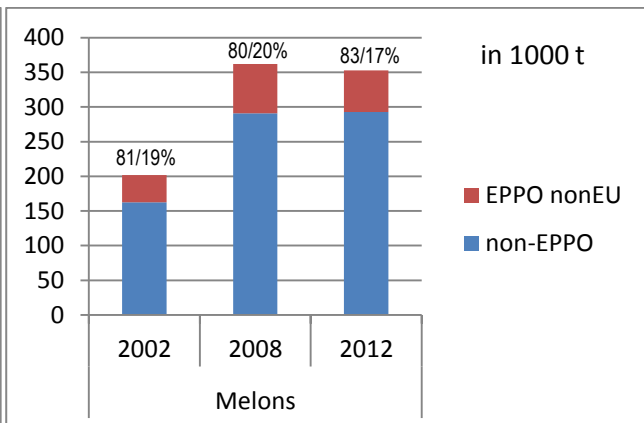
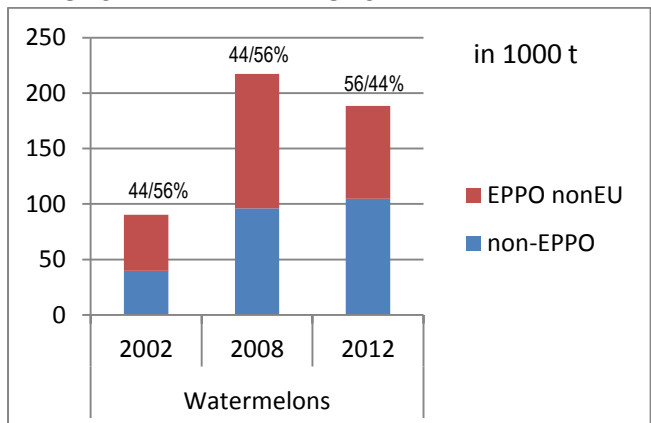
GRAPES



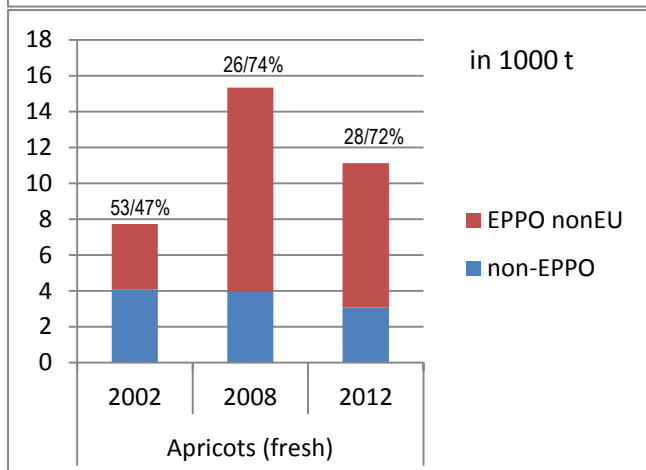
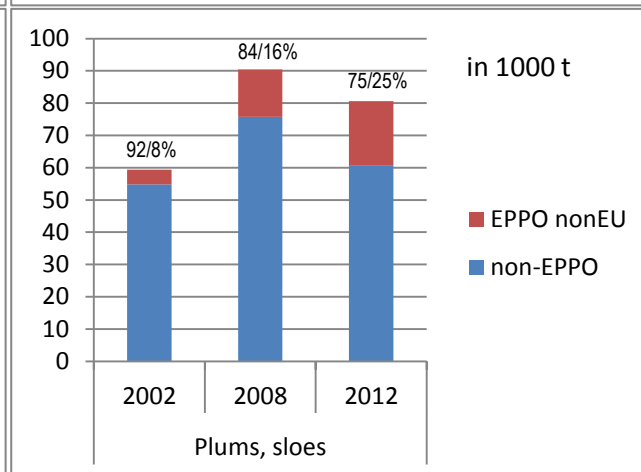
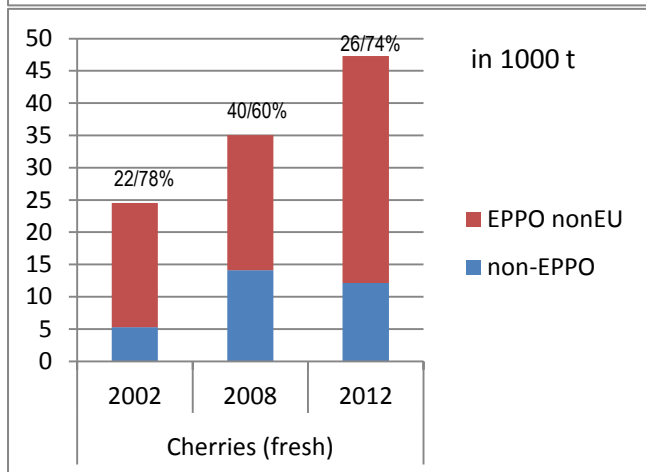
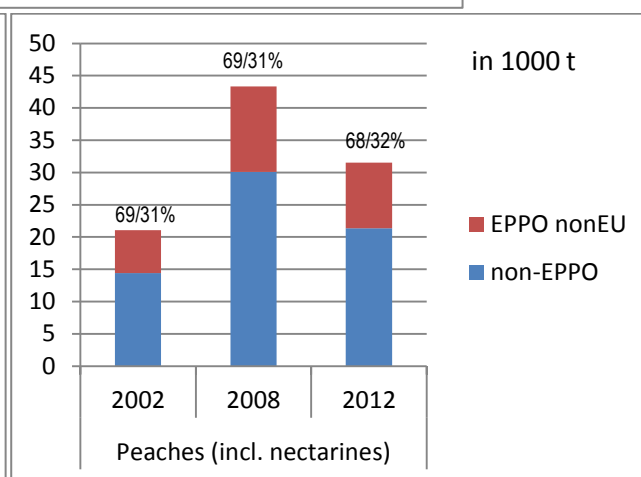
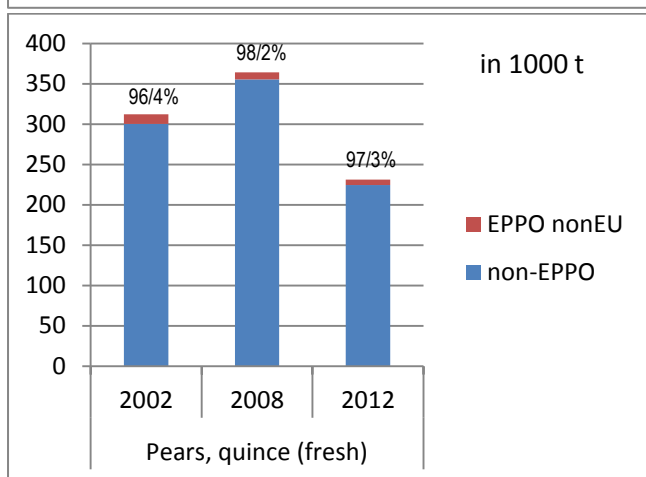
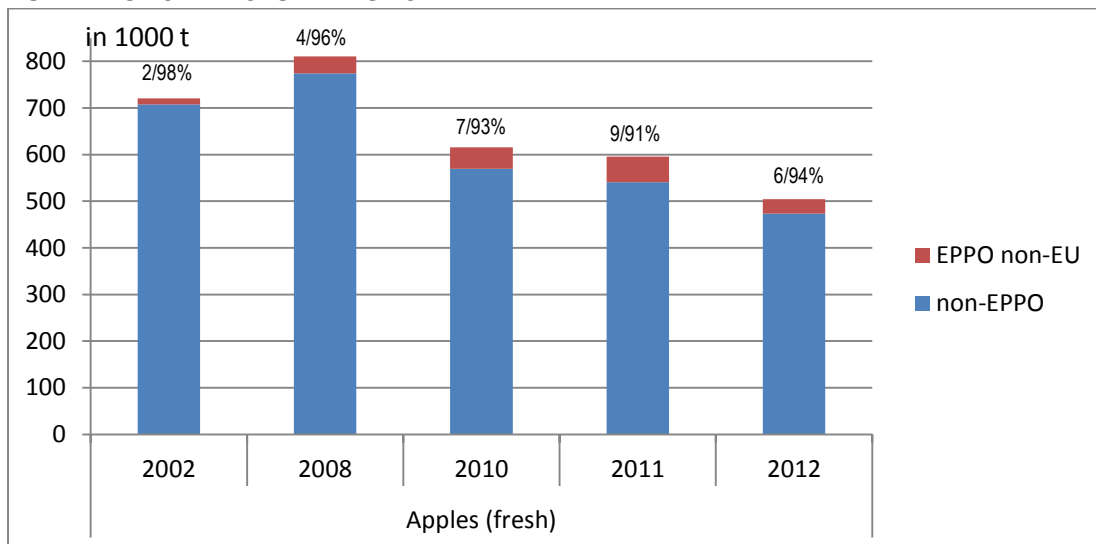
SMALL FRUITS



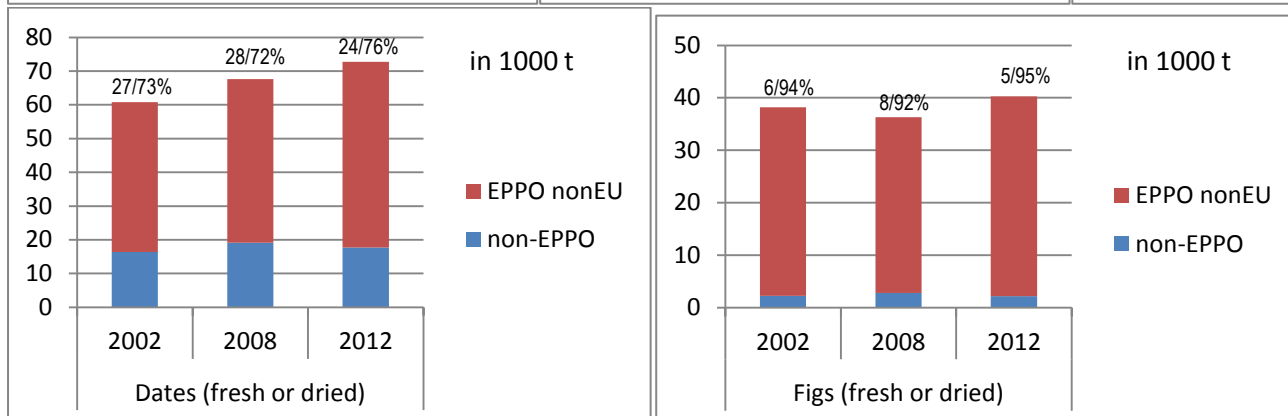
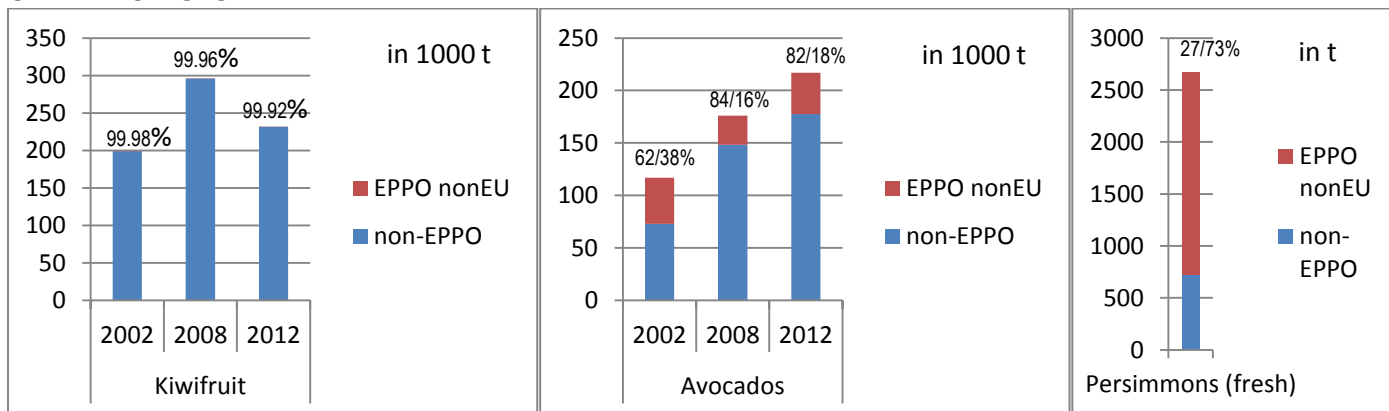
MELONS AND WATERMELONS



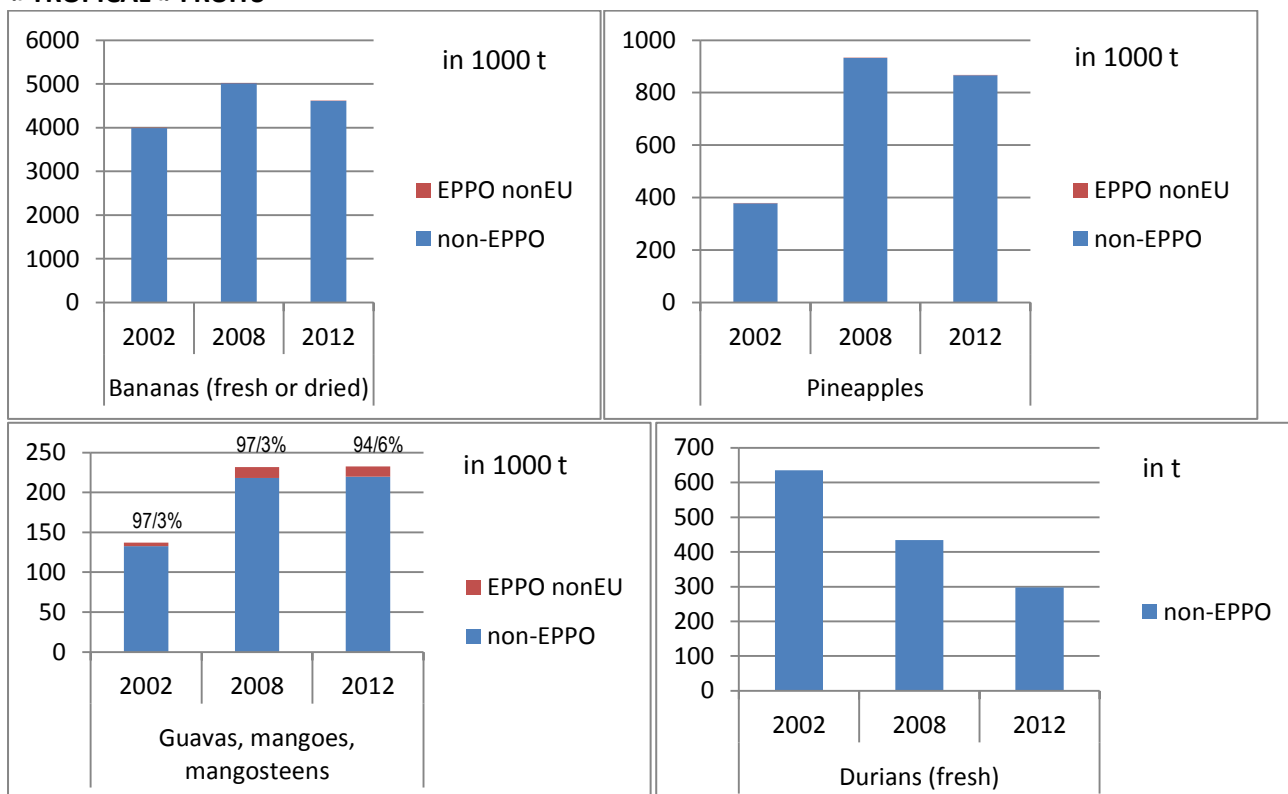
POME FRUITS AND STONE FRUITS

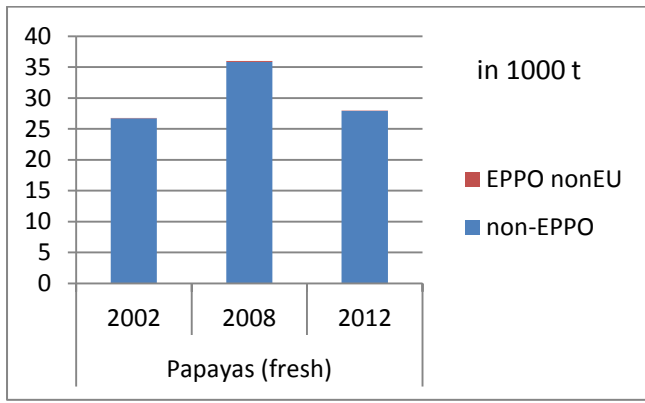


OTHER FRUIT GROWN IN THE MEDITERRANEAN AREA



« TROPICAL » FRUITS





4. Analysis of the data on production area and import volumes

Vineyards represent by far the largest fruit crop in the EU, with over 3.3 million hectares in 2012 (mostly for wine production). Citrus (collectively) and apple each occupy over 550 000 hectares in the EU. These fruits are also amongst the most imported into the EU with over 1.9 million tonnes for Citrus (collectively) and over 500 000 tonnes for fresh grapes and apples. The production areas for apples and grapes have decreased between 2002 to 2008 and to 2012, but remain major. Imports of fresh grapes from non-EU countries have substantially increased in 2002-2012 (by 200 000 t). Imports of apple seem to have decreased but are still substantial. Finally, regarding internal trade within the EU, Citrus (collectively), apples and bananas are the most traded fruits, amounting to 4.8 million t, 2.4 million t and 2.3 million t. As these volumes take account of fruit produced within the EU and re-exported fruit, it only indicates that internal trade is high.

From non-EU origins, bananas are by far the most imported fruit (with over 4.6 million t in 2012), while the volume of all Citrus species together reached over 1.9 million t, and pineapples 0.8 million t. In value, also bananas are most important, followed by grapes, apples and oranges (Figure 3c, from another dataset).

In 2002-2012, only a few species present substantial increases of production areas. These are (in order of variation): pomelos and grapefruit, "raspberry, blackberries, mulberries and longanberries", nectarines, avocados, kiwis and strawberries (see Table 2a)⁴. Among these, only grapefruit imports from non-EU countries have decreased in 2002-2012, especially from non-EPPO countries. Imports of some others show notable increases between 2002 and 2012 ("raspberry, blackberries, mulberries and longanberries", avocados) For avocado, Spain is the only producer with more than 1000 ha (and minor areas reported in France, Greece and Cyprus).

Many categories present a decrease of production area from 2002 to 2008 and to 2012, such as: figs, satsumas, gooseberries, melons, watermelons, plums, lemons and limes, other berries, peach, pears, mandarins, lemons and limes. Of these, watermelon, melon and cherries show an increase of imports from outside the EPPO region since 2002, and figs a quite stable import. Others ("lemons and limes", plums, "pears and quince") present a decrease of imports between 2008-2012 (after an increase in 2002-2012).

Finally both imports and production area of 'black, white, red current and gooseberries' have substantially decreased since 2002. Imports of durian have also decreased, and a small production area is recorded in the EU (300 ha).

The contribution of EPPO non-EU countries to EU imports depends on fruit groups. Over 2002-2012, it remained at a low level for most tropical fruits and has increased for most others. In 2008-2012, import volumes were notably higher only for other *Citrus* fruits (other than individual categories) and for cherries. Most other fruit categories showed an increase in import volumes from non-EPPO countries. For some, the increase was slight (e.g. bananas, papayas, citrus (except lemons and miscellaneous citrus), dates and figs). For others, it was a considerable increase (e.g. pineapples, 'guavas, mangos and mangosteens', avocados, kiwifruit, lemons and limes' (fresh or dried), miscellaneous citrus fruit, fresh grapes, watermelons and melons, strawberries, 'raspberries, blackberries, mulberries, longanberries', *Vaccinium*).

In 2008-2012, the only continuous increases in volumes of imports (EPPO or non-EPPO countries) are for *Vaccinium*, avocados and other Citrus (see footnote), cherries, as well as a slight increase of 'raspberries, blackberries, mulberries, longanberries', dates and figs. Imports of papayas in 2008-2012 decreased considerably, while 'guavas, mangoes and mangosteens' were stable. CBI (2013a) note that imports of lime increased by 35 % in 2008-2012, which is not reflected in the import data for the group "lemon and lime".

Vaccinium was analyzed separately as Eurostat does not give data on production areas. CBI (2013b) note that the production of France, The Netherlands, Poland and Germany amounted to 30 000 t in 2011 (while imports from non-EU countries reach 25 000 t). Import data in Eurostat show a continuous increase and doubling of imports from outside the EU between 2002 and 2012, with non-EPPO origins accounting for 80% of imports.

⁴ The category "small citrus fruit" or "other Citrus" also present substantial increases, but it is not clear if these categories have been recorded differently in previous years, nor what they cover exactly. The data for banana seems to present anomalies.

Bananas and pineapples are the most imported fruits (in volume), with respectively over 4.6 and 0.8 million t. CBI (2013c) indicates for pineapple that Portugal is the only EU producing country (small volume – 3000 t in 2011). Although Eurostat shows substantial production areas for banana, these data may reflect anomalies or changes in the recording of production (31 000, 10 000 and 9 000 ha reported in Bulgaria, France and Spain in 2012; no data for 2002 and 2008). A few other fruits imported in quantities over 10 000 t are not cultivated, or not important enough to be recorded separately in Eurostat, such as ‘guavas, mangoes and mangosteens’, as well as papayas. Papaya imports decreased considerably in 2008-2012, while ‘guavas, mangoes and mangosteens’ were stable with a larger proportion imported from EPPO non-EU countries, which may indicate a more general increase of production in Mediterranean countries. However, there was no data for production area in the EU, and these fruits are probably marginal at the scale of the EU. Other fruits not specifically studied here may be in the same situation, such as pomegranate. Not surprisingly, “tropical” fruits are mostly imported from outside the EPPO region. This is also the case of kiwifruit, which in the EU is cultivated mostly in Italy, and to a lesser extent in Greece, France, Portugal and Spain.

It should be noted that some figures may result from anomalies in the data rather than from actual increases/decreases of production areas. For example, the decrease of apricot production between 2008 and 2012 is due to a much larger area in Spain in 2008 compared to 2002 and 2012 (not logical for a tree crop); the increase of banana in 2008-2012 is detailed above; and “sour cherry” seems to appear in 2012, but was probably not recorded separately prior to this date (and is not included as a separate category in Figure 2a).

For nuts, production areas in the EU were relatively stable. Almond is the most widely-grown nut crop in the EU, with over 655 000 ha. For walnut, the overall area was stable, but there were important variations by country between 2002-2012, with substantial increase in Poland and Greece, and decrease in Bulgaria. Almond is also the most imported nut (over 210 000 t in 2012), followed by coconut (in all forms) and hazelnut.

5. Additional data on fruit trade to identify emerging trades

The EPPO Panel on Phytosanitary Measures was consulted on a preliminary selection of fruit, which was based on the above. It commented that the proposed selection did not take account of emerging risks due to lack of data. This is because Eurostat data is given at the species/genus only for ‘established’ trades (see section 3, bananas, apples); where wide categories are used, any increase in trade cannot be attributed to individual species/genera, and emerging trades cannot be identified. One major concern was that emerging trade of fruit may serve as a pathway for polyphagous pests, which may then transfer to widely cultivated species. The Panel noted that a detailed import database would be needed to allow identification of unknown emerging risks. However, such a database does not exist yet. It was decided that NPPOs of EPPO countries would be contacted to obtain additional data on imports of fruit (especially fruit not regulated in the EU, and for which specific data is missing). A request was sent for detailed data per genus and if possible per species, for fruit imports other than fruit species already recorded individually in custom databases, for 2013 and 2014.

Data was received from Austria, Cyprus, Czech Republic, Denmark, France, Germany, Israel, Lithuania, Malta, Poland, Romania, Slovenia, UK. Several other countries answered that they did not have data at a more detailed level than Eurostat (Belgium, Finland, Guernsey). The data varied in content and coverage, some countries providing selected data for non-regulated fruit, others data for a wide variety of commodities. Data came from a limited number of EPPO countries, most minor fruit importers (in volumes) of a limited number of species/genera of interest (i.e. not those already known as major trades). The origins were not always indicated (i.e. also covering fruit traded within the EU), including for some major fruit importers. Where they were indicated, many fruits imported by minor importers came from EPPO countries (e.g. Israel, Morocco, Tunisia, Balkans). Some data was provided at the level of fruit species/genera, and some to the same level as available in Eurostat (or slightly smaller groups). Only France and a few minor importing countries (in fruit volume) provided data both at the species/genus level and details on origins. Consequently due to the little number of answers giving data on origins for fruits potentially of interest (i.e. not already detailed in Eurostat), the data could not be used to identify emerging trades from non-EU origins, nor to draw an overall picture of origins from non-EU countries. Consequently, it was suggested that the priority list be retained as it was.

However, the data gave interesting information when at the level of fruit species/genus:

- Eurostat categories may be broader than intuitively understood (e.g. ‘apricot’, in addition to *P. armeniaca*, may contain *Prunus mume*, Japanese apricot; plum, in addition to *P. domestica*, may contain *P. americana* and *P. salicina*, American and Chinese/Japanese plums). These fruit may differ in their intended use and possibly also in the state in which they are imported.
- The large diversity of species in some categories, for example species and hybrids of *Citrus*, *Passiflora* species, *Annona* species.
- The large diversity of species/genera of other fruits; there are probably only a few species in “other nuts” because many nuts are individual categories in Eurostat.
- The difficulties of names in such data. For example, *Pyrus domestica* shows in the data, which in terms of scientific names is a synonym of *Sorbus domestica*. Data often records synonyms, which complicates data analysis (and, as for citrus, there may be several understandings of how the species are synonymized and classified).

The list below is partial because only few countries provided data at species level, and the list of traded species is presumably longer (e.g. *Garcinia mangostana*, mangosteens, in the category ‘guavas, mangoes and mangosteens’; blackberries, mulberries and longanberries in the category that includes raspberry). For most species below, the corresponding genera also appear in data without details of species.

Table 5. Fruit indicated as species level in trade data

Species were grouped below within the Eurostat categories. This was based on their common or Latin names, and may not correspond to the category/Customs code under which they were recorded. In some cases, it is not clear under which category/customs code they would fall in trade data (e.g. *Pyrus malus* is a synonym of *Malus sylvestris*; apples or pears?, *Citrus japonica* is a synonym of *Fortunella japonica*, other citrus or other fruit? Especially categories of citrus seem unclear).

Eurostat categories	Species mentioned in detailed trade data (with names as in EPPO Global database)
Individual categories of Citrus: oranges, mandarins, grapefruit, lemons and limes, others	Oranges : <i>C. aurantium</i> , <i>C. sinensis</i> Mandarins : <i>Citrus clementina</i> , <i>Citrus reticulata</i> (<i>C. nobilis</i>), <i>C. unshui</i> (<i>C. reticulata</i> var. <i>unshiu</i>), <i>C. reticulata</i> x <i>C. paradisi</i> , <i>C. tangerina</i> , <i>C. x tangelo</i> , Grapefruit : <i>C. maxima</i> (<i>C. grandis</i>), <i>C. paradisi</i> Lemons : <i>C. limon</i> (<i>C. limonum</i>) Limes : <i>C. aurantifolia</i> (<i>C. limonellus</i>), <i>C. latifolia</i> , Others : <i>C. hystrix</i> , ‘ <i>C. japonica</i> ’ (= <i>Fortunella japonica</i>), <i>C. junos</i> , <i>C. limetta</i> , <i>C. x limonia</i> , <i>C. medica</i> . (note. Some of these may be types of limes or lemons, but the Customs codes names limit these categories to the species above.
Apples	<i>Malus domestica</i> , <i>M. pumila</i> (<i>M. communis</i>), <i>M. sylvestris</i> (<i>Pyrus malus</i>)
Pears	<i>Pyrus communis</i> , <i>P. domestica</i> (<i>Sorbus domestica</i> ?), <i>P. pyrifolia</i>
Quinces	<i>Cydonia oblonga</i> (<i>C. vulgaris</i>), <i>C. sinensis</i> (= <i>Chaenomeles sinensis</i>)
Cherries	<i>Prunus avium</i> , <i>P. cerasus</i> (<i>P. vulgaris</i>)
Peaches (incl. nectarines)	Peaches : <i>Prunus persica</i> Nectarines : <i>P. persica</i> var. <i>nucipersica</i>
Apricots	<i>P. armeniaca</i> , <i>P. mume</i>
Plums and sloes	Plums : <i>Prunus domestica</i> (<i>P. sativa</i>), <i>P. americana</i> , <i>P. salicina</i> Sloes : <i>P. spinosa</i>
Black, white or redcurrants and gooseberries	black currant : <i>Ribes nigrum</i> red currant : <i>R. rubrum</i> (<i>R. sativum</i>) gooseberry : <i>R. uva-crispa</i>
raspberries, blackberries, mulberries and loganberries	Raspberry : <i>Rubus idaeus</i>
Cranberries, bilberries, other vaccinium	Cranberries : <i>V. macrocarpon</i> Bilberries/blueberries : <i>Vaccinium corymbosum</i> , <i>V. myrtillus</i> Lingonberry : <i>V. vitis-idaea</i>
Guavas, mangoes and mangosteens	Guavas : <i>Psidium cattleianum</i> , <i>P. guajava</i> Mangoes : <i>Mangifera indica</i> , <i>M. odorata</i>
bananas	<i>Musa acuminata</i> , <i>M. paradisiaca</i> (<i>M. sapientum</i>)
Other fruit: tamarinds, cashew apples, jackfruit,	Litchis : <i>Litchi chinensis</i> , <i>Nephelium lappaceum</i> (rambutan) Passionfruits: <i>Passiflora edulis</i> , <i>Passiflora edulis</i> f. <i>flavicarpa</i> , <i>Passiflora laurifolia</i> , <i>Passiflora</i>

lychees, sapodillo plums, passion fruit, carambola, pitahaya, other edible fruit (excl. others listed)	<i>ligularis</i> , <i>Passiflora mollissima</i> Carambola : <i>Averrhoa carambola</i> Pitahaya : <i>Hylocereus undatus</i> Custard apples : <i>Annona cherimola</i> , <i>A. muricata</i> , <i>A. reticulata</i> , <i>A. squamosa</i> Jujubes : <i>Ziziphus jujuba</i> , <i>Z. mauritiana</i> Pomegranate : <i>Punica granatum</i> Others: <i>Murraya koenigii</i> , <i>Fortunella margarita</i> , <i>Amelanchier</i> , <i>Syzygium samarangense</i>
Other nuts	<i>Carya illinoensis</i> (pecan), <i>Pinus pinea</i> (pine nuts), <i>Myristica fragrans</i> (nutmeg)

6. Priorities for further study

The main factors leading to the establishment of priorities are summarized in the table. Imports refer to imports from outside the EU.

1.	Apple	2 nd largest production area for fruit, throughout the EU (over 550 000 ha) Large imports (over 500 000 t, rank 5 of all fruits), despite decrease Perennial crop Important crop for EU countries History of interceptions of pests on fruit (Note: fruit regulated for some pests, e.g. <i>Carposina niponensis</i> , <i>Cydia</i> spp.)
2.	<i>Vaccinium</i>	Continuous increase of imports from outside the EU in 2002-2012 (reaching 25 000 t) 30 000 t produced, commercial production extending to the North of the EU. Wild indigenous species also important for fruit picking and ecosystems in the EU Perennial crop Note: fruit not regulated
3.	Grapes	1 st production area, throughout the EU (3.3 million ha) Large imports (577 000 t) High value crop, especially for wine production Perennial crop A few pests intercepted on fruit (Note : fruit not regulated)
4.	Orange and mandarins	Large production areas (>420 000 ha together) The largest imports among Citrus; 3 rd and 10 th fruits imports, with large volumes (over 816 000 t and 317 000 t) Widely grown in Mediterranean countries Large number of interceptions on fruit (Notes: Fruit regulated for some pests) Due to the importance of most <i>Citrus</i> in the EU, the study focuses on these species, but pests of other <i>Citrus</i> species will also be recorded, although in a less systematic way. The listed in section 5 will be kept in mind.
5.	Raspberries*	Increasing production area (over 37 000 ha, with 68% increase since 2002) Continuous increase of imports ("raspberries, blackberries, longanberries") from non-EPPO origins in 2002-2012. Within this category, raspberries are known to be imported (see section 5.) Note: fruit not regulated
6.	Cherries*	Major production, although slightly decreasing (over 176 000 ha, with 10.7% decrease in 2002-2012) Substantial imports (over 47 000 t), nearly doubled since 2002 and increasing from non-EPPO countries (although most cherries are imported from EPPO countries) Note: fruit of <i>Prunus</i> regulated
7.	Nectarines and peaches	Major increase of production area of nectarine (reaching 79 000 ha with 31% increase since 2002) Major production area for peach (over 178 000 ha) Substantial imports (32 000 t for nectarines and peach) In the EU, mostly grown commercially in Mediterranean and Eastern countries Note : fruit of <i>Prunus</i> regulated
8.	Kiwis	Increasing production area (38 000 ha, +18% from 2002) Large imports from non-EU countries, increasing (over 232 000t) However, few producers in the EU, in the Mediterranean area Note: fruit not regulated
9.	Strawberries	Large production area, increasing (106 000 ha, +17% from 2002) Moderate imports (39 000 t) and mostly from within EPPO Dropsa focuses on <i>Drosophila suzukii</i> , and fruit of strawberry is one of the pathways considered. Note: fruit not regulated

* In discussions with the EPPO Panel on Phytosanitary Measures, it was suggested that the priority order of raspberry and cherry be reconsidered at a later date if appropriate.

The following species were not retained in the priority list.

10.	Avocadoes	Small but increasing production (11 000 ha) and large imports (271 000 t) Only major producer in the EU is Spain (over 10 000 ha) Note: not considered a fruit by all Note: fruit not regulated
11.	Pomelos and grapefruit	Small but increasing production (3400 ha, +112% from 2002) and large imports (8 t fruit imports, 350 000 t) Will be covered to a certain extent by "orange and mandarins"
12.	Lemons and limes	3 rd Citrus production area (>79 000 ha) and large imports (6th fruit imports, 420 000 t) Will be covered to a certain extent by "orange and mandarins"
13.	Other citrus	Small production with a large increase (2800 ha +47% from 2008) and small imports (5000 t) Major uncertainty on the species concerned and whether the increase is real or due to different way of registering data for <i>Citrus</i> species over the years. Some of the species traded are listed in section 5. Will be covered to a certain extent by "orange and mandarins"
14.	Guavas, mangoes and mangosteens	Many interceptions in trade, but limited production in the EU
15.	Pomegranates	Possibly increasing production, but still small and concerning a few countries
16.	Pears, quinces	For pome fruit, considered less important than apple, already selected
17.	Apricots	For <i>Prunus</i> , considered less important than peach, nectarine and cherry, already selected
18.	Other berries: blackberries, mulberries, loganberries, currants, gooseberries etc.	Raspberry considered more important in terms of area among <i>Rubus</i> ; <i>Vaccinium</i> and strawberries assessed to be more important than other berries
19.	Melon and watermelon	Grown mostly in Mediterranean countries. Some interceptions, and large production area, but mostly imported from close areas (Mediterranean Basin)
20.	Almond	Large production area (over 575 000 ha). However, introduction with soft fruit considered more likely than with fruits with shell, which may also be imported dry. Other <i>Prunus</i> selected (peach, nectarine, cherries)
21.	All other nuts	Minor compared to fruit. May be imported dry, i.e. less likely to introduce pests.

ANNEX 1. Areas of production of fruit and nuts in the EU 28 countries (based on Eurostat)

Some categories are totals of others (e.g. vineyards (all)).

When sums were missing for one country, they were added. Major missing figures (over 1000 ha) are highlighted in green, and a corrected total for the EU is provided (with missing figure added for that country, based on mean of 2002-2012 (if 2008 missing) or based on previous/following year (for 2002 and 2012)). The aim is not to obtain a precise figure, but to cancel seemingly huge variations in total EU due to missing data.

[Totals and corrected totals sometimes at the end of the table, sometimes at the top.]

Table 1. Grapevine

Table 2. Citrus fruits

Table 3. Figs, kiwis, avocados, bananas

Table 4. Apple, pear, quince

Table 5. Stone fruits

Table 6. Berries, excluding strawberries

Table 7. Strawberries, melons and watermelons

Table 8. Nuts

Table 1 Grapevine (1000 ha)

	Vineyards (all)			Vineyards for table grapes			Vineyards for raisins			Vineyards for wine		
	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012
Total EU	3.986,1	2.522,3	2.520,0	156,3	101,7	55,4	49,8	32,7	21,7	3.779,3	2.387,3	2.442,0
Corrected		3586	3308									
Austria	46	45,6	43,6	0	0	0				46	45,6	43,6
Belgium												
Bulgaria	145,2	110,8	60,4	12,8	3,4	2,2				132,4	107,4	58,2
Croatia	57,7	33,7	29,3							57,7	33,7	29,3
Cyprus	15,1	8,4	6,7	1,1	0,4	0,4				13,9	8,1	6,4
Czech Rep.	10,8	16,4	15,7	0	0	0				10,8	16,4	15,7
Denmark												
Estonia												
Finland												
France	862,0	853,6	760,9	9	7,3	5,5				852,6	846,3	755,4
Germany	98,8	99,7	99,5							98,8	99,7	100
Greece	131,6	86,8	99,2	13	5,2	18	47,2	32,7	20	71,4	48,8	61,3
Hungary	81,9	82,6	75,5	2,6	2,7	3,7				79,3	79,3	71,8
Ireland												
Italy	871,6	788,1		73,6	73,1					798	715	
Latvia												
Lithuania												
Luxembourg	1,3	1,2	1,2							1,3	1,2	1,2
Malta			0,6			0,1						0,5
Netherlands	0	0,1	0	0	0	0				0	0,1	0
Poland	0	0,3	0,5	0	0	0				0	0,3	0,5
Portugal	216,6	187,8	179,5	5,5	2,8	2,5				211,1	185	177
Romania	232	181,4	176,5	14,9	6,7	8,4				217,1	174,7	168
Slovakia	13	9,7	10,5	0	0,1	0,1				12,8	9,6	10,4
Slovenia	16,6	16,1	16,4							16,6	16,1	16,4
Spain	1.185,9		943	23,8		14,5	2,6		1,7	1.159,5		926,8
Sweden												
UK			1									

Table 2. Citrus fruits (only countries with production are listed) (1000 ha)

	Citrus fruits			Pomelos and grapefruit			Lemons and limes			Oranges			Small citrus fruits			Satsumas			Clementines			Other citrus		
	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012
Total	580,8	255,6	388,4	1,6	0,9	3,1	94,6	37,3	48,9	308,7	161,7	205,8	6,8	3,6	127,3	10,9	7,6	7,6	130,6	121,5	90,7	5,7	1,9	2,8
Corrected		562	561		1,9	3,4		80,6	79		305	308									118			
Bulgaria	:	:	0	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Greece	59,6	54,7	49,9	0	0	0,6	12	5,6	7,2	40,9	39,5	35,3	:	:	6,8	0,3	0,1	0	3,3	4	6,8	0	0	0
Spain	305,5	:	310,5	1	:	1,9	47,1	:	39,5	135,4	:	152	:	:	115,8	10,6	7,5	7,6	101,9	87	81,9	3,2	:	:
France	2,2	1,8	3,7	0,3	0,2	0,3	0	:	0,8	0	:	0,8	:	:	0	0	:	0	1,9	1,6	1,8	0	:	:
Croatia	1,4	1,5	1,9	:	:	:	0	0	0	0,2	0,2	0	:	:	1,8	0	0	0	0	0	0	:	0	:
Italy	179,5	172,3	:	0,3	0,3	:	33,4	30,1	:	109,3	102,3	:	:	:	:	:	:	23,5	28,6	:	1,5	1,5	:	
Cyprus	5,5	4,2	2,6	0	0,4	0,3	1,1	0,7	0,5	1,9	2,4	1,2	1,7	0,7	0,5	:	:	:	0	0,3	0,2	1	0,4	0,5
Malta	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0	:	:	:	:	:	:
Portugal	27,1	21,1	19,8	0	0	0	1	0,9	0,9	21	17,3	16,5	5,1	2,9	2,4	:	:	:	:	:	:	:	:	2,3
Romania	:	0	:	:	0	:	:	0	:	:	0	:	:	:	:	0	:	:	0	:	:	0	:	0
Slovenia	0	0	0	:	:	:	:	:	:	:	:	:	0	0	0	:	:	:	0	0	0	:	:	:

Table 3. Figs, kiwis, avocado, bananas (1000 ha)

	Figs			Kiwis			Avocados			Bananas		
	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012
Total EU	38,7	39,2	21,3	31,9	35,4	14,4	9	0,1	11,4	1,3	1	51,9
Corrected			24			38,1		9				
Bulgaria	0	0,1	0	0	0	0	:	:	0	:	:	31,2
Greece	7	4,8	4,1	3,4	4,8	7,3	0	0	0,4	0	0	0,1
Spain	19,3	25,9	12,2	1,2	1,2	1,4	9	:	10,6	:	:	9,2
France	0,5	0,4	0,4	4,2	4,2	4	0	0	0,3	:	:	10,2
Croatia	0,3	0,4	0,2	0	0	0	:	:	:	:	:	
Italy	4,7	2,7	:	22	23,7	:	:	:	:	:	:	
Cyprus	0	0,3	0,1	0	0	0	0	0,1	0,1	0	0	0,2
Malta	:	:	0	:	:	:	:	:	:	:	:	
Austria	:	:	0	0	0	0	:	:	:	:	:	
Portugal	6,9	4,6	4,3	1,1	1,5	1,7	:	:	:	1,3	1	1
Romania	:	:	:	:	0	:	:	0	:	:	:	
Slovenia	0	0	0	0	0	0	:	:	:	:	:	

Table 4. Apple, pear, quince (1000 ha)

	Apples			Pears			Quinces		
	2002	2008	2012	2002	2008	2012	2002	2008	2012
Total EU	631,0	510,0	498,1	151,1	106,6	90,9	1,6	14,3	0,6
Corrected		564	557		143	131			?
Austria	5,9	6	6,1	0,4	0,4	0,4	0	0	0
Belgium	8,6	8,1	7,1	6,3	8,1	8,6	:	:	:
Bulgaria	8,3	5,4	4,6	0,5	0,6	0,4	0	0,5	0
Croatia	5,4	6,4	5,8	1	1,5	1,2	:	0	:
Cyprus	1,1	0,9	0,7	0	0,1	0,1	0	0	0
Czech Republic	8,9	10	9,4	0,3	0,6	0,9	:	:	:
Denmark	1,4	:	1,4	0,4	:	0,4	:	:	:
Estonia	0,6	0,9	0,7	0	0	0	:	:	:
Finland	0,6	0,7	0,6	0	0,1	0	:	:	:
France	60,3	52,2	41,1	9,7	7,3	6	0,2	:	:
Germany	31,2	31,8	31,6	2,1	2,1	1,9	0	0	0
Greece	14,3	12,2	13,5	4,1	4	4,9	0	0	0
Hungary	35,8	43,1	35,7	2,2	3,2	3,1	0,1	0,1	:
Ireland	0	:	0,5	:	:	:	:	:	:
Italy	64,4	59,1	:	45,8	40,7	:	0,1	0,1	:
Latvia	8,2	5,1	2,5	0,7	0,3	0,2	0	0,1	0
Lithuania	35,1	10,4	11,8	:	0,8	0,9	0	0,1	0
Luxembourg	1,1	0,2	0,2	0,2	0	0	:	:	:
Malta	:	:	0	:	:	0	:	:	:
Netherlands	11,2	9,3	7,9	6,3	7,5	8,2	:	:	:
Poland	168,5	172	194,7	14,4	13	10,9	:	0	0
Portugal	19,7	13,8	12,9	12,3	11,2	11,2	0,2	0,5	0,6
Romania	72,4	54,7	55,4	6,1	4,6	3,9	:	0,8	:
Slovakia	3,7	3,4	2,9	0,1	0,1	0,2	:	:	:
Slovenia	3,1	2,9	2,7	0	0,2	0	:	:	:
Spain	43,2	:	30,8	36,2	:	25,5	1	12,1	:
Sweden	1,3	1,4	1,5	0	0,2	0	0	0	0
UK	16,7	:	16	2	:	2	:	:	:

Table 5. Stone fruits (except almonds, see nuts)- (1000 ha) note, the general category stone fruits should indicate a total in Eurostat, but some data seem to be missing

	Stone fruits			Peaches			Nectarines			Apricots			Cherries			Sour cherries			Plums		
	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012
Total EU	751,9	733,8	565,5	200,8	181,1	117,6	59,5	71,7	45,6	80,0	148,1	53,5	196,7	159,5	146,9	0,0	0,0	62,0	208,3	169,3	155,5
Corrected			722			178			78,6			72		185	176					185	170
Austria	1,1	1,1	1,3	0,3	0,2	0,2	0	0	0	0,4	0,5	0,6	0,1	0,2	0,3	0	0	0	0,3	0,2	0,2
Belgium	1,3	1,3	1,6	0	:	:	:	:	:	:	:	:	1,2	1,3	1,1	:	:	0,4	0,1	0,1	0,1
Bulgaria	44,5	45,3	22,5	5,2	6	4,1	0	0	0	7,2	7,5	2,6	12,7	15,4	8,5	:	:	1,5	19,5	16,4	5,8
Croatia	8,6	9,6	13,6	0,8	1,2	1,4	:	:	0,2	0,2	0,3	0,3	1,7	3,3	3,4	:	:	2,6	5,9	4,8	5,7
Cyprus	1,3	1,5	1,5	0	0,4	0,2	0	0,3	0,1	0	0,2	0,3	0	0,2	0,3	:	:	:	0	0,3	0,6
Czech Rep.	6,1	6,7	6,6	1,3	1	0,7	0	0	0	1,7	1,4	1,3	2,5	2,8	2,7	:	:	1,6	0,6	1,5	2
Denmark	2,6	0	2,8	0	0	0	0	0	0	:	:	:	2,5	:	1,4	:	:	1,3	0,1	:	0,1
Estonia	0,1	0,1	:	:	:	:	:	:	:	:	:	:	0	0	0	:	:	:	0	0	0
Finland	0	0	0	:	:	:	:	:	:	:	:	:	0	0	0	0	0	0	0	0	0
France	66	57	53,5	12,2	8	6,4	7,7	6,8	5,5	14,8	14	13,8	12,2	10,8	9,6	:	:	:	19,2	17,2	18,2
Germany	14,7	14	14,2	0	0	0	:	:	:	0	0	0	9,6	8,9	7,5	:	:	2,3	5	5,1	4,4
Greece	62,9	59,2	62,4	42,5	36,9	37	5,5	5,7	7,1	5,4	5,3	6,3	8,7	8,2	10,4	:	:	0,1	0,8	0,8	1,5
Hungary	36,5	39,2	52	7,3	7,6	6,5	:	:	0,3	6	6,1	5,1	16	17,2	17,2	:	:	14,5	7,3	8,3	8,4
Ireland	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Italy	162,3	156,5	:	67,5	60,1	:	33	33	:	16,8	18,6	:	30,5	29,7	:	:	:	:	14,1	14,5	:
Latvia	1,9	0,4	0,2	:	:	:	:	:	:	:	:	:	1	0,2	0,1	0	0	0	0,9	0,2	0,1
Lithuania	2,5	2,4	2,4	:	:	:	:	:	:	:	:	:	:	0,9	0,8	:	:	0,8	:	0,9	0,8
Luxembourg	0,9	0	:	:	:	:	:	:	:	:	:	:	0,1	0	0	:	:	:	0,8	0	0
Malta	:	:	0,2	:	:	0,2	:	:	0	:	:	0	:	:	:	:	:	:	:	:	0
Netherlands	1	1	1	:	:	:	:	:	:	:	:	:	0,5	0,7	0,7	:	:	0	0	0,3	0
Poland	83,8	72,1	103,4	4,1	3,2	3,4	0	0	0	1,9	1,7	1,7	50,9	46,1	45,3	:	:	33,7	26,9	21,1	19,3
Portugal	14,5	11,6	11,6	6,3	4	3,8	0	0	0	0,6	0,4	0,4	5,6	5,6	5,8	0	0	0	2	1,6	1,6
Romania	106,6	87,5	82,9	3,3	1,6	1,9	0	0	0,1	3,9	2,9	2,5	11,7	7,6	6,8	:	:	3,1	87,8	75,3	68,5
Slovakia	2,1	1,8	1,5	0,8	0,7	0,5	:	:	:	0	0,2	0,2	0	0,2	0,1	0	0	0,1	0,6	0,6	0,6
Slovenia	0,9	0,7	:	0	0,5	0	0	0	0	0	0	0	0	0,1	0	0	0	0	0	0	0
Spain	127,9	164,6	143,5	49,2	49,7	51,3	13,3	25,9	32,3	21,1	89	18,4	28,8	:	24,9	:	:	0	15,5	:	16,6
Sweden	0,4	0,2	:	:	:	:	:	:	:	:	:	:	0	0,1	0	:	:	:	0	0,1	0
UK	1,4	:	1	:	:	:	:	:	:	:	:	:	0,4	:	0	:	:	:	0,9	:	1

Table 6. Berries (excluding strawberries) (1000 ha)

Note: for some countries, the first category (berries (excl. strawberries)) is a total of others – it is not the case for all countries

	Berries (excl. strawberries)			Currants			Black currants			Red currants			Raspberries			Gooseberries			Other berries n.e.c.		
	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012
Total	127,0	125,8	100,9	57,9	63,0	53,8	43,0	47,6	50,5	13,3	13,6	13,1	19,8	27,5	36,8	4,3	3,6	3,4	25,6	27,1	15,4
Corrected							50	53					22	28,5					27		24
Austria	0,3	0,4	0,5	0,3	0,2	0,2	0,2	0,2	0,1	0	0,1	0	0,2	0,2	0,2	0	0	0	0	0	0,1
Belgium	21,1	0,2	:	0,1	0,1	:	0	:	:	0	0,1	:	0	0,1	0,1	0	0	:	0,1	0,1	:
Bulgaria	0	1,7	0	0	0	0	0	0,1	0	0	0	0	1,3	1,4	1,4	0	0	0	0	0,2	0
Croatia	0	0	:	:	0	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:
Cyprus	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Czech Rep.	:	1,4	1,2	1,2	1,4	1,2	0,3	0,4	1,2	0,9	1,1	0,8	0	0	0	0	0	:	0	0	0
Denmark	2,5	:	:	1,9	:	:	1,9	:	1,9	0	:	:	0	:	0	:	:	:	0,6	:	:
Estonia	0,5	1,6	:	0,3	0,4	:	0,1	0,3	0,2	0	0	0	0	0	0,1	0	0	0	0	0	0
Finland	3,1	3,1	2,6	2,4	2,2	1,9	2	1,9	1,3	0,2	0,3	0,3	0,4	0,5	0,3	0	0	0	0	0,4	0
France	4,2	3,5	:	2,8	2,3	:	2,4	2	2,5	0,3	0,3	:	1,4	1,2	0,7	:	:	:	:	:	:
Germany	:	:	:	:	2	:	:	:	1,6	:	:	:	:	1,1	1	:	0,2	:	:	2,3	:
Greece	0	0	0	:	:	:	:	:	0	:	:	:	:	:	0	:	:	:	:	:	:
Hungary	6,9	7,7	:	2,4	2,6	2,3	1,2	1,1	1,1	1,2	1,5	1,2	1,7	1,3	0,7	0,4	0,4	0,3	2,4	3,4	:
Ireland	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Italy	8,9	9,6	:	0,1	0,1	:	0	:	0	:	:	:	0,2	0,3	:	0	0	:	8,7	9,2	:
Latvia	1,2	1,1	:	0,9	0,9	:	0,6	0,8	0,6	0,3	0,1	:	0,1	0,1	0,2	0,1	0	:	0	0,1	0
Lithuania	4,2	8,7	6,8	:	5,5	3,8	:	5,2	3,4	0	0,4	0,4	:	0,9	1,1	0	0,1	0	:	2,1	1,9
Luxembourg	0	0	:	:	0	:	:	0	:	:	0	:	:	0	0	:	0	:	:	0	:
Malta	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Netherlands	1,1	1,4	1,5	0,8	0,9	0,8	0	0,6	0	0	0,3	0	0	0,1	0	0	0	0	0,2	0,5	0,7
Poland	65,8	74,6	88,3	42,3	43,3	43,6	32	34,1	34,3	10,3	9,2	10,4	13,4	20	28,4	3,6	2,9	3,1	6,5	8,4	12,4
Portugal	0,1	0,2	:	:	:	:	0	0	0	:	:	:	0	0	0,2	:	:	:	0,3	0,3	0,3
Romania	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Slovakia	0	0,8	0	0	0,7	0	0	0,5	0,3	0	0,2	0	0	0,1	0	0	0	0	0	0,1	0
Slovenia	0	0	:	0	:	:	0	0	0	:	:	:	0	0	0	:	:	:	0	0	:
Spain	6,4	:	:	:	:	:	:	:	0	:	:	:	:	:	1,4	:	:	:	6,4	:	:
Sweden	0,7	:	:	0	0,4	0	0	0,4	0	0	0	0	0	0,2	0	0	0	0	0	0	0
UK	:	9,8	:	2,4	:	:	2,3	:	2	0,1	:	:	1,3	:	1	0,2	:	:	0,4	:	:

Table 7. Melon watermelon and strawberries (1000 ha)

Eurostat includes a category "melons and strawberries" which seems to be the total of melon, watermelon and strawberries.

Note: the category of "strawberry under glass or high accessible cover" seems to be covered under "strawberry" for most countries

	Melons			Watermelons			Strawberries			Strawberries under glass or high accessible cover		
	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012
Total EU	103,0	91,8	75,7	104,4	78,9	79,0	90,3	101,2	103,1	0,0	0,0	13,8
Corrected		94						105	106			
Austria	0	0	0	0	0	0	1,1	1,3	1,3	0	0	0
Belgium	0	:	:	:	:	:	1,3	1,6	1,6	:	:	:
Bulgaria	3	1,2	1,3	7,9	3,5	3,1	2,4	1,2	0,7	0	0	0
Croatia	3,5	0,2	0,1	1	1,2	0,5	0,1	0,2	0,2	:	:	0,1
Cyprus	0	0,2	0,1	0	0,4	0,3	0	0,1	0	:	:	:
Czech Rep.	0	0	0	0	0	0	0,3	0,7	0,5	0	0	0
Denmark	:	:	:	:	:	:	0,8	:	1,1	:	:	:
Estonia	:	:	:	:	:	:	0,7	0,3	0,4	0	0	0
Finland	:	0	:	:	:	:	4,1	3,2	3,4	:	:	0
France	15	14,7	14,5	0,2	0,2	0,2	3,8	3	3,2	:	:	1,6
Germany	:	:	:	:	:	:	9,9	13	15	:	:	0,4
Greece	8,5	6,6	4,5	15,7	13,1	13,1	0,5	0,7	1,1	:	:	1,1
Hungary	0,8	0,9	0,7	9,5	7,9	5,9	0,5	0,6	0,6	:	:	:
Ireland	:	:	:	:	:	:	0,1	:	0,5	:	:	0
Italy	24,7	28,2	20,6	15,5	11,1	8,7	6,4	6	2	:	:	2,7
Latvia	:	:	:	:	:	:	1,1	0,4	0,3	0	0	0
Lithuania	:	:	:	:	:	:	1,1	1,4	1	0	0	0
Luxembourg	:	:	:	:	:	:	0	0	0	:	:	:
Malta	:	:	0,2	:	:	0,1	:	:	0	:	:	:
Netherlands	:	:	:	:	:	:	1,4	1,6	1,8	:	:	0,3
Poland	:	0	:	:	0	0	38	54,2	50,6	:	:	0,1
Portugal	3,9	:	1,4	1	:	0,7	0,5	:	0,5	:	:	0,1
Romania	4,3	3,7	4,1	37,5	25,9	27,2	1,8	2,6	2,3	0	0	0
Slovakia	0,1	0,1	0,1	0,5	0,2	0,2	0,2	0,2	0,2	:	:	:
Slovenia	0	0	0	0	0	0	0	0,1	0	0	0	0
Spain	39,2	36	28,1	15,6	15,4	19	8,9	6,8	7,6	:	:	7,4
Sweden	0	0	0	0	0	0	2,2	2	2,2	0	0	0
UK	:	:	:	:	:	:	3,1	:	5	0	0	0

Table 8. Nuts (1000 ha)

	Walnuts			Hazelnuts			Almonds			Chestnuts			Other nuts n.e.c.		
	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012	2002	2008	2012
Total EU	56,8	85,1	70,7	98,1	81,8	26	719,7	130	575,8	45,7	52,1	78,3	23,1	19,5	0
Corrected					95	97		680	655	74	80				19,4
Austria	0	0,1	0,1	0	0	0	0	0	0	0	0	0	0	0	0
Belgium	:	:	0	:	:	0	:	:	:	:	:	:	:	:	:
Bulgaria	11,5	8,9	2,6	0	0,7	0,3	0	1,9	0,8	0	0	0	:	:	:
Croatia	5,3	6,9	3,7	:	1,9	2,6	0,3	0,5	0,2	0	:	0	:	:	:
Cyprus	0	0,3	0,2	0	0,1	0	3,6	3,6	3,2	:	:	:	0	0,1	0
Czech Rep.	0	0,3	0,2	0	0	0	0	0	0	0	0	0	0	0	0
Denmark	:	:	:	0	:	:	:	:	:	:	:	:	:	:	:
Estonia	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Finland	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
France	14,9	17,1	19,1	2,4	3,2	4,3	1,5	1,3	1,2	7,2	7	7,2	:	:	:
Germany	0,1	0	:	:	:	:	:	:	:	:	:	:	:	:	:
Greece	7,3	13,7	10,9	1,3	0,8	0,4	20,2	14,5	13,5	7,4	10,6	6,9	5,7	2,3	:
Hungary	3,6	4,2	5,2	0,1	0,1	0,2	0,2	0,2	0,2	0,5	0,8	0,6	:	:	:
Ireland	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Italy	0	:	:	69,6	71,1	:	86,4	79,5	:	:	:	:	3,6	3,7	:
Latvia	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Lithuania	0	0	0	0	0	0	:	:	:	:	:	:	:	:	:
Luxembourg	0,1	0	0	:	:	:	:	:	:	:	:	:	:	:	:
Malta	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poland	3,5	19,6	16,5	1,7	3,1	3,7	:	:	:	:	:	:	:	:	:
Portugal	2,9	2,7	2,8	0,6	0,4	0,4	35,7	28,5	27,2	30,6	33,7	34,8	13,8	13,4	:
Romania	2,1	1,7	1,4	0	0	0,2	:	:	0	0	0	0	:	:	:
Slovakia	0	0	0,1	0	0	0	0	0	0	0	0	0	0	0	0
Slovenia	0	0,1	0	0	0,4	0	0	0	0	0	0	0	:	:	:
Spain	5,5	9,5	7,9	22,4	:	13,9	571,8	:	529,5	:	:	28,8	:	:	:
Sweden	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
UK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANNEX 2. Import volumes into the EU (quantities in 100 kg)

Table 1. Grapevine

Table 4. Apple, pear, quince

Table 7. Strawberries, melons and

Table 2. Citrus fruits

Table 5. Stone fruits

watermelons

Table 3. Figs, kiwis, avocados, bananas

Table 6. Berries, excluding strawberries

Table 8. Nuts

Table 1 – Grapevine

	2002	2004	2006	2008	2009	2010	2011	2012
GRAPES (FRESH)								
Non-EPPO	3501434	4068272	5413133	5992081	5706026	5287661	4939127	5276290
EPPO non-EU	462549	762264	734273	578887	502984	457645	478134	491168
EU internal	8 221 113	9 520 408	10 173 818	11 854 534	10 681 210	10 039 379	10 233 527	10 043 350
GRAPES (DRIED)								
Non-EPPO	1082002	1286083	1230982	1680357	1229121	1531105	1409872	1240059
EPPO non-EU	1768831	1829803	2084815	1686703	2025775	1870035	1907360	1955464
EU internal	683 225	648 056	712 425	634 059	632 384	717 913	679 360	658 950

Table 2. Citrus

	2002	2004	2006	2008	2009	2010	2011	2012
Oranges								
Non-EPPO	5313496	5833835	6643319	8318564	6880496	8030447	6655137	6938696
EPPO non-EU	2297391	2233297	2357737	2113932	1655611	1503477	1403202	1218383
EU internal	20 509 041	22 464 283	19 129 303	18 959 047	20 326 987	19 958 607	19 868 259	20 777 178
Mandarins (incl. tangerines and satsumas, clementines, Wilkings and similar Citrus hybrids)								
Non-EPPO	1209553	1474796	1733969	1862443	1826253	1876489	1681128	1731490
EPPO non-EU	2104453	1924499	1899026	1717593	1865896	2006728	1685608	1440367
EU internal	13 563 270	14 900 147	16 318 703	15 463 509	15 525 845	15 747 692	16 311 223	17 146 273
Grapefruit								
Non-EPPO	2705554	2092170	2089497	2986558	2667158	2482349	2435552	2210096
EPPO non-EU	1359383	1321888	1623120	1341543	1350490	1336174	1096273	1286891
EU internal	1 730 415	2 080 161	2 027 073	2 469 631	2 460 017	2 516 836	2 355 836	2 318 019
Fresh or dried lemons "Citrus limon, C. limonum" and limes "C. aurantifolia, C. latifolia"								
Non-EPPO	2413164	2790819	3124023	4298723	3020548	3418308	3089670	3410788
EPPO non-EU	608016	676806	966722	861852	1236705	1270756	1215844	801755
EU internal	5 989 019	6 252 410	6 108 878	5 871 541	6 616 852	6 313 569	6 610 015	7 309 887
Other Citrus fruit (excl. Oranges, lemons, limes, grapefruits, mandarins)								
Non-EPPO	17961	9165	9223	5476	6370	6241	4884	5808
EPPO non-EU	5987	6764	8409	8138	13290	33619	37888	39507
EU internal	147 505	124 594	142 503	350 260	287 266	264 072	256 436	259 069

Table 3. Figs, kiwis, avocados, bananas

	2002	2004	2006	2008	2009	2010	2011	2012
FIGS (fresh or dried)								
Non-EPPO	22450	25316	25040	28340	26354	18444	20741	21878
EPPO non-EU	359286	451525	475736	334838	393671	389630	381001	381045
EU internal	191 035	226 508	222 136	202 983	219 685	255 038	269 448	268 879
KIWIFRUIT FRESH								
Non-EPPO	1991234	2267548	2405878	2958154	2664367	2499546	2376487	2316552
EPPO non-EU	368	1216	1040	1076	2466	1766	1948	1803
EU internal	3 306 002	4 259 876	4 425 984	4 780 294	5 081 042	5 039 377	4 715 265	4 871 116
AVOCADOES								
Non-EPPO	728384	921036	1365007	1482254	1587488	1674719	1445683	1776884
EPPO non-EU	438612	323576	319819	278788	328771	408963	416491	391119
EU internal	904 191	998 317	1 170 282	1 201 021	1 261 716	1 658 103	1 725 209	1 733 769
BANANAS, INCL. PLANTAINS, FRESH OR DRIED								
Non-EPPO	39913526	41204284	45016300	50186591	46764859	46424975	47612104	46152364
EPPO non-EU	273	1880	6	2080	371	212	14113	1062
EU internal	16 411 302	19 019 613	20 761 543	24 094 910	23 369 350	24 061 937	24 246 303	:

Table 4. Apple, pear, quince

	2002	2004	2006	2008	2009	2010	2011	2012
APPLES FRESH								
Non-EPPO	7077089	9012863	7826074	7744317	6831596	5698463	5408153	4736800
EPPO non-EU	126869	207909	490747	363317	170638	454313	550928	304978
EU internal	22 201 318	22 646 892	24 205 430	23 921 556	21 848 896	22 622 164	23 560 191	24 239 973
PEARS AND QUINCES FRESH							PEARS FRESH	FRESH QUINCES
Non-EPPO	3000564	3149758	1448	3554731	3731742	2800564	3053350	2245084
EPPO non-EU	120403	65369	40352	85797	74969	63502	63856	24570
EU internal	5 809 155	6 863 488	83 349	7 700 637	7 108 740	8 740 117	8 560 488	7 853 509

Table 5. Stonefruits

	2002	2004	2006	2008	2009	2010	2011	2012
APRICOTS FRESH								
Non-EPPO	40876	37140	33920	39395	40960	36576	31970	30664
EPPO non-EU	36436	58012	57679	113882	71184	67116	65254	80534
EU internal	1 238 761	1 069 712	1 515 096	1 098 621	1 430 748	1 257 814	1 281 160	1 606 608
Cherries (inc. sour cherries Punus cerasus, fresh)								
	2002	2004	2006	2008	2009	2010	2011	2012
Non-EPPO	52939	90330	116541	141214	120163	97095	114265	121313
EPPO non-EU	192207	384574	442883	209153	321920	321861	284403	351657
EU internal	245146	474904	559424	350367	442083	418956	398668	472970
	855 515	1 012 787	1 233 972	1 200 375	1 203 029	1 063 840	1 170 231	1 004 330
PEACHES, INCL. NECTARINES FRESH								
	2002	2004	2006	2008	2009	2010	2011	2012
Non-EPPO	144387	226244	230665	300747	262152	192053	233873	213833
EPPO non-EU	66292	62812	125842	132724	105971	90750	78508	101293
EU internal	210679	289056	356507	433471	368123	282803	312381	315126
	8974301	8172752	9927119	9959797	9739033	10028623	9983891	10665794
PLUMS AND SLOES FRESH								
Non-EPPO	548422	801637	574900	757950	738866	523040	675913	607818
EPPO non-EU	45870	43428	78902	146444	101420	113799	82501	198411
EU internal	2 573 479	1 667 937	2 083 870	2 491 366	2 138 052	1 931 975	2 079 553	2 091 722

Table 6. Berries (excl. strawberries)

	2002	2004	2006	2008	2009	2010	2011	2012
CRANBERRIES, BILBERRIES AND OTHER FRUITS OF THE GENUS VACCINIUM fresh								
Non-EPPO	19913	26803	72161	122979	119301	148000	182257	205543
EPPO non-EU	107584	82435	60478	13851	20206	28500	38407	47409
EU internal	118 160	103 487	158 850	224 898	308 082	319 119	414 968	425 956
RASPBERRIES, BLACKBERRIES, MULBERRIES AND LOGANBERRIES FRESH								
	2002	2004	2006	2008	2009	2010	2011	2012
	12013	22433	34002	44702	47544	51131	58033	71859
Non-EPPO	1146	503	81165	70288	67595	53538	88903	44992
EPPO non-EU	284 828	556 720	442 847	720 576	684 297	597 568	588 160	578 350
EU internal								
BLACK, WHITE OR RED CURRANTS AND GOOSEBERRIES Fresh								
	2002	2004	2006	2008	2009	2010	2011	2012
Non-EPPO	2664	762	1554	0	0	0	0	2485
EPPO non-EU	963	0	0	0	0	0	0	125
EU internal	262 700	281 493	135 635	:	:	:	:	206 365

Table 7. Strawberries, melons and watermelons

	2002	2004	2006	2008	2009	2010	2011	2012
STRAWBERRIES FRESH								
Non-EPPO	38959	71235	118194	111198	157220	116004	102323	100102
EPPO non-EU	199862	277602	292586	326202	274233	250640	308242	285786
EU internal	3 332 831	3 943 107	3 933 707	3 682 196	4 022 142	3 796 956	3 850 952	4 563 131
FRESH MELONS (EXCL. WATERMELONS)								
Non-EPPO	1624150	2194626	2725625	2906624	2608928	2719180	2758030	2927084
EPPO non-EU	392267	433851	665593	714028	704328	676594	635663	600305
EU internal	4 604 236	5 229 201	5 497 137	5 325 935	5 028 451	5 422 621	5 369 287	5 887 580
FRESH WATERMELONS								
Non-EPPO	398966	471079	793386	959614	929533	1009068	946467	1046891
EPPO non-EU	503002	557800	816362	1213671	859212	933004	1001915	837256
EU internal	6 999 495	7 383 129	7 349 603	7 539 781	7 945 796	9 292 140	7 879 346	8 875 985

Table 8. Nuts

	2008	2009	2010	2011	2012
desiccated coconuts					
EPPO non-EU	290	597	271	663	12
Non-EPPO	790767	806825	767365	825446	786453
EU internal	268390	194121	204567	201438	208435
fresh coconuts, whether or not shelled or peeled					
EPPO non-EU	351	667	878	55	62
Non-EPPO	328837	339219	311252	309502	258148
EU internal	143523	162274	168642	168711	135957
fresh or dried brazil nuts (in shell or shelled)					
EPPO non-EU	246	2	163	1	0
Non-EPPO	126201	119288	131985	118727	110208
EU internal	53648	55208	73319	71020	61600
cashew (in shell, shelled)					
EPPO non-EU	1605	527	1276	485	568
Non-EPPO	898871	846269	784791	727334	798709
EU internal	621214	414461	431590	422012	370397
Fresh or dried almonds (in shell, shelled)					
EPPO non-EU	22028	25472	25433	24510	18158
Non-EPPO	1916302	2062975	1884812	2055458	2109828
EU internal	870988	942493	994412	1043893	1123948
fresh or dried hazelnuts or filberts 'corylus spp.' (in shell, and shelled and peeled)					
EPPO non-EU	1016705	945375	1047095	1026092	956987
Non-EPPO	87514	157262	130657	197802	159845
EU internal	477579	576551	516922	403544	377489
fresh or dried walnuts in shell, and shelled and peeled					
EU internal	346235	365599	403510	458943	459350
EPPO non-EU	123966	104270	112618	146665	186230
Non-EPPO	652495	706495	728490	707384	593370
fresh or dried chestnuts 'castanea spp.', (whether or not shelled or peeled, in shell, shelled)					
EPPO non-EU	37991	24452	32120	39601	59526
Non-EPPO	99884	59282	34899	31939	45742
EU internal	294455	275572	296331	292921	330076
fresh or dried pistachios, whether or not shelled or peeled					
EPPO non-EU	9141	12190	4654	9277	9580
Non-EPPO	827360	702750	699189	611884	594081
EU internal	688220	546296	527505	400839	394347

	macadamia nuts, fresh or dried (whether or not shelled or peeled; in shell; shelled)				
EPPO non-EU	0	28	0	0	0
Non-EPPO	60139	56678	59281	54863	40674
EU internal	39909	41994	41643	31864	25918
	Other nuts (fresh or dried, whether or not shelled or peeled)				
EPPO non-EU	45904	24743	28809	17723	24859
Non-EPPO	167685	147675	164964	158391	150556
EU internal	546434	351917	871381	716123	373869