EN

EN EN

### **EUROPEAN COMMISSION**



Brussels, 28.6.2010 SEC(2010)776 final

#### COMMISSION STAFF WORKING DOCUMENT

accompanying document to the Report from the Commission to the European Parliament and the Council on the experience acquired from the statistical survey on plantations of certain species of fruit trees, carried out by the Member States in 2007 in application of Directive 2001/109/EC of the European Parliament and of the Council of 19 December 2001

COM(2010)340 final

EN EN

ANNEX 1
2007 basic survey of fruit trees

Member State	Data transmitted (and accepted)
BELGIUM	03/02/2009
BULGARIA	25/08/2008
CZECH REPUBLIC	16/05/2008
DENMARK	04/03/2008
GERMANY	23/09/2008
ESTONIA	19/09/2008
IRELAND	12/09/2008
GREECE	01/12/2008
SPAIN	01/10/2008
FRANCE	29/05/2008
ITALY	08/10/2008
CYPRUS	20/10/2008
LATVIA	02/09/2008
LITHUANIA	14/12/2007
LUXEMBOURG	13/02/2008
HUNGARY	20/10/2008
MALTA	06/02/2008
NETHERLANDS	12/09/2008
AUSTRIA	05/06/2008
POLAND	17/04/2008
PORTUGAL	27/08/2007
ROMANIA	30/09/2008
SLOVENIA	29/09/2008
SLOVAKIA	04/09/2008
FINLAND	30/09/2008
SWEDEN	01/10/2008
UNITED KINGDOM	08/01/2008

<u>ANNEX 2</u>
SPECIES SURVEYED IN THE VARIOUS MEMBER STATES

	Apples	Pears	Peaches	Apricots	Oranges	Lemons	Small Citrus fruits
Belgium	X	X					
Bulgaria	X	X	X	X			
Czech Republic	X	X	X	X			
Denmark	X	X					
Germany	X	X				0	
Estonia	X						
Greece	X	X	X	X	X	X	X
Spain	X	X	X	X	X	X	X
France	X	X	X	X	X	X	X
Ireland	X						
Italy	X	X	X	X	X	X	X
Cyprus	X	X	X	X	X	X	X
Latvia	X	X					
Lithuania	X	X					
Luxembourg	X	X					
Hungary	X	X	X	X			
Malta			X*				
Netherlands	X	X					
Austria	X	X	X	X			
Poland	X	X	<b>X</b> *	<b>X</b> *			
Portugal	X	X	X	X	X	X	X
Romania	<b>X</b> *	х*	<b>X</b> *	<b>X</b> *			
Slovenia	X	X	<b>X</b> *	<b>x</b> *			
Slovakia	X	X	<b>X</b> *	<b>X</b> *			
Finland	X						
Sweden	X	X					
United Kingdom	X	X					

<sup>\*</sup> Surveys are not conducted for: age of trees, density of plantation and variety.

# ANNEX 3

## SURVEY METHODS USED BY THE MEMBER STATES - BASIC SURVEY 2007

	BELGIUM	BULGARIA	CZECH REPUBLIC	DENMARK
1. Coverage 1.1 Species surveyed				
1.1.1 Based on Directive	Apple and pear trees (dessert varieties)	Apple, pear, peach and apricot trees (dessert varieties)	Apple, pear, peach and apricot trees (dessert varieties)	Apple and pear trees (dessert varieties)
1.1.2 Others	None	Cherry, morello, plum, walnut, almond	Cherry, Sour cherry, Plum, other fruit and bushes (Walnut, Cob- nut, Almond, Currant bushes, Gooseberry bushes, Bramble bushes, Raspberry bushes)	None
1.2 Holdings (minimum threshold of orchards)	None	All holdings complying with the thresholds for agricultural holdings in FSS that cultivated at least 500m² of orchards and having orchard parcels of at least 500m²	Holdings have to respect two conditions: at least 15 are of orchard and >50% of the fruit production for market	All holdings with planted areas with apple and pear trees for commercial purposes
2. Type of survey	Exhaustive survey	Exhaustive survey (for holdings that cultivate more than 1 dca orchards) and sample survey (for holdings that cultivate less than 1 dca orchards)	Complete census, face to face interviews (3,069 holdings)	Complete census, mail survey
3. Reference period/date	1 November 2007	The crop year 2006/2007 for the utilized agricultural area of survey holdings; The autumn 2006- spring 2007 for newly planted orchards	1 <sup>st</sup> May 2007	31 <sup>st</sup> May 2007
4. Survey date	November 2007	16 June -31 August 2007	Not mentioned	June 2007
<b>5. Survey characteristics</b> 5.1 Based on Directive				
5.1.1 Orchard area considered	Net planted area	The fruit plantations in the agricultural holdings	Gross area, covering net and mixed plantations	Net area
5.1.2 Varieties	Exhaustive coverage of varieties	Specified significant varieties and "others"	Specified significant varieties and "others"	Pre-selected list of major varieties, plus "others"

	BELGIUM	BULGARIA	CZECH REPUBLIC	DENMARK
5.1.3 Age	Actual year of planting	Age classes determined from the year of planting	Age of trees is counted from the year of planting	Age classes determined since the year of planting
5.1.4 Density	Number of trees per hectare	Calculated using the spacing between the rows and in the rows for each fruit species, and estimated as number of trees per ha	Calculated on the basis of the number of trees and planted area	Calculation based on planted area and the number of trees
5.2 Others	None	Holdings cultivating fruit trees, areas of new plantations, grubbed and destination of fruit production	Not mentioned	Not mentioned
5.3 Accuracy	Census	Not mentioned	Not mentioned	Not mentioned

	GERMANY	ESTONIA	IRELAND	GREECE
1. Coverage 1.1 Species surveyed				
1.1.1 Based on Directive	Apple and pear trees	Apple trees (dessert varieties)	Apple trees	Apple, pear, peach, apricot, orange, small citrus fruit and lemon trees
1.1.2 Others	Plum and cherry trees	None	None	Cherry trees
1.2 Holdings (minimum threshold of orchards)	Holdings with at least 30 are of the defined species, producing fruit for sale	All holdings which produce apples for sale	All holdings with commercial orchard area. All holdings with more than 0.10 ha of apple, including cider	Holdings with at least 10 are (0.1 hectare) planted with the defined species
2. Type of survey	Complete enumeration	Survey conducted jointly with the FSS. This survey was a combination of complete enumeration for larger surveys and a sample survey for small ones: the number of holdings surveyed was 20,000.	Complete census, conducted by post with visit to the farm if needed	Stratified sample by size classes of orchard with exhaustive survey to holdings with more than 10 ha
3. Reference period/date		1st June 2007	31st March 2007	
4. Survey date	January-June 2007	June-November 2007	August 2007	May-July 2007 Reference period
<b>5. Survey characteristics</b> 5.1 Based on Directive				
5.1.1 Orchard area considered	Net area	Net area	Net area	Net area of regular groves, separated on a pro rata basis if mixed regular groves (more than 1 specie)
5.1.2 Varieties	Exhaustive coverage of varieties	Pre-selected list of major varieties (4 from EU list + 28 local varieties), plus "others"	Exhaustive coverage of varieties. Pre-selected list of major varieties, plus 'others'	Pre-selected list of major varieties, plus "others"
5.1.3 Age	The actual year of planting (autumn or spring)	The actual year of planting	The actual year of planting	The actual year of planting (autumn or spring)
5.1.4 Density	Calculation based on the number of trees per hectare or on tree spacing in and between rows	Calculation based on the number of trees and of area	Calculation based on planted area and the number of trees	Calculation based on planted area
5.2 Others	Not mentioned	Not mentioned	Significant amount of information on farms producing apples	Not mentioned

	GERMANY	ESTONIA	IRELAND	GREECE
5.3 Accuracy	Not mentioned	Comprehensive number of tests. Sampling error:0,8%	Census survey	The coefficients of variation (%) of production zones for each variety of trees separately do not exceed 2% of total for country

	SPAIN	FRANCE	ITALY	CYPRUS
1. Coverage 1.1 Species surveyed				
1.1.1 Based on Directive	Apple, pear, peach, apricot, orange, small citrus fruit and lemon trees	Apple and pear (dessert varieties), peach, apricot, orange, small citrus fruit and lemon trees	Apple and pear (dessert varieties), peach, apricot, orange, small citrus fruit and lemon trees	Apple and pear (dessert varieties), peach, apricot, orange, small citrus fruit and lemon trees
1.1.2 Others	Not mentioned	Plum, cherry, kiwi and nut trees	Not mentioned	Grapefruit trees
1.2 Holdings (minimum threshold of orchards)	Holdings with at least 5 are producing fruit intended for sale	Holdings with at least 50 are of orchard area Orchard is a regularly maintained plantation (annual cut, regular treatments) of fruit trees (for human consumption or for industry), of a density of at least 100 individuals per hectare, i.e. a maximum spacing of 10 to 10 metres	All holdings with an area planted with fruit trees, provided that the fruit produced is entirely or mainly intended for market during the 2007 agricultural year No physical threshold	Agricultural holdings with a minimum area of 0.1 ha planted with fruit trees (at least 95% of the total area planted with fruit trees)
2. Type of survey	Area frame sampling (MAST – Marco de Áreas y Segmentos Territoriales),	Random sampling (6,500 holdings surveyed for a universe of 24,444)	Sample survey (to a stratified sample of 20,744 holdings) Face to face interviews and paper questionnaires	Sample survey based on a sample of holdings having at least 0.1 ha of cultivated area with fruit trees
3. Reference period/date	Not mentioned	1 <sup>st</sup> April 2007-31 <sup>st</sup> March 2008	1 <sup>st</sup> November 2006- 31 <sup>st</sup> October 2007)	1 <sup>st</sup> October 2006 – 30 <sup>th</sup> September 2007
4. Survey date	February-December 2007	January- June 2007	October 2007-June 2008 Simultaneously with FSS 2007	October 2007 – March 2008
<b>5. Survey characteristics</b> 5.1 Based on Directive			,	
5.1.1 Orchard area considered	Net area (calculated from gross area surveyed); including (pro-rata) areas of associated plantations. Trees in rows and isolated trees are not covered	Net area	Net area; including areas utilised for the agricultural machinery, excluded areas with windbreak plans or with border wooded crops or with walking paths	Net area
5.1.2 Varieties	Pre-selected list of major varieties, plus "others"	Pre-selected list of major varieties, plus "others"	Exhaustive list from Commission Decision	Pre-selected list of the major varieties for each species of fruit, plus a group 'other'
5.1.3 Age	The actual year of planting	The actual year of planting (autumn or spring)	The actual year of planting or grafting	Calculated from the time of their planting in the orchard

	SPAIN	FRANCE	ITALY	CYPRUS
5.1.4 Density	Calculated on the basis of tree spacing in and between rows	Calculated on the basis of tree spacing in and between rows giving the number of trees per ha	Calculated on the basis of number of plants and planted area	Calculated on the basis of the area and the number of trees per 0.1 ha
5.2 Others	Not mentioned	Volume of the production, trade circuits, Technical management of the plantations, permanent/temporary labour force, storage capacity, agricultural practices (irrigation, plant protection products, etc.)	Not mentioned However, as the survey was carried out simultaneously with the FSS, it would be possible to cross orchard areas with the other characteristics of the holdings	No
5.3 Accuracy	Not mentioned	Thresholds respected with the exception of citrus fruit trees	Estimated regional accuracy of 5%	Not mentioned

	LATVIA	LITHUANIA	LUXEMBOURG	HUNGARY
1. Coverage 1.1 Species surveyed				
1.1.1 Based on Directive	Apple and pear trees (dessert varieties)	Apple and pear trees (dessert varieties)	Apple and pear trees (dessert varieties)	Apple and pear (dessert varieties), peach and apricot trees
1.1.2 Others	Not mentioned	Not mentioned	Not mentioned	None
1.2 Holdings (minimum threshold of orchards)	Members of Latvian Fruit Growers Ass. (production for sale) and all holdings with at least 100 are of orchard producing apples and/or pears for sale	"Holdings with an area planted with dessert apple trees and dessert pear trees, provided that the fruit produced is entirely or mainly intended for the market"	Holdings with at least 15 are of fruit trees of the defined species producing fruit for sale.	"Plantation (orchard) which is an area of at least 1500 m² planted with the same fruit species in a continuous pattern and where the spacing is determined by taking into account the given fruit species/variety
2. Type of survey	Complete enumeration (face to face interview or by post and/or telephone)	Complete census (face to face interview, 157 holdings)	Not mentioned	Random sampling (face to face interview, more than 12 thousand orchards in almost 750 municipalities, with cadastre maps)
3. Reference period/date	Not mentioned	1 <sup>st</sup> June 2007	Not mentioned	31 <sup>st</sup> May 2007
4. Survey date	Not mentioned	1st to 29th June 2007	During 2007	1 <sup>st</sup> June to 15 <sup>th</sup> October 2007
<b>5. Survey characteristics</b> 5.1 Based on Directive				
5.1.1 Orchard area considered	Net area on regular plantation (isolated trees not included)	Net area, i.e. the area solely occupied by trees without windbreaks driving paths of quarters	Net planted area	Net planted area
5.1.2 Varieties	All varieties with more than 3% of the total area (5 apple and 5 pear trees of local varieties)	Pre-selected list of major varieties (19 apple and 6 pear local), plus "others"	Pre-selected list of major varieties, plus "others"	Pre-selected list of major varieties, plus "others"
5.1.3 Age	Number of trees by age classes	Actual year of planting	Actual year of planting (autumn or spring)	Actual year of planting (autumn or spring)
5.1.4 Density	Calculated on the basis of area and number of trees	Calculated on the basis of area and number of trees	In accordance with the Commission Decision	In accordance with the Commission Decision

	LATVIA	LITHUANIA	LUXEMBOURG	HUNGARY
5.2 Others	No	Number of farms with apple and/or pear trees As the survey was carried out simultaneously with the FSS, it would be possible to cross orchard areas with the others characteristics of the holdings	Not mentioned	Productiveness and kilter of the orchard
5.3 Accuracy	Not mentioned	Census, coherence tests	Not mentioned	The relative standard error is less than 2 % at 68.3°% confidence level

	MALTA	NETHERLANDS	AUSTRIA	POLAND
1. Coverage 1.1 Species surveyed				
1.1.1 Based on Directive	Peach trees	Apple and pear trees (dessert varieties)	Apple and pear trees (dessert varieties), peach, nectarine and apricot (dessert varieties) trees	Apple and pear (dessert varieties), peach and apricot trees
1.1.2 Others	None	Not mentioned	Berry, elderberry, nut, cherry and plum trees	Plum, sour and sweet cherry and walnut trees and apple trees by type of rootstock (dwarf, semi-dwarf and hard-growing) and a comprehensive number of fruit bushes and of berry plantations
1.2 Holdings (minimum threshold of orchards)	No thresholds were used and the entire population on the agricultural register were interviewed	The minimum size is 3 Dutch Size Units (NGE). 1 NGE corresponds to a SGM of 1400 euro. 3 NGE corresponds to about 0.4 ha of pear trees or to about 0.6 ha of apple trees.	Holdings with at least 15 are of fruit trees of the defined species producing fruit for sale. Exclusives berries holding with at least 10 are (not covered by the orchard directive)	Holdings which are producing fruit entirely or mainly intended for the market. The surveyed population were all private farms possessing orchard (15,000 farms i.e. more than 5% of whole population)
2. Type of survey	Random sampling by farm type, economic size and region (1.332 agricultural holdings, response 88%). By telephone for holdings with an economic size class three and below (>0-<6 ESU) and face to face interview for holdings with an economic size of class four and above (>6ESU)	Exhaustive annual farm structure census by postal mail (response 98%) for the total areas of apples and pears. A survey by postal mail (covering 88% of the area of apples and pears, response 42%) for the details on variety, planting density and planting year.	Exhaustive survey.	Random sampling survey of about 15,000 farms, where all farms with more than 10 ha of orchard were included in the sample Face to face interviews for private farms and by post for cooperative farms and companies
3. Reference period/date	1 <sup>st</sup> September 2007	Not mentioned	1 June 2007	30 <sup>th</sup> June
4. Survey date	September - November 2007	December 2007	May 2007-September 2007.	October 2007
<b>5. Survey characteristics</b> 5.1 Based on Directive				
5.1.1 Orchard area considered	Not applicable	Net planted area. Mixed cropping with apples and pears is negligible in the Netherlands.	Net orchard area, calculated by multiplying the number of trees by the distance between trees.	Net area, i.e. the area occupied by trees without paths

	MALTA	NETHERLANDS	AUSTRIA	POLAND
5.1.2 Varieties	Not applicable	Pre-selected list of major varieties, plus "others"	Exhaustive coverage of varieties.	Pre-selected list of major varieties, plus "others"
5.1.3 Age	Not applicable	The farmers were asked to give the area by variety divided into the five age-classes. (the age class 0-4 means that the area was planted between the summer of 2002 and 2007; and so on)	Actual year of planting (autumn or spring)	Determined by number of years since planting to the orchard on a permanent place
5.1.4 Density	Not applicable	The density was calculated by Statistics Netherlands	Number of trees per hectare in the plantation and trees separation.	Based on the number of trees per hectare
5.2 Others	Not applicable	Not mentioned	Not mentioned	The scope of the survey was extended by characteristics covering the needs of national users; other species of fruit trees, bushes, berry plantations and nurseries and information about the holder and the holding were also the subject of the survey, as were irrigated orchards and capacity of store houses and cold stores.
5.3 Accuracy	Not mentioned	Not mentioned	Not mentioned	Not mentioned

	PORTUGAL	ROMANIA	SLOVENIA	SLOVAKIA
1. Coverage 1.1 Species surveyed				
1.1.1 Based on Directive	Apple and pear (dessert varieties), peach, apricot, orange, small citrus fruit and lemon trees	Apple and pear (dessert varieties), peach and apricot trees	Apple and pear (dessert varieties), peach and apricot trees	Apple and pear (dessert varieties), peach and apricot trees
1.1.2 Others	Cherry trees and kiwi plants	Sweet cherry and cherry and plum trees and walnut and other trees (hazelnut, chestnut and quince trees)	Berries	Not mentioned
1.2 Holdings (minimum threshold of orchards)	Holdings with at least 15 are of fruit trees of the defined species producing fruit for sale	All agricultural holdings having utilized agriculture areas with fruit tree plantations	All agricultural holdings producing fruit for sale in intensive orchards (fruit tree plantations) and/or have at least 20 are of fruit tree plantations or 10 are of berries	Not mentioned
2. Type of survey	Random sampling (6,500 holdings, around 16% of the universe)	Sampling survey on crop production, based on a sample of 80,000 agricultural holdings (face to face interview). For fruit trees survey a sample of circa 8,000 holdings was used	Census, complete enumeration	Complete enumeration by mail
3. Reference period/date	Survey date (April-May 2007) and crop year (2005/06)	1 <sup>st</sup> October 2006 – 30 <sup>th</sup> September 2007	1 <sup>st</sup> June 2007	Spring 2007
4. Survey date	April-May 2007	1 <sup>st</sup> – 30 <sup>th</sup> November 2007	12 <sup>th</sup> October 2007	May 2007
<b>5. Survey characteristics</b> 5.1 Based on Directive				
5.1.1 Orchard area considered	Net area, including prorata areas of mixed plantations	Net area	Net and gross area by species, net area by varieties	Not mentioned
5.1.2 Varieties	Pre-selected list of as many varieties as possible, plus "others"	Not mentioned	Exhaustive coverage of varieties settled at a later stage (determination of category 'other varieties')	Pre-selected list of varieties, plus "others"

	PORTUGAL	ROMANIA	SLOVENIA	SLOVAKIA
5.1.3 Age	Actual year of planting (autumn or spring)	Not collected	The actual year of planting	The actual year of planting
5.1.4 Density	Calculation based on planted area	Collected only for young plantations	Calculation based on planted area and the number of tree	Not mentioned
5.2 Others	Irrigated area, the production, the production system and some production techniques	Average production	Not mentioned	Not mentioned
5.3 Accuracy	The relative standard error is less than 2 % at 68°% confidence level	Not mentioned	Census	Census

	FINLAND	SWEDEN	UNITED KINGDOM	
1. Coverage 1.1 Species surveyed				
1.1.1 Based on Directive	Apple trees (dessert varieties)	Apple and pear trees (dessert varieties)	Apple and pear trees (dessert varieties)	
1.1.2 Others	Not mentioned	None	Not mentioned	
1.2 Holdings (minimum threshold of orchards)	Holdings with an area of at least 0.5 ha planted with apple trees intended for sale	All holdings with plantations of apple and/or pear trees at a minimum 0.25 ha	Orchard areas with at least 30 are of fruit trees producing fruit for sale	
2. Type of survey	Complete enumeration by post complemented by phone if necessary		Complete enumeration	
3. Reference period/date	Not mentioned	31 December 2007	Not mentioned	
4. Survey date	. Survey date March to May 2008		1 <sup>st</sup> February 2007	
<b>5. Survey characteristics</b> 5.1 Based on Directive				
5.1.1 Orchard area considered	Net area	Net area	Planted area	
5.1.2 Varieties	Pre-selected list of major varieties, plus "others"	Pre-selected list of major varieties, plus "others"	Pre-selected list of major varieties, plus "others"	
5.1.3 Age	The actual year of planting	The actual year of planting or grafting is recorded	Age brands	
5.1.4 Density	Calculation based on planted area and the number of trees	Number of trees per hectare calculated from the number in the field	Number of trees per hectare calculated from the number in the field	
5.2 Others	Number of trees with "moderate" vigour	Not mentioned	Not mentioned	
5.3 Accuracy	Census	Census	Census	

## ANNEX 4

Main findings on the results of the statistical survey on plantations of certain species of fruit trees,

carried out by the Member States in 2007 in application of Directive 2001/109/EC of the European Parliament and of the Council of 19 December 2001

NB: Unless it is indicated the contrary the data only refers to dessert fruit production.

Table A: Breakdown of the various fruit species by Member State and for EU - 2002 and 2007 (ha)  $\,$ 

Member State		Total	Apple	Pear	Peach	Apricot	Orange	Lemon	Small citrus fruit
EU-27	(2007)	1,364,662	485,044	111,878	206,958	67,370	279,048	62,855	151,510
EU-15	(2002)	1,065,929	226,558	109,250	201,325	59,069	252,117	68,034	149,576
	(2007)	1,028,308	200,589	95,391	189,942	52,959	277,494	62,190	149,744
Belgium	(2002)	14,638	8,249	6,389	-	-	-	-	-
	(2007)	14,058	6,833	7,225	-	-	-	-	-
Bulgaria	(2007)	10,518	4,121	298	3,488	2,610	-	-	-
Czech Republic	(2007)	13,548	9,895	716	1,149	1,788	-	-	-
Denmark	(2002)	1,797	1,398	400	-	-	-	-	-
	(2007)	1,907	1,507	401	-	-	-	-	-
Germany	(2002)	29,735	28,050	1,685	-	-	-	-	-
	(2007)	29,469	27,888	1,581	-	-	-	-	-
Estonia	(2007)	690	690	-	-	-	-	-	-
Ireland	(2002)	151	151	-	-	-	-	-	-
	(2007)	149	149	-	-	-	-	-	-
Greece	(2002)	98,088	10,379	3,386	35,152	4,994	33,029	6,169	4,978
	(2007)	94,771	9,337	3,127	34,127	3,929	32,440	5,180	6,632
Spain	(2002)	445,616	36,293	31,306	69,476	22,615	131,435	43,851	110,640
	(2007)	459,393	24,822	25,845	75,118	18,700	158,824	39,859	116,225
France	(2002)	93,038	47,593	9,039	19,691	14,924	29	37	1,725
	(2007)	76,638	40,113	6,707	14,308	13,804	29	22.7	1,654
Italy	(2002)	303,406	54,285	38,420	73,091	15,575	76,042	17,620	28,374
	(2007)	279,120	55,225	32,075	63,754	15,649	73,786	16,634	21,998
Cyprus	(2007)	5,939	925	146	614	269	1,554	665	1,766
Latvia	(2007)	1,557	1,300	258	-	-	-	-	-
Lithuania	(2007)	2,459	2,428	32	-	-	-	-	-
Luxembourg	(2002)	981	914	67	-	-	-	-	-
	(2007)	54	46	8	-	-	1	-	-
Hungary	(2007)	47,183	33,793	2,812	5,578	4,999	-	-	-
Malta	(2007)	215		-	215	-	1	-	-
Netherlands	(2002)	17,017	11,176	5,841	-	-	-	-	-
	(2007)	16,410	9,380	7,030	-		-	-	
Austria	(2002)	8,172	6,952	470	280	470	-	-	-
	(2007)	8,541	7,229	506	211	594	-	-	
Poland	(2007)	176,730	165,715	7,048	2,908	1,060	-	-	

Member State		Total	Apple	Pear	Peach	Apricot	Orange	Lemon	Small citrus fruit
Portugal	(2002)	43,590	13,631	10,035	3,636	491	11,582	357	3,859
	(2007)	39,792	11,711	9,228	2,424	283	12,416	494	3,235
Romania	(2007)	70,659	60,494	4,834	1,897	3,434	1	-	ı
Slovenia	(2007)	3,089	2,438	196	431	23	-	-	1
Slovakia	(2007)	3,765	2,656	148	734	227	-	-	-
Finland	(2002)	516	516	-	-	-	-	-	
	(2007)	437	437	-	•	-	•	-	•
Sweden	(2002)	1,515	1,342	172	-	-	-	-	1
	(2007)	1,224	1,102	122	-	-	-	-	1
United	(2002)	7,669	5,628	2,041	-	-	-	-	-
Kingdom	(2007)	6,346	4,810	1,536	-	-	-	-	-

In all the tables, the figures are rounded.

The largest area of orchard occupied by the surveyed species in EU is located in Spain. Spain has one third of the EU-27 orchard area, and more than 40% of the EU-15 area. Large areas of fruit tree orchards are also found in Italy (20% of the total EU-27 area), Poland (13%) and Greece (7%). Apple trees are the most common fruit trees grown in EU-27, covering around one third of the surveyed area. Citrus trees (orange, lemon and small citrus fruit) together cover a further third of the EU-27 area.

The enlargements to EU-27 produced a substantial increase in the area under table apples and a smaller increase in the other areas surveyed. The area under apple trees increased more than 2.4 times, mainly due to the addition of the Polish and Romanian apple orchards. Pear and peach tree areas increased by 17% and 13% respectively. The 27% increase of the apricot area was more significant. For citrus fruits, the increase in area due to the last two enlargements is insignificant (around 1%).

Between 2002 and 2007, most of the orchard areas surveyed in EU-15 decreased. The two exceptions are the area under orange trees, which increased by 10%, and the area under small citrus fruit, which stayed more or less constant. The remaining fruit tree areas experienced decreases of between 5% and 13%. The following paragraphs detail the results by fruit tree specie.

In the enlarged EU, the main growers of apple trees are Poland (165,715 ha<sup>1</sup>) and Romania (60,494 ha). Italy and France have the two largest areas of apple trees in EU-15 (55,225 ha and 40,113 ha respectively). Between the two surveys the total EU-15 area of apple tree orchards decreased. The area in Italy increased slightly, while the area in France decreased significantly. In most of the other Member States, with the exception of Denmark and Austria, the total area under apple trees decreased.

-

A large part of this area produces apples that are processed and so includes not only "dessert apples" as requested in Directive 2001/109. This is due to the impossibility of distinguishing between those areas planted for dessert and those areas planted for processing in Poland.

The largest areas of pear tree orchards in EU-27 are in Italy (32,075 ha), Spain (25,845 ha), Portugal (9,228 ha) and Belgium (7,225 ha). Moreover, the total EU-15 area under pear trees actually decreased during the period 2002-2007. The areas in Belgium, the Netherlands and Austria increased, the area in Denmark stayed constant and all the pear tree orchard areas in EU-15 decreased between 2002 and 2007.

In EU-27, the largest areas under peach trees are located in Spain (75,118 ha), Italy (63,754 ha), Greece (34,127 ha) and France (14,308 ha). Among the New Member States, the largest area belongs to Hungary, which ranks fifth in EU-27. Spain and Italy together account for two thirds of the total EU-27 area. Spain is the only EU-15 Member State where the peach tree orchard area increased.

The largest area of apricot tree orchards is found in Spain (18,700 ha), followed by Italy (15, 649 ha), France (13,804 ha) and Hungary (4,999 ha). Spain and Italy have more than half of the total EU-27 area of apricot tree orchards. The total area in Italy remained almost constant, and areas in all the other EU-15 Member States decreased, with the exception of the significant increase experienced by Austria.

With 158,824 ha under orange trees, Spain is by far the largest orange tree grower in Europe. It has around 55% of the EU-27 area. The 73,786 ha area in Italy represents one quarter of the total EU area under orange tree orchards. The other Member States where orange orchards are surveyed are Greece, Portugal, Cyprus and France, which together account for only 20% of the orange tree orchards in EU-27. Cyprus is the only New Member State that has citrus fruit orchards, and its contribution to the total area for all citrus fruit species is very small. Between 2002 and 2007 the total EU-15 orange tree orchard area increased owing to the increase in Spain and Portugal. The other Member States experienced small decreases in their orchard areas.

The 39,859 ha of lemon tree orchards in Spain make up more than 60% of the EU-27 area. The second largest area of lemon tree orchards belongs to Italy (16,634 ha); it represents around one quarter of the EU-27 area. The third largest area is found in Greece, which accounts for only 8% of the total area. The areas in Cyprus, Portugal and France represent a very small share of the EU-27 area (1% or less in each Member State). As only the area in Portugal increased, while all the others decreased, the total effect in EU-15 was a decrease in the total area under lemon trees.

The largest area of small citrus fruit trees is in Spain. Its area of 116,225 ha accounts for three quarters of the EU-27 small citrus fruit tree orchard area. The next grower is Italy, with only 21,998 ha, which represents around 15% of the total EU-27 area. The area increased in Spain and Greece, and decreased in Italy by approximately the same amount; hence the total effect was that the small citrus fruit orchard area remained more or less constant between 2002 and 2007.

Table B: 2007 orchard area as a percentage of 2002 orchard area (EU-15)

Member State	Total	Apple	Pear	Peach	Apricot	Orange	Lemon	Small- citrus fruit
EU-15	96.47	88.54	87.31	94.35	89.66	110.07	91.41	100.11
Belgium	96.04	82.84	113.08	-	-	-	-	-
Denmark	106.11	107.79	100.22	-	-	•	-	-
Germany	99.10	99.42	93.82	-	-	-	-	-
Ireland	99.17	99.17	1	-	-	1		-
Greece	96.62	89.96	92.34	97.08	78.66	98.22	83.98	133.21
Spain	103.09	68.39	82.56	108.12	82.69	120.84	90.90	105.05
France	82.37	84.28	74.20	72.67	92.50	98.58	61.62	95.89
Italy	91.99	101.73	83.49	87.23	100.48	97.03	94.40	77.53
Luxembourg	5.52	5.06	11.84	-	-	-	-	-
Netherlands	96.43	83.93	120.36	-	-	-	-	-
Austria	104.52	103.98	107.78	75.52	126.43	-	-	-
Portugal	91.28	85.91	91.97	66.68	57.62	107.20	138.39	83.84
Finland	84.69	84.69	-	-	-	-	-	-
Sweden	80.80	82.08	70.86	-	-	-	-	-
United Kingdom	82.75	85.47	75.27	-	-	-	-	-

Table B presents the change in the EU-15 orchard area by Member State and by fruit type. Between 2002 and 2007, the total area of orchards in EU-15 decreased by around 4% (37, 621 ha in absolute value). Most of the fruit tree orchard areas experienced declines, ranging from only 6% in the case of peach trees to 13% for pear trees. The two exceptions to this downward trend are the areas under orange trees, which increased by 10%, and those under small citrus fruit, which stayed more or less constant.

In several Member States, the total surveyed area increased. The total surveyed orchard area increased in Denmark (by 6%), Austria (by 4%) and Spain (by 3%). In Denmark, all the areas surveyed (apple and pear trees) increased. In Austria, the peach tree orchard area decreased by one quarter, while all the other areas surveyed saw an increase. There was also a sizeable increase in the apricot orchard area (26%). In Spain, there was a significant increase in the area under orange trees (21%), and a less important increase in the areas under peach tees and small citrus fruit trees. The other surveyed areas declines, and the decline was especially significant in the area under apple trees (a decrease of one third).

Some other Member States experienced a decrease in the total surveyed area, as well as a decline for all of the species of fruit tree surveyed. The total area declined quite significantly in France, Finland, Sweden and the United Kingdom (by between 15 and 20%), while in Luxembourg the plantations of fruit trees producing for the market disappeared almost entirely. In Germany and Ireland, there was only a very small decrease (of less than 1%) in the total area.

In the remaining Member States, the total orchard area occupied by the surveyed species decreased, although there was an increase for some of the species surveyed. In Greece, for example, the area under small citrus fruit trees increased by one third, whereas all the other areas decreased. In Italy the total area decreased by 8%. It experienced a slight increase in the apple and apricot orchard areas, and declines in the other types of orchard areas. The fall was quite large in the areas under small citrus fruit trees (22%), pear trees (17%) and peach trees (13%). Portugal experienced a large increase in the area under lemon trees, while all other areas decreased, some of them substantially (peach and apricot). In Belgium and Netherlands, the total area decreased by around 4%, due to the combined effect of the decrease in the apple tree orchard area and the increase in the pear tree orchard area.

Table C: 2007 orchard area by age class as a percentage of 2002 orchard area (EU-15)

Table C.1: 2007 orchard area by age class as a percentage of 2002 orchard area (EU-15) - Apple trees

Member State	Total	Less than 5 years	Between 5 and 9 years	Between 10 and 14 years	Between 15 and 24 years	25 years and over
EU-15	88.54	91.97	89.35	81.07	95.90	81.59
Belgium	82.84	61.73	98.06	70.60	181.52	204.87
Denmark	107.79	127.31	159.62	67.87	110.84	73.98
Germany	99.42	94.17	83.06	82.23	165.25	118.34
Ireland	99.17	57.77	104.87	67.06	229.81	186.81
Greece	89.96	141.11	72.60	131.37	78.19	39.43
Spain	68.39	51.44	95.18	58.36	62.72	84.10
France	84.28	79.08	66.61	72.85	115.86	98.08
Italy	101.73	146.48	110.29	97.85	78.02	78.78
Luxembourg	3.28	24.61	5.17	6.76	14.02	0.27
Netherlands	83.93	63.08	122.34	68.99	95.89	70.15
Austria	103.98	93.31	99.25	107.48	129.64	101.37
Portugal	85.91	62.00	72.09	72.87	145.44	105.48
Finland	84.69	93.13	117.71	80.21	52.67	88.11
Sweden	82.08	85.99	81.58	54.59	171.44	58.52
United						
Kingdom	85.47	167.69	56.93	97.22	83.31	59.94

The breakdown of the orchard areas by the age of the trees is important, because a large proportion of "young" trees is an indicator of good prospects for fruit production in the future, while a high proportion of relatively "old" trees areas might endanger future production.

The total EU-15 area under apple trees decreased by more than 10% between 2002 and 2007, and the decrease was felt across all age classes.

Between 2002 and 2007, the total apple trees area in Italy increased slightly due to an increase in the area of "young" apple tree orchards (i.e. less than 5 years old and between 5 and 9 years old). The areas of "old" apple trees orchards in Italy decreased during this period.

At the same time, the total area of apple tree orchards in France decreased significantly. The "young" apple tree areas showed a marked decrease, and the only increase was in the area under "old" apple trees (between 15 and 24 years old). This shows that the apple tree orchards in France are getting older.

In several Member States, only the areas under "old" apple trees increased (for example, Belgium, Germany, Austria, Portugal), while in other Member States such as Denmark, Italy, Netherlands, Finland and United Kingdom, there was a bigger increase in "young" apple orchards. The increase in the planting of "very young" apple trees was particularly significant in the United Kingdom (68%).

Table C.2: 2007 orchard area by age class as a percentage of 2002 orchard area (EU-15) - Pear trees

Member State	Total	Less than 5 years	Between 5 and 9 years	Between 10 and 14 years	Between 15 and 24 years	25 years and over
EU-15	87.31	100.17	94.82	66.79	93.01	92.71
Belgium	113.08	82.54	95.21	113.05	160.75	133.78
Denmark	100.22	100.93	105.92	98.74	149.86	57.32
Germany	93.82	82.92	63.41	121.96	134.19	89.18
Greece	92.34	109.39	72.87	93.21	95.26	119.32
Spain	82.56	106.62	83.50	48.51	116.86	108.75
France	74.20	54.84	58.07	42.97	132.73	74.79
Italy	83.49	113.20	107.83	70.47	71.69	86.87
Luxembourg	11.84	44.57	25.58	13.17	27.87	3.30
Netherlands	120.36	104.14	143.49	139.88	118.73	104.25
Austria	107.78	192.27	62.23	103.62	99.43	115.02
Portugal	91.97	82.29	106.18	99.06	76.86	101.70
Sweden	70.86	68.44	52.09	78.73	272.64	57.47
United						
Kingdom	75.27	114.98	42.18	66.56	94.88	71.30

The total EU-15 area under pear trees also decreased during the period 2002-2007. The areas in all age classes decreased, with the exception of the area under trees below 5 years old, which remained more or less constant.

The largest growers of pear trees in EU-15 are Italy (32,075 ha) and Spain (25,845 ha). In both of these Member States, the total area under pear trees decreased by around 17%, although there was some increase in some of the age classes. In Italy, only the area under "old" pear tree orchards decreased, while the area under "young" trees increased. In Spain,

there was an increase in the area under pear trees less than 5 years old, but also in the area under trees older than 15 years.

The total pear tree orchard area increased only in three Member States: Belgium, Netherlands and Austria. It remained more or less the same in Denmark and decreased in all of the other Member States.

In Member States like France, Sweden and United Kingdom, it decreased by more than 20%.

In some Member States, like Greece, Spain, Netherlands and Austria, there was an increase in the age categories of both "young" and "old" trees. In Member States such as Italy or the United Kingdom, there was an increase in the area of "young" pear tree orchards, while in Member States like Belgium, France or Germany, the area of "old" orchard areas increased, while the area under "young" trees decreased.

Table C.3: 2007 orchard area by age class as a percentage of 2002 orchard area (EU-15) - Peach trees

Member State	Total	Less than 5 years	Between 5 and 9 years	Between 10 and 14 years	Between 15 and 19 years	20 years and over
EU-15	94.35	95.61	111.05	78.45	79.64	109.81
Greece	97.08	128.70	98.64	80.79	84.42	174.73
Spain	108.12	111.74	128.62	91.57	78.71	121.07
France	72.67	57.42	86.81	57.58	104.97	100.73
Italy	87.23	83.22	108.81	73.37	70.10	69.64
Austria	75.52	86.79	75.60	41.79	108.90	110.53
Portugal	66.68	60.74	74.38	50.80	102.84	91.26

The total peach trees orchard area in EU-15 decreased slightly between 2002 and 2007. The areas under very "old" trees (20 years and above) and under relatively "young" peach trees increased, while the areas under trees in other age classes decreased.

The largest areas under peach trees are found in Spain (75,118 ha) and Italy (63,753 ha). In Spain, the total peach trees orchard area increased by 8%. Both the "young" tree areas (below 10 years old) and the very "old" peach trees orchard area (20 years old and above) increased, while the area of trees in the "middle age" range decreased quite significantly.

In Italy, all age class areas, except for trees aged between 5 and 9 years, experienced a significant decrease, and the combined effect was a 13% fall in the total area under peach trees.

In all other Member States, the total area under peach trees decreased. The largest decrease in the total area occurred in Portugal, France and Austria.

With respect to the change in the age distribution, Italy is the only Member States where the area of relatively "young" peach trees orchards (between 5 and 9 years old) was the only category to increase. In all the other Member States, there was an increase in both some

"young" and "old" trees orchard areas, as in Spain and Greece, or the increase was seen only in the areas under "old" trees, such as in France, Austria and Portugal.

Table C.4: 2007 orchard area by age class as a percentage of 2002 orchard area (EU-15) - Apricot trees

Member State	Total	Less than 5 years	Between 5 and 9 years	Between 10 and 14 years	Between 15 and 19 years	20 years and over
EU-15	89.66	109.99	101.39	69.89	104.10	76.34
Greece	78.66	68.71	88.82	95.49	60.05	74.45
Spain	82.69	122.16	82.90	77.71	114.04	59.00
France	92.50	85.26	88.87	61.32	153.71	114.73
Italy	100.48	133.63	128.51	62.13	74.55	105.06
Austria	126.43	120.19	150.18	104.28	193.65	107.15
Portugal	57.62	112.44	95.19	64.51	128.68	20.27

Between 2002 and 2007, the EU-15 area cultivated with apricot trees decreased by 10%. There was a strong decrease in the areas of "middle-aged" (between 10 and 14 years old) and very "old" (20 years and above) apricot trees, while the areas with orchards of young trees (below 10 years old) increased, although to a lesser extent.

The largest area of apricot orchards is found in Spain (18,700 ha), followed by Italy (15, 649 ha). The total area in Spain decreased, although there was a relatively large increase in the areas under trees below 5 years old and between 15 and 19 years old.

In Italy the total area stayed almost constant, but there was a substantial increase in the area under young apricot trees (less than 10 years old).

Of the remaining Member States, only Austria experienced an increase in the total areas under apricot trees orchards, and this increase was seen in all age classes. In France, the areas of "old" trees (i.e. at least 15 years old) increased, while the rest of the age class areas saw a significant decrease. In Greece, the areas under trees of all age classes decreased. Portugal experienced the largest decrease (more than 40%) in the total area under apricot trees, but during the same period young plantations also saw a small increase.

Table C.5: 2007 orchard area by age class as a percentage of 2002 orchard area (EU-15) - Orange trees

Member State	Total	Less than 5 years	Between 5 and 9 years	Between 10 and 14 years	Between 15 and 24 years	Between 25 and 39 years	40 years and over
EU-15	110.07	117.95	122.06	90.90	106.05	123.21	102.47
Greece	98.22	359.34	52.58	76.71	147.70	69.48	93.05
Spain	120.84	121.59	130.79	107.95	112.78	155.83	87.42
France	98.58	-	-	206.10	43.89	22.40	-
Italy	97.03	86.22	109.74	61.84	79.63	125.98	108.11
Portugal	107.20	49.21	109.70	96.23	116.08	141.74	144.13

Orange trees were the only fruit tree area in the EU-15 that recorded an increase between 2002 and 2007. The increase was in both the "young" and the "old" orange tree areas.

The largest orange tree orchard areas are in Spain (158,824 ha) and Italy (73,786 ha).

In Spain, there was an increase in the areas for all age classes, except for "40 years and over"; the total orange tree orchard areas also increased. This is a sign of good production potential for the years to come. During the last 5 years the increase was smaller than during the previous 5 years (age class 5 to 10 years old), which shows that new planting of orange trees in this Member State is progressing less rapidly.

In Italy, the total area cultivated with orange trees decreased, although there was an increase in the area of "old" trees (above 25 years old) and in the area of trees between 5 and 9 years old.

In Greece, the total area decreased, but there was a strong increase in the area of trees younger than 5 years old, which shows a renewal of the orange tree plantations of this Member State.

Portugal experienced an increase in the total area, mainly due to the increase of "old" orange tree areas.

Table C.6: 2007 orchard area by age class as a percentage of 2002 orchard area (EU-15) - Lemon trees

Member State	Total	Less than 5 years	Between 5 and 9 years	Between 10 and 14 years	Between 15 and 24 years	Between 25 and 39 years	40 years and over
EU-15	91.41	56.01	185.77	131.72	69.14	98.76	93.30
Greece	83.98	364.48	133.03	118.17	94.13	51.70	61.57
Spain	90.90	48.95	219.36	177.34	66.44	92.26	116.23
France	61.62	-	-	30.89	62.17	89.65	-
Italy	94.40	104.16	80.41	28.79	67.67	124.46	96.03
Portugal	138.39	135.73	165.40	83.98	85.74	249.63	133.04

The total area under lemon trees in EU-15 decreased by around 9% between 2002 and 2007. As in the case of orange trees, the largest European growers of lemon trees are Spain and Italy, with total areas of 39,859 ha and 16,634 ha respectively.

In both Member States, the total area decreased. However, in Italy there was a slight increase in the area of trees under 5 years old, while in Spain the area of "young" tree orchards decreased by more than 50%.

Greece experienced a decrease in the total area, whereas the orchard areas for "young" trees increased substantially.

Portugal is the only Member State where there was an increase in the total area under lemon trees.

Table C.7: 2007 orchard area by age class as a percentage of 2002 orchard area (EU-15) - Small citrus fruit

Member State	Total	Less than 5 years	Between 5 and 9 years	Between 10 and 14 years	Between 15 and 24 years	Between 25 and 39 years	40 years and over
EU-15	100.11	53.85	134.92	129.44	105.29	96.20	71.33
Greece	133.21	266.10	231.35	82.49	138.73	184.92	53.96
Spain	105.05	50.56	145.26	154.44	120.00	86.04	47.36
France	95.89	44.61	81.43	57.91	163.82	81.68	678.59
Italy	77.53	93.45	59.99	64.30	63.46	100.25	83.37
Portugal	83.84	66.53	44.70	50.07	111.08	138.11	311.11

The total EU-15 area cultivated with small citrus fruit trees remained more or less constant between 2002 and 2007 (an increase of only 0.11%). The areas of "old" trees (25 years old or above) and "very young" trees (below 5 years old) decreased, but this was offset by an increase in the areas of trees in the age classes between 5 and 25 years old.

The largest orchard areas of these fruits are found in Spain (39,859 ha) and Italy (16,633 ha). The total area in Spain increased by 5%. The age classes between 5 and 25 years old are increasing in Spain, whereas the area under trees younger than 5 years old has fallen by half.

In Italy, the total area decreased by almost 25%, and the decrease was marked across almost all age classes.

The total area in Greece increased by one third, and the increase was particularly marked in the areas under trees that are younger than 10 years old.

The other Member States experienced a decrease in the total area and the "ageing" of their small citrus fruit tree plantations (a decrease in the area of "young" trees and an increase in the area of "old" trees).

Table D: 2007 orchard area by density class as a percentage of 2002 orchard area (EU-15)

Table D.1: 2007 orchard area by density class as a percentage of 2002 orchard area (EU-15)-Apple trees

Member State	Total	<400	400 and <799	>800 and <1,599	>1,600 and <2,399	>2,400 and <3,199	>3,200 and <3,999	<u>≥</u> 4,000
EU-15	88.54	53.33	112.75	85.36	75.61	104.95	126.60	112.19
Belgium	82.84	5.55	40.38	76.86	83.53	93.30	61.85	168.30
Denmark	107.79	85.72	75.52	64.09	105.87	277.36	1519.64	225.89
Germany	99.42	79.20	68.84	75.79	95.81	130.20	139.32	82.05
Ireland	99.17	134.18	53.23	81.30	270.20	18.01	-	-
Greece	89.96	44.92	76.59	2044.33	-	-	-	-
Spain	68.39	22.47	39.58	69.17	98.26	140.53	5.61	5.16
France	84.28	341.63	446.14	86.60	23.92	14.18	29.76	0.00
Italy	101.73	71.70	63.96	75.66	98.87	123.95	180.03	158.13
Luxembourg	3.28	0.00	1	12.14	-	-	-	1
Netherlands	83.93	0.00	342.46	197.71	73.31	83.55	90.15	63.35
Austria	103.98	54.56	58.49	63.98	73.75	125.75	139.62	122.42
Portugal	85.91	81.16	61.03	77.55	128.76	159.76	50.10	1570.83
Finland	84.69	83.13	43.85	229.49	90.10	-	-	-
Sweden	82.08	40.35	83.46	89.31	91.18	223.70	110.72	73.97
United Kingdom	85.47	34.24	55.96	161.73	89.56	133.30	51.78	34.69

In EU-15, there was an increase in the areas of high density for apple trees (above 2,400 trees/ha), while the areas in most of the other density classes decreased.

In Italy, which is the largest apple tree grower in EU-15, there was a considerable increase in the more densely cultivated areas (above 2,400 trees/ha).

France, on the other hand, experienced a large increase in the less dense orchard areas (below 800 trees/ha), and a very large decrease in the relatively dense orchard areas.

In Germany and Spain (respectively the third and fourth largest growers of apple trees in EU-15), there was some increase in the more dense areas and a decrease in the areas of lower tree density.

In most of the other Member States, there was an increase in the high density areas and a decrease in the rest of the density classes. The exceptions are the Netherlands, where the increase was in the relatively low density classes (between 400 and 1,599 trees/ha), and Ireland, where the increase was in the low density and some medium density class orchard areas.

Table D.2: 2007 orchard area by density class as a percentage of 2002 orchard area (EU-15)-Pear trees

	Total	<400	400 and <799	>800 and <1,599	>1,600 and <2,399	>2,400 and <3,199	>3,200 and <3,999	≥4 000
EU-15	87.31	73.50	91.47	77.01	96.17	125.25	138.50	174.24
Belgium	113.08	20.72	56.28	105.97	115.98	205.40	93.46	348.23
Denmark	100.22	60.55	49.15	80.70	205.78	199.06	104.34	2760.00
Germany	93.82	63.32	103.32	82.61	112.20	132.96	117.62	81.83
Ireland	-	-	•	-	-	-	-	-
Greece	92.34	62.02	53.88	4384.51	-	1	-	-
Spain	82.56	52.48	69.33	79.39	99.41	123.00	28.25	25.49
France	74.20	935.10	554.02	39.13	12.86	24.80	29.92	-
Italy	83.49	126.19	68.65	69.21	100.85	124.31	268.82	235.24
Luxembourg	11.84	1.29	•	61.52	-	1	-	-
Netherlands	120.36	41.14	185.70	111.93	104.70	144.11	156.03	125.72
Austria	107.78	65.11	77.90	139.27	110.25	121.20	83.26	57.99
Portugal	91.97	82.06	68.07	92.19	145.40	236.55	-	31.55
Finland	-	-	-	-	-	-	-	-
Sweden	70.86	34.74	70.25	88.01	61.87	231.77	131.88	98.88
United Kingdom	75.27	21.53	95.20	100.97	63.23	42.65	61.16	63.29

Between 2002 and 2007, there was a significant increase in the relatively dense pear tree orchard area (above 2,400 trees/ha) in EU-15. In these Member States the trend towards the intensification of the new plantations has continued during the last 5 years.

In Italy, there was a decrease in the middle-range density areas (between 400 and 1,600 trees/ha), and an increase in all other density classes.

Spain noted an increase in the orchard areas with a density of between 2,400 and 3,199 trees/ha and a decrease in all the other density classes.

In Portugal (which has the third largest area of pear tree orchards in EU-15), there was a large increase in medium density orchard areas (between 1,600 and 3,199 trees/ha), and a significant decline in most of the other density areas.

In the Netherlands, orchard areas increased in all density classes except the lowest.

The experience of the other Member States is variable, with increases in the more densely planted areas and decreases in the less dense areas, such as Belgium or Denmark, or vice versa, as in France.

Table D.3: 2007 orchard area by density class as a percentage of 2002 orchard area (EU-15)-Peach trees

Member State	Total	<300	300 and <599	>600 and <899	>900 and <1,199	>1,200 and <1,499	<u>&gt;</u> 1,500
EU-15	94.35	91.83	86.54	99.76	90.67	164.40	104.31
Greece	97.08	139.55	94.14	87.59	167.89	824.08	-
Spain	108.12	52.07	104.22	118.17	95.53	174.24	49.04
France	72.67	50.35	76.82	71.27	59.76	53.86	87.17
Italy	87.23	134.10	70.09	88.20	92.25	170.05	190.87
Austria	75.52	154.59	61.94	80.75	119.79	105.14	106.81
Portugal	66.68	134.45	58.51	69.51	61.34	72.22	41.02

In EU-15, there was an increase in the peach tree orchard areas with a density of more than 1,200 trees/ha, and a decrease in the orchard areas of lower density. Most Member States experienced some increase in both the relatively dense orchards and the less dense peach tree orchard areas, and a decrease in some middle-density classes. The only exception to this pattern is France, where all density areas decreased, some of them substantially.

Table D.4: 2007 orchard area by density class as a percentage of 2002 orchard area (EU-15)-Apricot trees

Member State	Total	<300	300 and <599	>600 and <899	>900 and <1,199	>1,200 and <1,499	<u>≥</u> 1,500
EU-15	89.66	78.15	96.44	80.72	89.19	205.92	128.02
Greece	78.66	70.12	74.68	209.14	3198.15	-	-
Spain	82.69	70.85	118.41	50.94	77.73	412.07	-
France	92.50	64.60	94.42	86.81	195.60	69.32	37.84
Italy	100.48	174.47	92.75	101.78	71.57	168.75	97.56
Austria	126.43	97.92	115.71	111.49	227.53	212.44	137.80
Portugal	57.62	115.54	67.62	30.45	300.38	371.01	75.00

In EU-15 as a whole, the only increase was in the apricot trees orchard areas of a density above 1,200 trees/ha. As with other species, this points to the substitution of less dense plantations by intensive new plantations.

The pattern of change is mixed in most of the Member States, with increases and decreases in both high density and low density orchard areas. A notable exception is Austria, where orchard areas of all density classes increased, except for those with the lowest density (fewer than 300 trees/ha).

Table D.5: 2007 orchard area by density class as a percentage of 2002 orchard area (EU-15)-Orange trees

Member State	Total	<250	250 and <499	>500 and <749	>750 and <999	>1,000 and <1,499	>1,500 and <1,999	>2,000 and <2,499	>2,500 and <2,999	<u>&gt;</u> 3,000
EU-15	110.07	332.32	107.49	117.70	93.55	45.79	29.31	4.54	59.71	8.78
Greece	98.22	200.90	95.03	92.18	81.86	445.54	-	-	-	_
Spain	120.84	397.36	129.90	126.28	94.23	30.41	27.29	4.41	61.51	6.02
France	98.58	-	57.06	471.72	-	-	-	-	-	_
Italy	97.03	1858.72	92.04	107.44	70.71	202.78	38.16	5.64	-	28.05
Portugal	107.20	290.62	84.61	112.05	142.81	119.18	13.27	-	-	_

Between 2002 and 2007 the total area under orange trees in EU-15 increased; this was due to an increase in the low density orchard areas (below 749 trees/ha).

Spain had the same pattern of change as the total EU-15 area. This is easily explained by the fact that Spain accounts for more than half of the EU-15 area under orange trees.

In the other Member States where orange tree orchards are surveyed, the increases in area tended to be in the low and middle density orchards, while the high density orchard areas were seen to decrease.

For this specie the "intensive" pattern with high density plantations does not seem to be economically sustainable.

Table D.6: 2007 orchard area by density class as a percentage of 2002 orchard area (EU-15)-Lemon trees

Member State	Total	<250	250 and <499	>500 and <749	>750 and <999	>1,000 and <1,499	>1,500 and <1,999	>2,000 and <2,499	>2,500 and <2,999	<u>≥</u> 3,000
EU-15	91.41	89.47	99.98	74.06	20.86	139.25	174.52	522.81	Ī	20.38
Greece	83.98	155.78	71.75	89.83	100.71	3528.57	-	-		-
Spain	90.90	77.94	96.74	110.59	3.10	69.00	-	-	_	-
France	61.62	_	43.48	330.72	-	-	-	-	_	-
Italy	94.40	629.56	126.91	56.69	66.64	190.03	174.91	903.03	_	21.37
Portugal	138.39	538.17	113.10	120.74	154.93	195.19	-	-	_	-

EU-15 as a whole experienced a large increase in orchard areas of middle density (between 1,000 and 2,499 trees/ha) for lemon trees. In some of the other density classes, the decrease was very marked (for example, an 80% decrease in the 750-999 trees/ha density class).

In Spain, only the area of density between 500 and 749 trees/ha increased, while the areas of other densities decreased.

In Italy and Greece, some high density and low density orchard areas increased, whereas the orchard areas of intermediate density decreased.

Portugal is the only Member State where there was an increase in the areas of all densities, especially the very low density class.

Table D.7: 2007 orchard area by density class as a percentage of 2002 orchard area (EU-15)-Small citrus fruit

Member State	Total	<250	250 and <499	>500 and <749	>750 and <999	>1,000 and <1,499	>1,500 and <1,999	>2,000 and <2,499	>2,500 and <2,999	<u>≥</u> 3,000
EU-15	100.11	658.04	121.56	101.91	98.82	53.47	27.68	39.39	34.82	151.25
Greece	133.21	401.24	135.22	122.39	38.19	188.93	-	-	-	-
Spain	105.05	981.43	188.14	106.30	100.27	51.61	28.34	38.77	33.81	148.36
France	95.89	22.67	104.22	85.57	13.28	-	-	-	-	-
Italy	77.53	656.84	80.74	63.10	62.97	105.84	14.97	-	76.70	191.38
Portugal	83.84	270.13	53.51	93.18	147.10	224.65	56.64	738.78	42.73	-

In EU-15, the total area of small citrus fruit trees orchards remained almost constant between 2002 and 2007, but its distribution according to the density of the trees underwent a major transformation. There was an increase in the very high density orchard areas (above 3,000 trees/ha) and in the low density orchard areas (below 749 trees/ha). The increase was particularly pronounced in the area of density below 250 trees/ha, which increased by more than six times. The areas of orchards in other density classes decreased, most of them significantly.

Spain followed the same pattern of change as the EU-15, given that around three quarters of the EU-15 area of small citrus fruit trees orchards belongs to Spain.

Italy experienced a significant increase in the very low and very high density orchard areas (below 250 and above 3,000 trees/ha), and large decreases in most of the middle-density orchard areas.

In Greece, there was a large increase in the low density orchard areas (below 749 trees/ha) and in the areas of density between 1,000 and 1,499 trees/ha.

Table E.1.a: The EU-15 apple tree orchard by variety. 2002and 2007

Variety	2002 area	Variety	2007 area	Variety	2007 area as a % of 2002 area
All varieties (EU-15)	226,558	All varieties (EU-15)	200,589	All varieties (EU-15)	88.54
1.Golden Delicious&		1.Golden Delicious&		1.Golden Delicious&	
Golden Spur	66,040	Golden Spur	52,548	Golden Spur	79.57
2.Groupe Gala	23,420	2.Groupe Gala	23,138	2.Groupe Gala	98.79
3.Red Delicious\$		3.Red Delicious\$		3.Red Delicious\$	
Starking Delicious	15,729	Starking Delicious	15,328	Starking Delicious	97.45
4.Jonagold	14,377	4.Elstar	12,106	4.Elstar	96.45
5.Elstar	12,552	5.Jonagold	10,532	5.Jonagold	73.25

Table E.1.b: The most important table apple varieties in EU-15 and EU-27 in 2007

Variety	EU-15 area	%	Variety	EU-27 area	%
All varieties	200,589	100.00%	All varieties	485,044	100.00%
1.Golden Delicious& Golden Spur	52,548	26.20%	1.Golden Delicious& Golden Spur	61,659	12.71%
2.Groupe Gala	23,138	11.53%	2.ldared	47,209	9.73%
3.Red Delicious& Starking Delicious	15,328	7.64%	3.Jonagold	32,076	6.61%
4.Elstar	12,106	6.04%	4.Groupe Gala	27,812	5.73%
5.Jonagold	10,532	5.25%	5.Red Delicious& Starking Delicious	18,433	3.80%

Table E.1.a shows the trend in the main apple tree varieties in EU-15. The most common varieties are Golden Delicious and Golden Spur, which represent approximately 26% of the total EU-15 table apple orchard areas, followed by Group Gala (12%), Red Delicious and Starking Delicious (8%), Jonagold (6%) and Elstar (5%). Between 2002 and 2007, the areas cultivated with all these varieties decreased, but they kept the same ranking according to their area. The exceptions were Jonagold and Elstar, which swapped places.

After the 2004 and 2007 enlargements, the order of importance of the different varieties changed (see Table E1b). The Golden Delicious and Golden Spur variety is still the most cultivated, but now accounts for only 13% of the total table apple area. The second variety is now Idared, with 10% of the area. The next three varieties in EU-27 are Jonagold (7%), Group Gala (6%) and Red Delicious and Starking Delicious (4%).

Table E.2.a: The EU-15 pear trees orchard by variety. 2002and 2007

Variety	2002 area	Variety	2007 area	Variety	2007 area as a % of 2002 area
All varieties (EU-15)	109,250	All varieties (EU- 15)	95,391	All varieties (EU- 15)	87.31
1.Conference	26,240	1.Conference	26,929	1.Conference	102.63
2.Abate Fetel	12,399	2.Abate Fetel	12,531	2.Abate Fetel	101.07
3.William's	11,000	3.William's	9,496	3.William's	86.33
4.Blanquilla	10,671	4.Rocha	8,728	4.Rocha	94.23
5.Rocha	9,263	5.Blanquilla	5,783	5.Blanquilla	54.19

Table E.2.b: The most important table pear tree varieties in EU-15 and EU-27 in 2007

Variety	EU-15 area	%	Variety	EU-27 area	%
All varieties (EU-15)	95,391	100.00%	All varieties	111,878	100.00%
1.Conference	26,929	28.23%	1.Conference	29,178	26.08%
2.Abate Fetel	12,531	13.14%	2.Abate Fetel	12,568	11.23%
3.William's	9,496	9.95%	3.William's	10,332	9.24%
4.Rocha	8,728	9.15%	4.Rocha	8,728	7.80%
5.Blanquilla	5,783	6.06%	5.Blanquilla	5,783	5.17%

The main varieties of table pear tree in EU-15 were the same in 2002 and 2007. There was an increase in the area under the Conference and Abate Fetel varieties during this period. These two varieties account for 28% and 13% respectively of the table pear orchards in EU-15. The next three varieties are William's (10%), Rocha (9%), and Blanquilla (6%), and the area under all of these varieties decreased in the period between the two surveys. The huge decrease for Blanquilla, which was much greater than for Rocha, has meant that the former is now only the fourth most important variety of pear tree plantation in EU-15.

In EU-27, the main pear varieties are the same as in EU-15, but generally the EU-27 area that is cultivated with each variety accounts for a lower share of the total area under pear trees. For example, the Conference variety represents 28% of the EU-15 pear tree orchard area, and only 26% of the total area for EU-27. Abate Fetel covers 13% of the total EU-15 area, and only 11% of the total EU-27 area under table pear trees. The ranking order of the most important varieties is still the same. This shows that successive enlargements have not altered the pattern of distribution of the different varieties.

Table E.3.a: The EU-15 peach trees orchard by groups of varieties. 2002and 2007

Variety	2002 area	Variety	2007 area	Variety	2007 area as a % of 2002 area
All varieties	201,325	All varieties	189,942	All varieties	94.35
Nectarines (yellow flesh)	27,257	Nectarines (yellow flesh)	21,192	Nectarines (yellow flesh)	77.75
Group Cresthaven	18,154	Group Cresthaven	17,333	Group Cresthaven	95.48
Group Pavie/Percoche	17,409	Group Pavie/Percoche	16,299	Group Pavie/Percoche	93.63
Group Springcrest	16,149	Group Springcrest	11,858	Group Springcrest	73.43
Group Stark Red gold	13,479	Group Stark Red gold	10,925	Group Stark Red gold	81.05

Table E.3.b: The most important peach tree groups of varieties in EU-15 and EU-27 in 2007

Variety	EU-15	%	Variety	EU-27	%
All varieties	189,942	100.00%	All varieties	206,958	100.00%
Nectarines yellow	211,922	11.16%	Nectarines yellow	21,700	10.49%
Group Cresthaven	17,333	9.13%	Group Cresthaven	18,468	8.92%
Group Pavie/Percoche	16,299	8.58%	Group Pavie/Percoche	17,003	8.22%
Group Springcrest	11,858	6.24%	Group Springcrest	11,965	5.78%
Group Stark Red	10,925	5.75%	Group Stark Red gold	11,092	5.36%

For peach tree orchards, the analysis is conducted for groups of varieties, as each individual variety covers only a very small share of the total EU area. The most cultivated varieties of peach trees in EU-15 were the same in 2002 and 2007, but their share of the total has decreased. The decline was significant for the Springcrest group (27%), yellow flesh nectarines (13%) and the Stark Red Gold group (29%).

The main groups of varieties are the same in both EU-15 and EU-27, but they account for a slightly smaller share of the EU-27 total than of the EU-15 total. As the new Member States have only 8% of the total EU-27 peach tree orchard area, the difference in percentage terms is quite small.

Table E.4.a: The EU-15 apricot trees orchard by variety. 2002and 2007

Variety	2002 area	Variety	2007 area	Variety	2007 area as a % of 2002 area
All varieties	59,069	All varieties	52,959	All varieties	89.66
1.Bulida	11,522	1.Bulida	7,923	1.Bulida	68.77
2.Bergeron	4,930	2.Bergeron	4,474	2.Bergeron	90.74
3.Bebecou	3,864	3.Bebecou	2,893	3.Bebecou	74.87
4.Precoce de Tyrinthe	2,510	4.Galta Rocha	2,315	4.Galta Rocha	122.16
5.Polonais	2,047	5.Precoce de Tyrinthe	1,759	5.Precoce de Tyrinthe	70.09

Table E.4.b: The most important apricot tree varieties in EU-15 and EU-27 in 2007

Variety	EU-15 area	%	Variety	EU-27 area	%
All varieties	52,959	100.00%	All varieties of apricots	67,370	100.00%
1.Bulida	7,923	14.96%	1.Bulida	7,923	11.76%
2.Bergeron	4,474	8.45%	2.Bergeron	5,106	7.58%
3.Bebecou	2,893	5.46%	3.Bebecou	2,893	4.29%
4.Galta Rocha	2,315	4.37%	4.Galta Rocha	2,315	3.44%
5.Precoce de Tyrinthe	1,759	3.32%	5.Precoce de Tyrinthe	1,760	2.61%

In both 2002 and 2007 the three most important apricot varieties in EU-15 were Bulida (15% of the area), Bergeron (8%) and Bebecou (5%).

All of these varieties saw significant decreases in terms of cultivated area.

The variety Precoce de Tyrinthe was the fourth most important in 2002, but the 30% decline in terms of its area placed it in fifth position in 2007, with only 3% of the area.

The Polonais variety also decreased in importance, while the Galta Rocha variety experienced a significant increase in cultivated area. It became the fourth most important variety, covering 4% of the EU-15 area under apricot trees.

The most cultivated apricot tree varieties in EU-27 are the same as in EU-15. Most of the areas did not change in absolute value with enlargement. This is because, although the varieties cultivated in the new Member States are generally different, their share of the total apricot area has obviously decreased. This is the case for Bulida, Bebecou, Galta Rocha and Precoce de Tyrinthe.

Only the area cultivated with the Bergeron variety increased as a result of the enlargement to EU-27, although its share of the total area fell by almost 1 percentage point.

Table E.5.a: The EU-15 orange tree orchard by variety. 2002and 2007

Variety	2002	Variety	2007	Variety	2007 area as a % of 2002 area
All orange varieties	252,117	All orange varieties	277,494	All orange varieties	110.07
1.Sweet, Navels Group, Navelina or		1.Sweet, Navels Group, Navelina or		1.Sweet, Navels Group, Navelina	
Dalmau	69,081	Dalmau	74,433	Or Dalmau	107.75
2.Sweet, Navels Group, Merlin or Washinton Navel	34,125	2.Sweet, Valencia Late	31,884	2.Sweet, Valencia Late	101.88
3.Sweet, Valencia Late	31,294	3.Sweet, Navels Group, Lane Late	30,321	3.Sweet, Navels Group, Lane Late	183.86
4.Blood, Tarocco	24,554	4.Sweet, Navels Group, Merlin or Washinton Navel	28,185	4.Sweet, Navels Group, Merlin or Washinton Navel	82.59
5.Sweet, Navels Group, Lane Late	16,492	5.Blood, Tarocco	22,243	5.Blood, Tarocco	90.59

Table E.5.b: The most important orange tree varieties in EU-15 in 2007

Variety	Area	%
All orange varieties	277,494	100.00%
Sweet, Navels Group, Navelina or Dalmau	74,433	26.82%
Sweet, Valencia Late	31,884	11.49%
Sweet, Navels Group, Lane Late	30,321	10.93%
Sweet, Navels Group, Merlin or Washinton Navel	28,185	10.16%
Blood, Tarocco	22,243	8.02%

The most common variety of oranges in EU-15 is the Navelina or Dalmau, which accounts for approximately 27% of the area under oranges. Between 2002 and 2007, the area cultivated with this variety increased by almost 8%.

The Merlin or Washington Navel variety was the second most cultivated variety in 2002, but dropped to fourth place in 2007, when its area decreased by 17%. It accounts for 10% of the orange area in EU-15.

The Valencia Late variety covers 11% of the area and it experienced a slight increase in area between 2002 and 2007. In 2002, it was the third most cultivated variety and in 2007 it became the second most important.

The Lane Late variety saw a large increase in area (84%), to become the third most cultivated variety. It accounts for around 11% of the orange orchard area.

The area cultivated with the Tarocco variety shrank by almost 10%, and in 2007 it accounted for 8% of the total area.

The report does not show a comparison between the EU-15 and EU-27 citrus trees areas. Cyprus, the only New Member State that has citrus fruit orchards, has only around 1% of the corresponding EU-27 area; therefore the difference between EU-15 and EU-27 citrus tree areas is very small.

Table E.6.a: The EU-15 lemon tree orchard by variety. 2002and 2007

Variety	2002	Variety	2007	Variety	2007 area as a % of 2002 area
All lemon varieties	68,034	All lemon varieties	62,190	All lemon varieties	91.41
1.Group Mesero	21,976	1.Group Mesero	22,252	1.Group Mesero	101.25
2.Group Berna	17,838	2.Group Berna	12,998	2.Group Berna	72.86
3.Comune	9,265	3.Comune	8,496	3.Comune	91.69
4.Maglini	3,613	4.Maglini	2,285	4.Maglini	63.24
5.Monachello	2,442	5.Siagara bianca	1,712	5.Siagara bianca	84.26

Table E.6.b: The most important lemon tree varieties in EU-15 in 2007

Variety	Area	%
All lemon varieties	62,190	100.00%
Group Mesero	22,252	35.78%
Group Berna	12,998	20.90%
Comune	8,496	13.66%
Maglini	2,285	3.67%
Siagara bianca	1,712	2.75%

The main varieties of lemon trees in 2007 were the same as in 2002. The Group Mesero is the most cultivated; it accounts for 36% of the lemon tree area and is the only one among the top five whose total area increased.

The next most popular varieties are Group Berna (21%), Comune (14%), Maglini (4%) and Siagara Bianca (3%). The areas under all these four varieties decreased in the period 2002 - 2007.

Table E.7.a: The EU-15 small citrus fruit tree orchard by variety. 2002and 2007

Variety	2002	Variety	2007	Variety	2007 area as a % of 2002 area
All Small-fruited citrus varieties	149,576	All Small-fruited citrus varieties	149,744	All Small-fruited citrus varieties	100.11
Clementines, Clémenules or Clémentine de Nules	37,477	Clementines, Clémenules or Clémentine de Nules	47,687	Clementines, Clémenules or Clémentine de Nules	127.24
Clementines, Comune	18,227	Clementines, Comune	15,894	Clementines, Comune	87.20
Clementines, Marisol	9,545	Clementines, Clemenvilla o nova	8,072	Clementines, Clemenvilla o nova	99.19
Clementines, Clemenvilla o nova	8,137	Clementines, Marisol	7,272	Clementines, Marisol	76.19
Clementines, Hernandina	7,204	Clementines, Hernandina	6,442	Clementines, Hernandina	89.42

Table E.7.b: The most important small citrus fruit tree varieties in EU-15 in 2007

Variety	Area	%
All small citrus fruit varieties	149,744	100.00%
Clementines, Clémenules or Clémentine de Nules	47,687	31.85%
Clementines, Comune	15,894	10.61%
Clementines, Clemenvilla o nova	8,072	5.39%
Clementines, Marisol	7,272	4.86%
Clementines, Hernandina	6,442	4.30%

The first variety of small citrus fruit trees is the Clémenules or Clémentine de Nules. It covers 32% of the total EU-15 small citrus fruit trees area, following a considerable increase in area between 2002 and 2007.

The second most popular variety is the Clementine Comune. Its area decreased in the period between the two surveys and its share of the total fell from 12% to under 11%.

The Clementine Marisol variety experienced a 25% decrease in cultivated area, dropping from third to fourth most cultivated variety. It accounts for around 5% of the total area.

The area under Clemenvilla o nova was the fourth most important variety in 2002. It too covers around 5% of the total area. Although the area decreased slightly in the period between the two surveys, it was the third most cultivated variety in 2007.

The fifth variety in both 2002 and 2007 was the Clementine Hernandina, which accounts for 4% of the total area of the orchards for small citrus fruit trees.