

CITRICULTURE IN OTHER LANDS

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Citrus fruits are grown in near about 64 countries of the world. Currently, citrus is commercially grown primarily between the latitudes 40°N to 40°S. Brazil is now the largest producer of Citrus world wise, and its industry is oriented towards production of oranges for processing. The United States is the second largest producer of citrus overall, and the largest producer of the grape fruit. China, a major area of origin, has become the third largest producer of oranges worldwide. Spain is the fourth largest producer followed by Mexico, Italy, Japan, Egypt, Argentina, Turkey, Israel and Morocco (Global Citrus industry).

Globally, a gradual increase in Citrus Production has covered as much as 26%

of total fruits produced. There are two clearly differentiated markets in Citrus Sectors, a) Fresh Citrus fruits market, with a predominance of oranges, b) Processed Citrus fruit products market, mainly orange juice. It is expected that tangerines will be more in demand in coming years. China, India, Pakistan with their quality mandarin will be in better position to get greater market share in the world citrus trade. In general South American fruit production is export oriented and Asian Production is mainly for local consumption. Consumption of Citrus fruits juices has also increased. This increase, boosted juice production and international juice trade.

Citrus Growing Countris in Different Continents

Asia	North and central ameica	South america	Africa	Europe	Austraia
China, Japan, Israel, India, Nepal, Bangladesh, Bhutan, Sri Lanka, Pakistan, Malaysia, Philippines, Syria, Turkey, Lebanon, Egypt, Thailand	Honduras, Jamaica, Trinidad, Mexico, USA, Cuba, Puerto Rico, Costa Rica	Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Suriname, Uruguay and Venezuela	Morocco, Algeria, Egypt, Ivory, Zimbabwe, Sierra Leone, Guinea, Senegal, Congo, Ghana, South Africa, Swaziland, Mozambique, Uganda, Ethiopia, Nigeria, Kenya, Tanzania, Zambia, Malawi	France, Georgia, Greece, Italy, Portugal, Spain, Yugoslavia	Australia, Cook Island, New Zealand

Source: Advances in citricultures.2004

World Wide Adaptability of Citrus

Climatically citrus growing regions of the world may be demonstrated as:-

- Moist marine areas, such as Japan, the black sea coast, Adriatic sea coast of Yugoslavia, parts of Turkey, and New Zealand. The cold hard culture, such as Satsuma, mandarin is usually grown in these colder locations
- Subtropical, Mediterranean Climate is typified by Spain, Israel, Italy, Turkey, Parts of Australia, Lebanon, Greece, and the coastal area of California. These areas are famous for production of lemons as well as sweet oranges.
- Subtropical arid areas such as the U.S. desert regions of southern California, Arizona, and Rio Grande Valley of Texas. A sizeable amount of grapefruits are often grown
- Subtropical, moist areas include

Produced in these areas are generally good for fresh consumption.

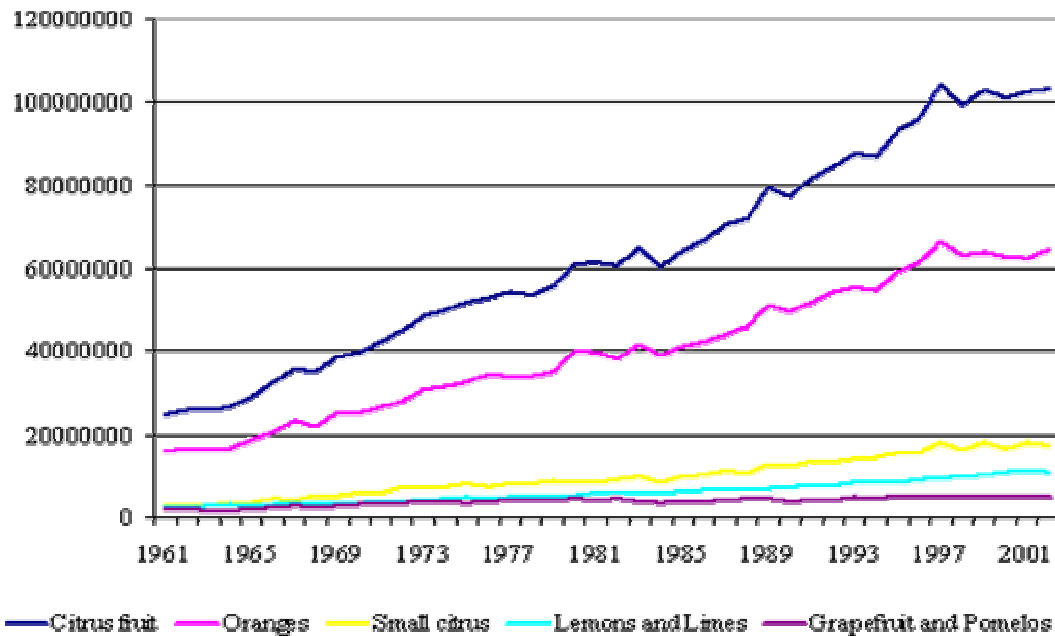
- Tropical, moist areas such as Hawaii, part of Mexico, central America etc. Fruit rarely attain good external and internal colour. All the cultivars tend to be overbearing and experience Production throughout year.

World Citrus Production, Export and Processing

i. Citrus Fruit Production

World production of citrus fruit has experienced continuous growth in last decades of 20th century. The world Citrus industry has a total production of 96.64 million tones during 2001-2002. Oranges constitute the bulk of Citrus fruit production, accounting for 2/3 of total Citrus production. In world citrus production, oranges contributed 71 % and rest of tangerines, lemons and grape

World Citrus Fruits Production (1961-2002, tons)



Source: UNCTAD from FAO

Florida, Parts of China, India, South Africa, Brazil and Argentina. Fruit

fruit contributed 13%, 10 % and 6 % respectively.

Contribution of Major Countries in Production

World Production = 96640.8 0 (000 tons)

Countries	Production	Percentage
Brazil	19754.00	20.44
U s a	14097.20	14.59
China	11607.00	12.01
Mexico	06120.00	06.33
Spain	05750.60	5.95
India	04730.00	4.89
Italy	03016.30	3.12
Egypt	02900.00	3.00
Pakistan	02003.50	2.07

Source: <http://www.fao.org/es/ESC/escf/escr/citrus/citrus.htm>.

Citrus in World 2001-02

World production=96.64 million tons

Oranges = 71%

Tangerines/mandarins = 13%

Lemon and limes = 10%

Grape fruits = 06%

The rise in Citrus production is due to increase in cultivation areas and the change in consumer preferences towards good health, convenience food consumption and rising incomes. The following graph shows the evolution of world production for total Citrus fruits and different type of Citrus.

Contribution of different areas in World Citrus Production

Most citrus fruit production is concentrated in certain areas. Maximum Citrus fruits are grown in the Northern Hemisphere, accounting for 70% of the total Citrus production. Rest of 30% Citrus is produced in Southern hemisphere.

World Citrus Production

(⁰⁰⁰ Tones)

Year	1999-2000	2000-2001	2001-2002
World	94782.9	89071.1	96640.8
Northern Hemisphere	67127.6	63569.4	67969.1
Southern Hemisphere	27655.3	25501.7	28671.7

(<http://www.fao.org/es/ESC/escf/escr/citrus/citrus.htm>)

Main Citrus fruits producing countries are Brazil, the United States and China producing 19754.00, 14097.20 and 11607.0 thousands tons respectively. These countries represent more than 2/3 of global Citrus production.

Total Citrus Production (⁰⁰⁰ tons)
Total World Production in 2001-2002= 96640.8 (000 tons)

Countries	1999-2000	2000-2001	2001-2002
USA	14810.7	14049.3	14097.2
Greece	1354.2	1229.1	1260.5
Italy	3217.2	3011.2	3016.3
Spain	5624.5	5400.7	5750.6
Israel	696.0	630.0	512.6
Algeria	440.4	442.3	471.2
Morocco	1384.0	965.0	1153.5
Tunisia	269.6	323.1	323.3
Egypt	2231.6	2508.2	2900.0
Cyprus	236.8	192.9	199.1
Lebanon	324.5	317.4	316.5
Turkey	2143.2	1901.5	2390.0
Others	806.7	857.7	897.3
Portugal	333.7	286.1	297.5
Japan	1817.0	1504.0	1633.1
Costa Rica	405.0	436.7	400.0
El Salvador	37.3	37.3	37.3
Guatemala	104.3	106.0	106.0
Honduras	142.2	142.2	142.2
Mexico	5531.6	6142.5	6120.0
Cuba	769.2	883.8	741.8
Iran	2918.2	2953.9	2953.9
China	10787.0	8783.0	11607.0
India	4530.0	4530.0	4730.0
Pakistan	1900.5	2003.5	2003.5
Indonesia	644.1	411.7	411.7
Korea Rep	637.1	563.0	651.0
Viet nam	449.2	439.7	453.8
Argentina	2578.8	2808.0	2566.0
Brazil	18678.8	16498.1	19754.0
Chile	214.0	244.0	235.0
Colombia	339.8	352.9	233.5
Ecuador	200.3	206.6	210.7
Paraguay	282.8	298.3	303.0
Peru	671.2	639.7	710.6
Australia	755.2	562.9	728.0
South Africa	1473.1	1526.5	1659.3

Source: [http:// www.fao.org/es/ESC/escf/escr/citrus/citrus.htm](http://www.fao.org/es/ESC/escf/escr/citrus/citrus.htm)

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For the different types of citrus fruits, major producing countries are the following, ranked as for 2000 FAO data

Oranges	Brazil, United States, Mexico, China, India, Spain, Italy, Iran, Egypt, Pakistan.
Small citrus	China, Spain, Japan, Brazil, Iran, Thailand, United States, Italy, Turkey.
Lemons and limes	Mexico, India, Argentina, Iran, Spain, United States, Italy.
Grapefruit	United States, China, Israel, Cuba, Mexico, South Africa.

The world citrus industry has a total production of 96.64 million tones during 2001-02. Amongst leading Citrus growing countries. Brazil, USA and China contributed 20.44%, 14.59% and 12.01% toward world production. Mexico, Spain occupied 4th and 5th position in the ranking. Brazil is producing maximum yield/ha i.e 25t/ha as compared to world average yield i.e. 15 t/ha.

In the Mediterranean countries, citrus fruits are produced mainly for fresh fruit consumption.

Spain is the leading producing country in the area. Amongst leading Citrus growing countries, China, Brazil and Mexico has triple their production during 23 years. South Africa recorded two folds increase in total citrus production from 0.59 to 1.65 million tones. Other front line Citrus countries attained a substantial increase in total citrus

World citrus fruits export

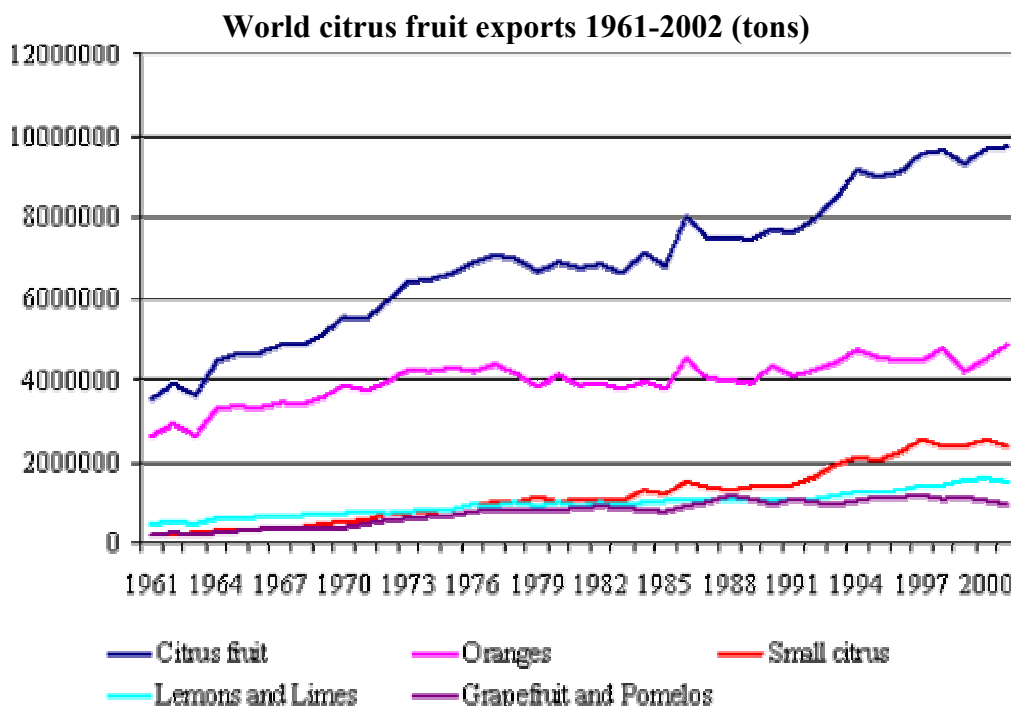
As fresh Citrus fruits

Exports of fresh citrus fruits represent roughly 10% of total citrus fruit production. The following chart shows the evolution of citrus fruit exports in the last decades of the nineties for total citrus fruits and the different types of fruits included in the group.

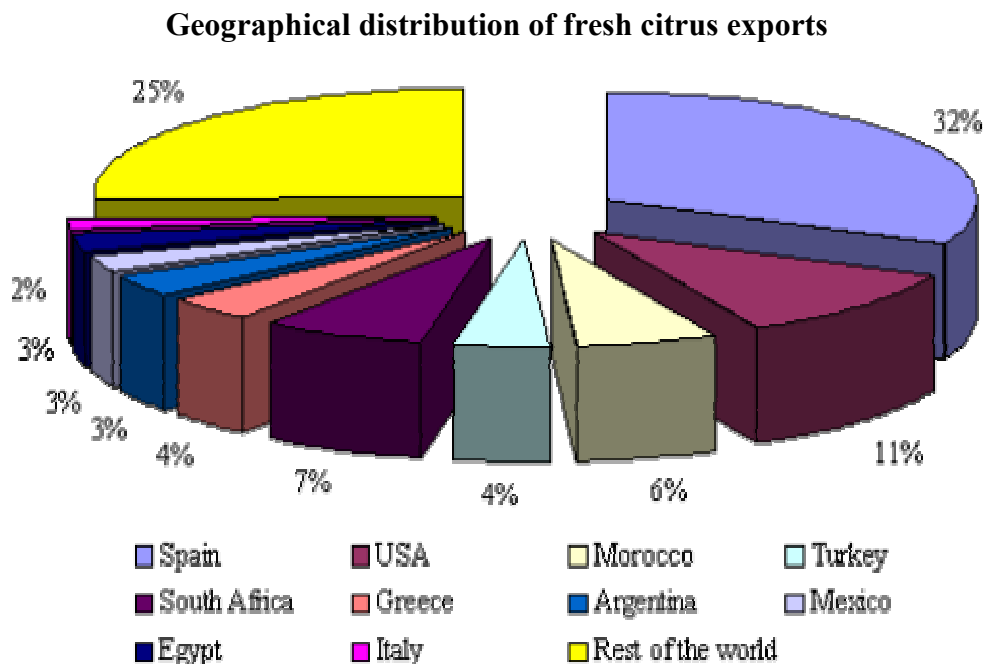
The bulk of exports of fresh citrus fruits is situated in the Northern

Hemisphere, accounting for around 85% of world fresh citrus fruit exports in the late nineties. The Mediterranean region plays a prominent role as fresh citrus exporter, providing nearly 60% of global fresh citrus fruits exports.

Southern Hemisphere countries, such as Argentina, Australia and South Africa are increasing their presence in international trade by providing off-season citrus fruits to the North. This has been favored by the improvements in storage and transportation technologies. Major destinations of Mediterranean exports of fresh citrus fruits are the European Union countries. In the case of United States, primary destinations of fresh citrus fruits exports are Japan, Canada and Southeast Asian countries.



Source: UNCTAD from FAO
<http://ro.unctad.org/infocomm/anglais/orang/market.htm>



Source: UNCTAD from FAO data

China, Brazil and Mexico have triple their production during 23 years. South Africa recorded two folds increase in total citrus production from 0.59 to 1.65

million tones. Other front line Citrus countries attained a substantial increase in total citrus production from 0.90 to 2.9 million tones in Egypt and from 2.12

to 8.9 million tons in Turkey. On the other hand, production pattern in countries like Algeria, Israel, and Japan, has decreased from 0.5 to 0.47 million tones ,1.5 to 0.51 m tones and 3.10 to 1.63 million tones respectively. USA and Brazil are the leading producing countries of processed citrus fruits. Their citrus industries are oriented toward production of grapefruit and oranges for processing.

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For the different types of citrus fruits, major exporting countries are the following, ranked as for 2000 FAO

Oranges	Spain, South Africa, United States, Morocco, Greece, Egypt.
Small citrus	Spain, Morocco, China, Turkey.
Lemons and limes	Spain, Mexico, Argentina, Turkey, United States.
Grapefruit	United States, South Africa, Israel, Turkey.

Production, export and Processing pattern in leading citrus growing countries (thousand metric tons) over last 30 year

<i>Country</i>	<i>Production</i>		<i>Export</i>		<i>Processing</i>	
	<i>1970-71</i>	<i>1999-00</i>	<i>1971-72</i>	<i>1999-00</i>	<i>1971</i>	<i>1999-00</i>
World	45385.1	90886.8	6290.1	9430.5	14093.4	31381.3
Northern Hemisphere	34025.1	63891.6	5774.8	8101.4	11533.9	17071.3
United States	11475.7	14812.1	785.1	1023.0	9048.1	11569.0
Mediterranean region	11705.6	18291.4	4578.3	5529.8	9048.1	3579.3
Greece	668.7	1354.2	189.6	322.4	163.8	418.6
Italy	2688.6	3214.9	387.3	212.4	351.0	1422.8
Spain	2745.2	5624.5	1620.4	3221.0	276.2	924.0
Israel	1609.5	696.0	891.8	220.0	561.4	363.0
Algeria	515.5	444.9	112.8	-	-	-
Morocco	798.4	1400.0	563.3	596.8	95.8	140.4
Tunisia	119.7	269.6	28.4	27.0	-	-
Cyprus	245.0	236.8	184.5	118.5	16.6	51.0
Egypt	942.2	2497.5	164.5	226.9	3.0	102.0
Lebanon	315.4	353.5	165.6	-	-	-
Turkey	748.2	1826.2	121.9	489.5	68.7	116.5
Former USSR	84.0	93.0	-	-	-	-
Japan	3863.4	1746.0	-	-	-	159.0
Cuba	162.0	755.0	47.7	55.0	-	560.0
Mexico	1761.6	4730.0	-	254.0	-	636.0
China	719.1	10787.1	83.1	156.0	-	535.0
Southern Hemisphere	11359.9	26995.2	515.3	1329.1	2559.5	14310.0
Argentina	1434.4	2240.0	40.2	310.0	245.4	936.0
Brazil	6051.0	19700.0	53.3	102.0	1944.6	12811.0
Uruguay	73.9	-	13.4	-	-	-
Venezuela	235.2	-	-	-	-	-
United States	899.2	935.6	-	-	-	-
Australia	417.6	715.0	25.3	5.0	171.0	293.0
South Africa	604.3	1149.0	305.7	646.0	94.2	270.0

Source: Advances in Citriculture 2004