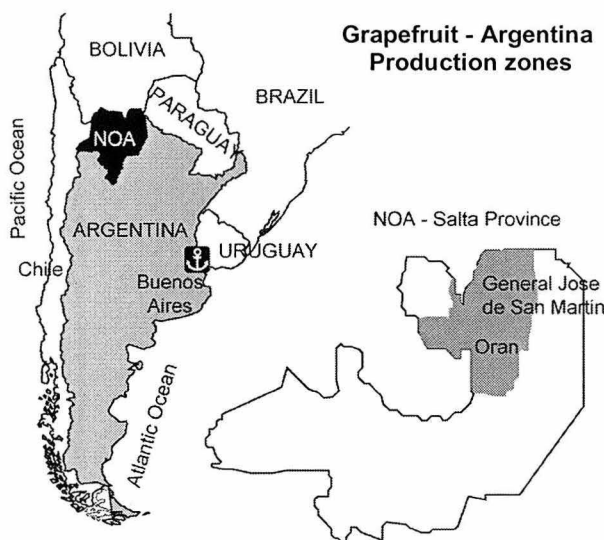


Argentinian grapefruit

Argentina is one of the ten leading producer countries in the world, thanks in particular to the industrial plantations established in the 1990s in the north-west part of the country (in particular in Salta province). The sector was seriously affected by a strong decrease in export income at the end of the 1990s and the beginning of the 2000s but now seems to be recovering. However, the spread in 2002 of sanitary problems such as black spot and citrus canker made it delicate and limits development potential.



Source: Cirad

Production zones

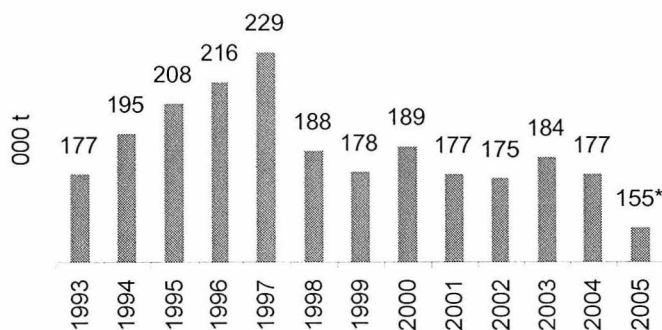
Grapefruit production is concentrated in two zones in the north of the country with a subtropical climate and low frost risk. Production in the Mesopotamia region, the traditional centre for the crop (especially Corrientes province) has decreased strongly because of serious sanitary problems. Grapefruit is now grown on about a third of the area and is sold almost only on the domestic market. Production developed strongly in the NOA (Noroeste Argentino) region in the 1990s because of its earliness and its more limited exposure to sanitary problems thanks to a marked dry season (the region was free of citrus canker until 2002). It was the site of 55% of the 12 500 hectares cultivated country-wide in 2005, with the plantations sited mainly in the departments in the north-west of Salta province (Oran and General Jose de San Martin). The NOA orchard is completed by the neighbouring provinces of Formosa, Jujuy and Chaco. Industrial type production organisations (more than 500 ha) form 70% of the area under grapefruit in NOA. These have a high technical level and can ship a large proportion of their production to export markets

Volumes

Production has increased considerably since the mid-1980s and growth accelerated from the first half of the 1990s onwards with the laying out of industrial plantations in the Salta region. Production peaked at some 230 000 t in 1997 after several years of steady growth. A crisis caused by several factors and resulting in a strong decrease in profitability upset this dynamics at the end of the 1990s. On the one hand, income, strongly dependent on exports to the EU, decreased considerably as a result of increasing competition from South Africa and the strength of the dollar against the European currencies. In addition, recurrent drought and above all the appearance of citrus canker in NOA in 2002 had an extremely negative effect on yields and production costs. Economic returns have improved markedly in recent years as the European market is more

buoyant (the euro:peso exchange rate is more favourable and Florida grapefruit are in short supply). Nevertheless, this improvement has not yet resulted in a recovery of production; this has varied between 160 000 and 180 000 t since 1998.

Grapefruit - Argentina - Production



*: estimates / Source: FEDERCITRUS

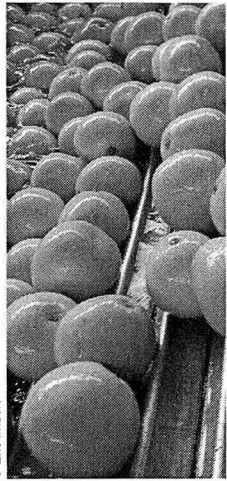
Grapefruit — Argentina — Production calendar

	J	F	M	A	M	J	J	A	S	O	N	D
Star Ruby												
Ruby Red												

Production calendar and varieties

The NOA crop consists almost entirely of coloured varieties. Pink is dominant and forms 70% of total volumes ('Ruby', 'Foster'

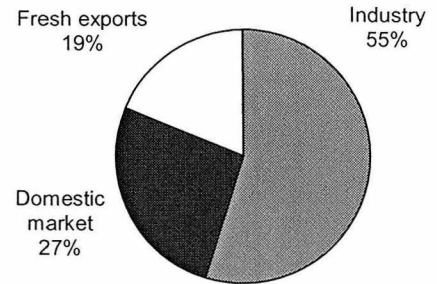
and 'Foster Seedless' from which 'Star Ruby' was bred). Red varieties account for about 35% of production, with 'Star Ruby', 'Rio Red', 'Flame', 'Henderson' and an original indigenous mutation of 'Ruby Red' owned by the La Toma company and named 'Rouge La Toma'. 'White Marsh' forms only 5% of the volumes in the zone. In contrast, it is much more widely grown in NEA (Noreste Argentino).



Outlets

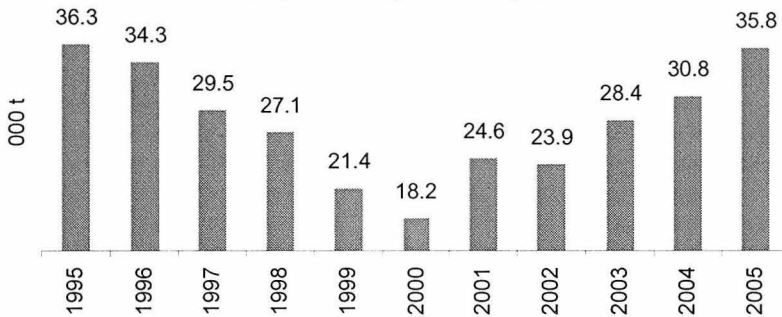
The considerable increase in sorting rejects resulting from the spread of canker and drought (small fruits) has led to a sharp increase in the quantities supplied to industry, a leading market segment in recent years with one juice production unit in Salta province and two in Jujuy province. Exports have also increased in the past few years. NOA has a marked export specialisation accounting for 30 to 40% of its production. The domestic market is in a serious slump with regard to both market shares and volumes, that have fallen from over 100 000 t at the end of the 1990s to less than 50 000 t recently. It is the outlet for most of the fruits from the Mesopotamia region and grade 2 fruits from NOA.

Grapefruit - Argentina - Outlets



Source: INTA, SENASA, FEDERCITRUS, CICA
2003-2004 season average

Grapefruit - Argentina - Exports

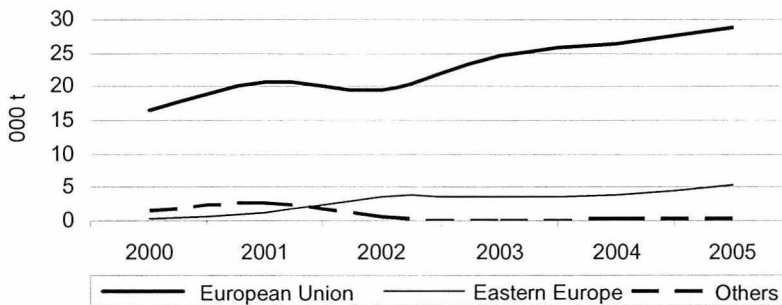


Source: SENASA, USDA

Exports

Endemic black spot and citrus canker and the phytosanitary measures in force at the international level have led the Argentinian authorities to supervise export activity very strictly since 1993. The discovery of citrus canker in NOA in 2002 and then that of a batch infected by black spot in Spain in 2004 led to the strengthening of the measures. Since then, only fruits grown on plantations approved by the SENASA (Servicio nacional de sanidad y calidad agroalimentaria) and controlled by the same body from orchard to loading are eligible for export.

Grapefruit - Argentina - Exports by destination



Source: SENASA

Export volumes decreased noticeably in the 1990s before regaining momentum in recent years. Europe is the main outlet for Argentinian grapefruit and the most attractive market. The exchange rate is favourable (with a strong euro) and the marketing window has broadened because of the shortage of fruits from Florida. The volumes exported to Eastern Europe are also increasing but remain limited. A few batches are also shipped to the Middle East, Japan and China (with export authorisations since 2004 and 2005 respectively) and North America. Four exporters alone concentrate nearly two-thirds of the volumes shipped.

Logistics

As a rule, the grapefruit for the European market are hauled by refrigerated lorry to Campana. Nearly two-thirds of 2005 exports left via this port on the river Parana some 1 300 km from Salta. The fruits are then loaded on conventional ships and reach the northern EU ports (Rotterdam and Antwerp) after some two weeks at sea. The quantities for the markets in the Far East and Canada are shipped in containers. Significant volumes are also shipped from the port of Buenos Aires and to a lesser extent from San Pedro, Zarate and Rosario. Container traffic seems to be increasing in 2006 because of the decrease in prices.

Grapefruit — Argentina — Logistics

Markets	Main shipping lines		Shipping time	Observations
	Port of departure	Port of arrival		
EU	Buenos Aires, Campana, etc.	Rotterdam	17 to 19 days	Container traffic: Maersk, Hambourg Sud, etc.
		St Petersburg	20 to 22 days	Conventional traffic: Lauritzen, etc.
		Black Sea	19 to 20 days	