

## Tomato processing in Chile

After many years of expansion, and notably the production of more than 900 000 tonnes of tomatoes for processing in 1999 and 2000, Chilean production has been dropping over the last four years and a production of only 756 000 tonnes was achieved in 2005. This contraction is mainly due to the economic difficulties experienced by Argentina and Brazil, 2 major export markets at that time, in the early 2000's. As a result, the tomato products industry is also going through difficulties due to the general fall in export demand and international prices, which has resulted in a significant fall of planting contracts for these past season and the shut downs of several factories.



Most of those tomatoes are grown in the fertile earth of the country's central valley where weather conditions are ideal for tomato crops. Tomatoes for processing are planted between mid-September and the beginning of December and harvested between the 20<sup>th</sup> of January and the 10<sup>th</sup> of April. Sub-zero temperatures are a major drawback for these crops in most of the growing areas. Dry summers and wide differences between night time and daytime temperatures during the cropping season are responsible for the bright red colour of the fruit.

The production of processing tomatoes is subject to contracts which stipulate the provision of small plants, pesticides as well as technical and financial assistance by the processor. In 1999, bare-root seedlings accounted for 90% of the plants, but plug-seedlings are being increasingly used, despite costing twice as much. Plug-seedlings are more resistant and can advance the harvest date by 4 or 5 days, which is why processors are encouraging their use by producers. Planting is carried out at a density of 36 000 plants per hectare. All the

processing tomato crop is grown from hybrids. Gravitational irrigation is the most frequent form of irrigation; often according to the Californian furrow method. Drip irrigation is not yet in use because of the high initial investments required. In the last few years, producers have had to contend with a lack of available labour, a fact that has raised costs. For this reason, the industry has promoted mechanical harvesters but the cost of mechanized harvesting is still higher than manual harvesting. Less than 5 % of the surface are mechanically harvested. The implementation of modern cultivation techniques, the appearance of new varieties and the use of hybrid seeds have contributed to increasing average yields to more about 75 tonnes per hectare.

After many years of continuing increase in the surface planted, a drop was experienced since 2001; 10 400 hectares were grown in 2005, compared to 13 000 hectares in 2001. Reportedly, the industry decided to change from an effort to maximize the usage of processing capacity and thereby lower production costs in the past, to favour the quality of their products allowing them to face better the uncertain export market.

From 10 large processors less than 10 years ago down to only 2 large operators today, namely Aconcagua Foods with a 60 000 MT paste production and Agrozzi with 55 000 MT. There are only 5 running factories today in Chile. The factory production lines are very efficient and use Italian equipment for concentration and aseptic packaging, and benefit from highly qualified professionals.

The tomato industry in Chile produces mainly paste (90 % of the fresh tomatoes), with some sauces and some canned products – whole peeled, diced or pulped tomatoes. The Chilean tomato industry can hardly compete with its European counterpart, and every year, local production depends on the situation of the international markets after the Northern hemisphere crop. In 2005, 756 000 tonnes of tomatoes were made into paste, mainly hot-break paste at 30-32 °Brix (about 110 000 MT.) intended for the export market, with a small proportion being concentrated to 28-30 °Brix for the Japanese market and to 36-38% for South America.

The price of fresh tomatoes was about 55 US \$ in 2005 and the average yield was 72 MT per hectare.

The domestic market in Chile is much smaller than the export market with about 15 000 MT, half processed into sauces or ketchup and half used by the canned fish industry.

The tomato processing industry of Chile is represented within the WPTC by Chile Alimentos, based in Santiago.