

Fumigation Makes Spain the #1 Exporter of Strawberries in the World

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Spain is the biggest exporter of strawberries worldwide and ranks #2 in overall production (the U.S. is the #1 producer). The Spanish strawberry industry is worth more than €400 million a year and supports around 50,000 jobs. Strawberries are referred to as “red gold” in Spain. The Spanish strawberry sector uses an annual planting system with fresh plants established in October. The fruit is harvested from January to June and 90% is exported as the winter-spring supply for the European market. Germany imports about one-third of Spanish production, closely followed by France. Over 90% of Spain’s production of strawberries takes place in the SW corner of the country in the Huelva region. Strawberries are cultivated in long plastic tunnels and about 300,000 MT are grown each year on about 7000 hectares.

Strawberries are grown on the same land year after year without rotation to other crops [1]. As a consequence, there is a constant presence of soil borne pathogens and nematodes that infect strawberry plants. The standard practice in the Huelva region is to disinfest the soil with fumigants prior to covering the soil with plastic followed by transplanting strawberry seedlings through slits cut in the plastic. Research has shown that without fumigation, strawberry yields are 35% lower in non-fumigated fields in comparison to fields that have been fumigated [2]. Nematode populations are ten times higher in non-fumigated fields [3].

For many years, Spanish strawberry growers relied on methyl bromide for fumigation but have recently transitioned to alternative fumigants.

References

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2. Lopez-Aranda, J.M., et al. Evaluation of Methyl Bromide Alternatives for Strawberry in Florida and Spain. *2005 Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions*. October 31-November 3, San Diego, California.
3. Lopez-Aranda, J.M., et al. Strawberry Production in Spain: Alternatives to MB, 2008 results. *2008 Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions*. November 11-14, Orlando, Florida.



Huelva is the center of Spain's strawberry production



“Red Gold” in Barcelona



Fumigating strawberries



Fumigated

Not fumigated