PEAR STEMFILIOSIS RISK PREDICTION SYSTEM BASED ON AGRO CLIMATIC DATA (BSPCAST/PAMCAST MODELS)

Pear global production (27 million tons in 2016), rates it as one of the most valuable fruits in the world. Last years, consumption has been increasing over 3% yearly. Both production and consumption reach the top in countries like China, EU, Argentina and EUA.

Stemfiliosis is a pear disease that generates brown stains on its skin, turning pears into less commercially attractive fruit. Such disease is controlled by fungicides that leave waste in the fruits, increasing production costs and making it a non-environmentally friendly fruit.

This technology allows a better, cost-effective, and environmentally-friendly fungicide treatment in case of stemfiliosis.

TECHNOLOGY DESCRIPTION

This technology consists of a decision making system, formed by 2 modelos, BSPcast (Brown Spot of Pear Forecast) and PAMcast (Pleospora allii Maturation Forecast), based on algorithms obtained from experimental data, which determine the risk and the infection of the fruit. This system can forecast the risk of stemfiliosis infection from climate data such as temperature, relative humidity or wetting, and it is used to determine the right application of fungicides.

TARGET MARKET

This bimodal system BSPcast - PAMcast can be implemented as a decision making system targeted to the fruticulture sector. The target market has all population as final consumers, and phytosanitary products companies, IT companies or agriculture cooperatives, as tech transfer users.

COMPETITIVE ADVANTAGES

- More efficient, economic and sustainable technology
- Reduction of pear losses in production.
- Fungicide savings from 30-70%.
- First Stemfiliosis forecast model, evaluated and validated in real fields.