

Production cycle forecasts of the strawberry cv Elsanta by means of maturation curves and environmental control factors.

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Abstract

The climatic impact during the growing season is a key factor to forecasting the production quantities of the farms and growers organizations in particular. Furthermore, yield predictions are rather critical for crops that are highly characterized by limited shelf life performance like strawberry and soft fruit.

The number of variables that triggers the strawberry production are related and depending not only to the primary paedoclimatic influence, but also to the plant environment and genotype interaction, that determine considerable changes of the production factors levels like total yield, fruit size and grade characteristics and significant implications when weekly forecasts are necessary to market the right quantity of fruit.

Weekly prediction yield are built from up-to-data cadastre farm and land information, production potential of the plants and maturation curves made up from mathematical models and correlations with historical climatic and harvest data.

Reliable elaboration is made through a software linked both to the automatic meteorological stations and to the management program that updates the records. The output is weekly production multilevel forecasts that are continuously compared with the real production weights.

Predicting strawberry yields in soilless conditions for the cv Elsanta allows an efficient elaboration useful to give primary management tools to the market on the long and short time.