



JANNY MT



individual modules of controlled atmosphere

Long term preservation for pears : A step forward with Janny MT modules

Setting up the preservation :

In an ordinary cold room, 12 modules Janny MT are set up.
300 kg of Conférence pears per module : lid with 6 membranes.
10 kg of lime in a perforated bag added in each module
« Captacalfruit ».
Some control pears are preserved in the same cold room in boxes.



On Tuesday 06 of December, the afternoon was definitely international on the French farm « Gaec des fruits de Bourgogne », managed by Mr Geoffroy. About 30 people participated in the event, including people from Poland, Netherland, Switzerland, Italy and Germany. They have followed the technical presentation by Mr Gratadour, Technical Manager of Rhône Chamber of Agriculture. After 100 days of preservation, the opening of Janny MT modules has shown the good results obtained and the evolution of the experimentation. Many technical exchanges took place while a comparison between the fruits preserved in ordinary cold and those preserved in Janny MT modules was held. This meeting has emphasized several key factors in order to carry out a successful preservation with Janny MT modules on pears.

Summary of Mr Gratadour speech (Rhône Chamber of Agriculture)

It is very important to consider the quality of the fruits to be preserved. The success of preservation is obtained thanks to a perfect supervision of the orchard and a harvest stage fitting controlled atmosphere requirements. If those preliminary conditions are not observed, CA preservation is not recommended.

Both sanitary and physiological aspects, are very important elements to be considered. For pears, harvest firmness is a very good indicator while for apple, the background colour (especially for Gala and double coloured apples) and starch regression are essential tools to determine the harvest.

Oxygen and CO² recommended levels must be respected in order to avoid physiological disorders during the preservation (Example : Conférence pear O₂>2% et CO₂<2%). Pear is very sensitive to ethylen and requires a precise follow-up so as to be picked at the optimum stage. Several practical changes must be implemented by growers who are used to store their pears in ordinary cold conditions.



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O2/CO2 follow-up and Janny MT modules opening

Module N° 3	August 18	August 26	09/01	09/09	09/15	09/22	10/10	10/26	11/21	11/06
O2	Harvest	Module closure	3.0	2.8	3.3	3.3	3.7	2.6	2.1	1.9
CO2			0.0	0.0	0.3	0.0	0.1	0.3	0.4	0.3



Evolution and comparison of the firmness

Harvest firmness	« Janny MT module » 100 days	« Ordinary cold » 100 days	Difference after 100 days
5.5 Kg/cm ²	4.69 Kg/cm ²	4.49 Kg/cm ²	5%

Comments : After « Janny MT » modules opening, the pears are still very turgescient and do not show any withering signs. The peduncle has the same color and there is absolutely no brown core and/or hollow corpus. For the next steps of the trial, we will follow the preservation up to 150 and 200 days. Janny MT Company can communicate the results on demand.