

Kiwi fruit

Hayward (green)

2 trials



AIM OF THE STUDY:

WHAT IS THE IMPACT OF THE HDCOLD® TECHNOLOGY ON THE STORAGE QUALITY OF HAYWARD KIWI FRUIT COMPARED TO A STANDARD COLD ROOM?

Current practice:

- Recommended storage :
 - 0-1°C / 90-95 % RH
 - 3-4 months
- Product extremely sensitive to ethylene
- Existing technologies to extend storage:
 - Controlled atmosphere
 - Postharvest treatment (1-MCP)
 - Ethylene monitoring and elimination

HDCold® technology:

- Cold system which maintain natural relative humidity at high levels (>98 %)
 - No addition of liquid water
 - Decrease of water loss, and therefore weight loss of the products
- Low temperature difference between the set point and the refrigerant:
 - Less hydric stress on the products
 - Less to no frost formation



RESULTS

Presentation of the results of two trials

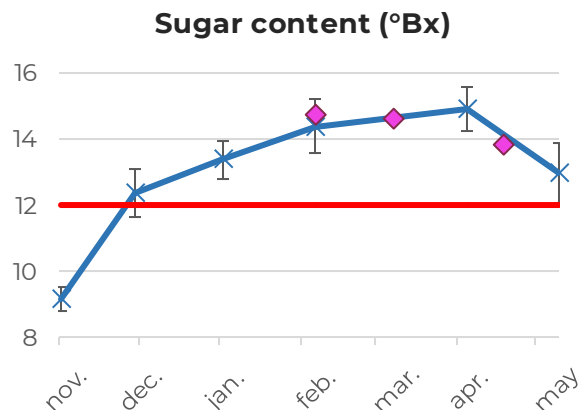
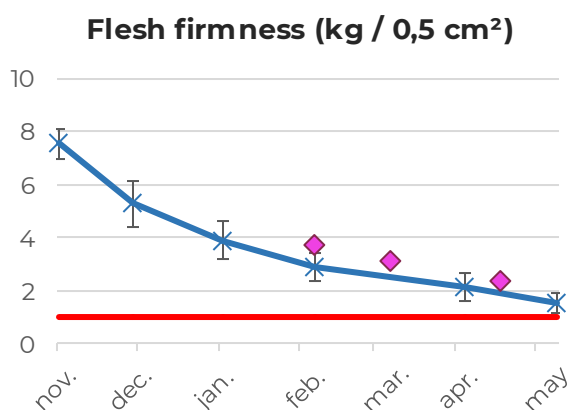
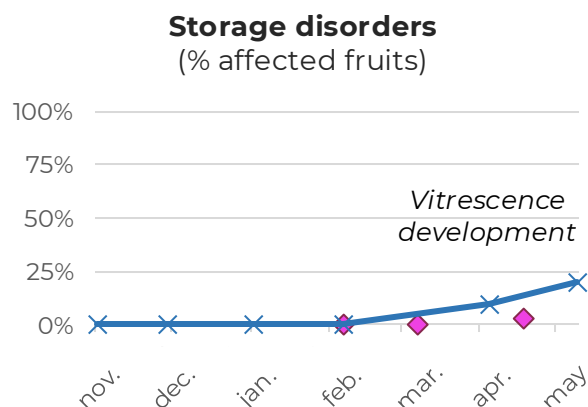
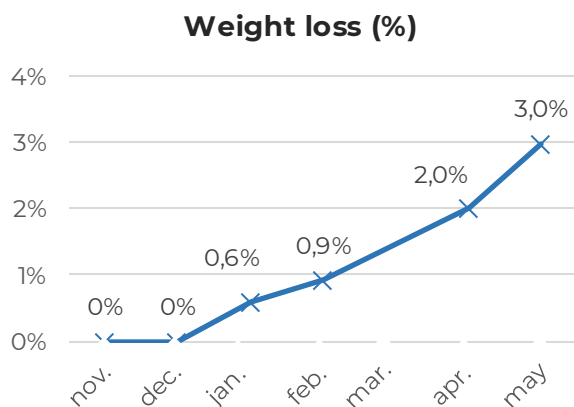
Harvest: 3 nov. 2020 / 12 nov. 2021 (South-West, France)

Storage: HDCold®, 1°C / 98 % RH

2020 trial

2021 trial

Label Rouge expectations (quality national sign)



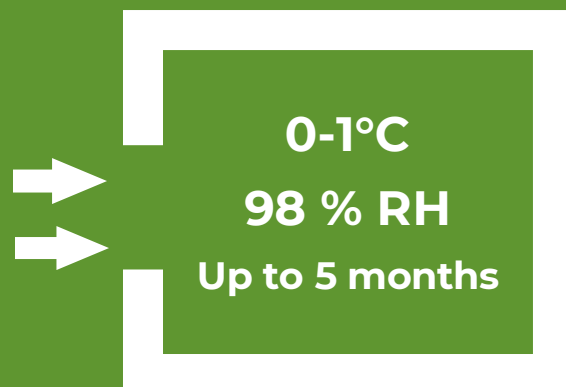
² APKPA, "Cahier des charges Label Rouge Kiwi Hayward -LA/35/90." Ministère de l'Agriculture et de la Pêche, pp. 1-16, 2011.

CONCLUSIONS

Based on these results, the **HDCold® technology**:

- ✓ **Maintain Label Rouge quality** for up to 5 months under normal atmosphere in cold storage
- ✓ **Maintain fresh firmness** higher than 1 kg / 0,5 cm²
- ✓ **Prevent** the development of **wilting** or **external damage**
- ✓ **Prevent** the development of **internal vitrescence** for up to 5 months

RECOMMENDATIONS



contact@dpkl.fr – +33 5 63 32 58 57