

White asparagus

2021



AIM OF THE STUDY:

WHAT IS THE IMPACT OF THE HDCOLD® TECHNOLOGY AND THE PACKAGING ON THE STORAGE QUALITY OF WHITE ASPARAGUS?

Current practice¹:

- Storage: 0–2°C / RH > 95%
- High humidity achieved by covering with tarpaulins and/or spraying water in the storage room.
- Possibility of extending storage life by using a controlled atmosphere:
 - 5–10% O₂ / 10–15% CO₂

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



¹Adam D. et Stengel B., 1999. L'asperge. CTIFL, 304 p.

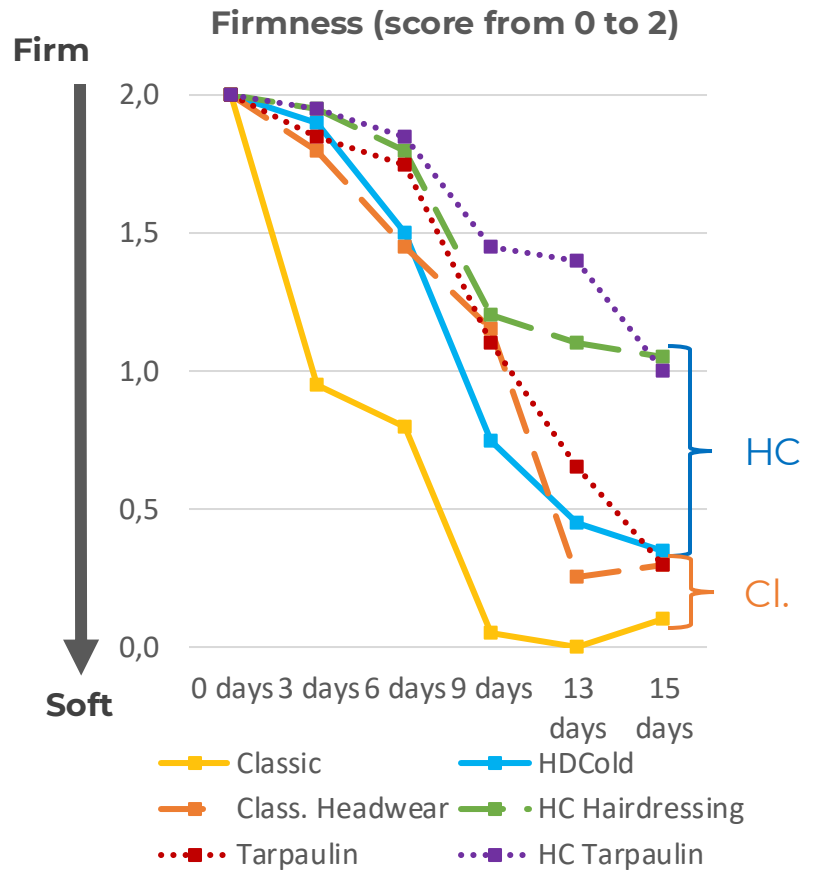
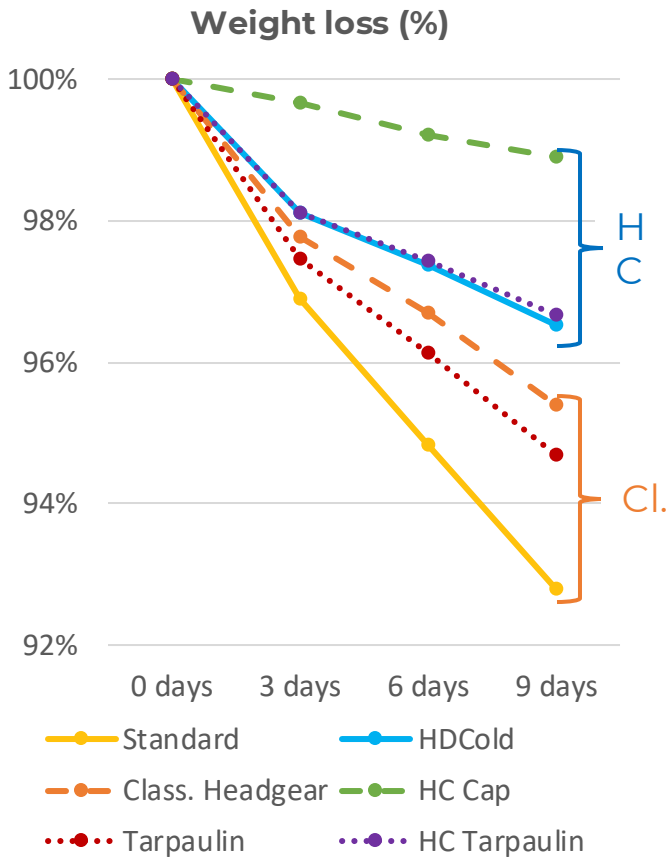
RESULTS

Harvest: 20 april 2021

3 types of packaging: wooden crate / crate with perforated cover / crate with tarpaulin

Classical cold room (1°C ; unregulated RH)

HDCold® cold room (1°C; 98% RH)

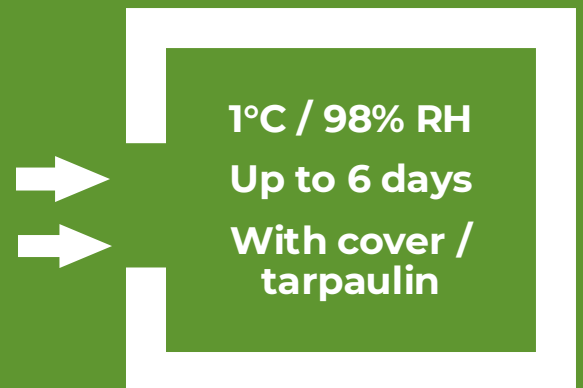


CONCLUSIONS

Based on these results, the HDCold® technology:

- ✓ **Significantly reduced weight loss**
 - Halved after 6 days of storage
- ✓ **Better retention of firmness**
- ✓ **Slower wilting**
- **No significant differences** observed in **browning** or **mold development**

RECOMMENDATIONS



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