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Obstbauversuchsanstalt Jork
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Storage of raspberries and blackberries
Former results of storage experiments with raspberries and blackberries:

Optimal storage conditions:

Temperature: -0,5 °C (fast removal of field heat)
O₂-concentration: > 5 %
CO₂-concentration: 18 – 20 %

But:
Fruit growers claim that the fruits look dull and mat after rapid cooling.
In consequent, they don’t use rapid cooling and store at 4 – 8 °C.
Total time: 60 min
Total time: 60 min
Raspberries with (A, B) and without (C, D) rapid cooling (pictures B and D were taken with flash)
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Results and conclusions

- Rapid cooling is very effective to get rid of field heat (by convection and evaporation)
- Low storage temperature is very important to maintain fruit quality
- Fruit temperature could fall below dewpoint of surrounding air during or after the cooling process
- Water condensate is sterile and disappear quickly when the fruit temperature exceeds air dewpoint
  - Only an aesthetic problem
  - Foil packaging reduce the problem

- **An unbroken cold chain prevents condensation and maintains fruit quality**
Thanks for your attention!

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