Characterising winter chilling requirement: a practical approach



Rob Saunders June 2013

NOTICE TO PICKERS

These Blackcurrants may have to be Cold Stored and may not be processed for some months. Fruit must be of Good Quality and must be free from:

> Snails or Caterpillars Hard Green Fruit Hard Shrivelled Fruit Wet, Pulpy or Mouldy Fruit Leaves, Dirt, Stones or any other foreign matter.

Fruit which does not conform to this standard will not be paid for.

Riber





Ben Gairn – effect of chilling temperature on bud break















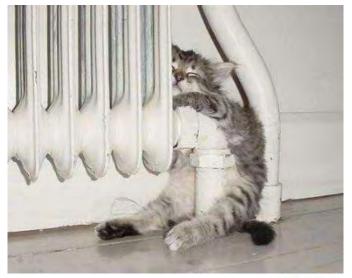




















Ben Gairn 11/2, 3 weeks after cutting, one of the earliest cultivars to achieve sufficient winter chill Ben Hope 11/2, 3 weeks after cutting, almost had sufficient chill, top buds breaking

Ribena

Source: Atwood, J. 2004





Baldwin, 11/2/03, 3 weeks after cutting, tip buds only breaking, not sufficient winter chill

8972-1, 11/2/03, 3 weeks after cutting, more than 75% bud break



Source: Atwood, J. 2004

Ben Alder treated to improve bud break.

Ben Alder Untreated

Lantin method: Summary

- Is 'quick and dirty' but practical
- Gives a rough indication of the chilling requirement of the variety
- Assists in variety selection for any given site
- Assists in decision making about the need for treatments to assist with dormancy-breaking



- Lantin, B., 1973. Cold temperature requirements of buds of blackcurrant (Ribes Nigrum L.) and a few redcurrants (Ribes Sp.) Ann. Amelior. Plantes, 1973, 23 (I), pp.27-44
- Atwood, J.,2007. Blackcurrants: Further detailed evaluation of a range of cultivars for evenness of bud break and development. HDC report
- Atwood, J., 2004. Winter chilling requirements of Blackcurrants: An assessment of the chilling requirements for a range of cultivars at the Bradenham Hall Site 2003-4. HDC report

Ribena Growers: Great blackcurrants, respectfully grown