



Crop maturity and dry matter

Bruising has been reported to increase with crop maturity, some trials have supported this but not for all varieties. However, there is no clear definition or measure of crop maturity.

Comparing two crops of the same variety, there is a reasonable chance that the crop with the higher dry matter is more prone to bruising. This does not hold in every case, therefore caution must be used in making decisions of bruising susceptibility based only on DM%. When comparing dry matter of crops of different varieties there is no correlation of dry matter with bruising.

High dry matter content can arise from starch content and/or tuber dehydration and this may account for inconsistencies from some varieties and in some seasons. Other research has indicated that tuber water status may play a key role in determining bruising susceptibility.

BPC National Bruising Survey

86% of respondents recognised dry matter as having a major or very major influence on bruising.

For further information on the BPC funded BRUCE project (Ref. 807/227), see www.potato.org.uk . For a project report on 'Improving quality by minimising damage', call BPC Publications on 01865 782222.

ACTION

- **Crops should be managed to reach the desired maturity before harvest, by:**
 - timely planting
 - an even plant stand
 - correct nutrition
- **Assess a crop's DM prior to lifting, treat all high dry matter crops with caution**

Potatoes are more likely to bruise.....

.....when tubers are old.

.....when they have a higher dry matter.

Potatoes are less likely to bruise.....

.....when tubers are young.

.....when they have a lower dry matter.