



Crop nutrition

Nitrogen (N) can affect maturity and dry matter (DM) content (see advice sheet No. 9). N applications should be tailored to variety and length of growing season. BPC funded research shows bruising can be significantly lowered in crops receiving a 240kg/ha N application. However, N application at this level is excessive for most crops and other factors for managing bruising should be progressed.

Note: Excessive N will delay maturity, resulting in later harvest, possibly when soil temperatures are lower.

In terms of potash (K), some trials have shown a reduction in bruising with increased rates. However, this has not been consistent in all trials. The best recommendation is to test soils for K, rectify any deficiency and apply what is required for normal crop growth. Bear in mind K above this level cannot be guaranteed to reduce bruising.

What's more, K applications at levels above those for yield response can reduce the DM content of tubers. Applying K in the autumn, or using potassium sulphate rather than potassium chloride (muriate of potash), could result in a higher DM content.

Several other minor/trace nutrients (especially calcium) have also been linked to bruising, but as yet no conclusive evidence is available. The best recommendation is to test soil and correct any deficiency or imbalance.

ACTION

- **Ensure adequate soil fertility especially potash. Refer to BPC's factsheet *How to implement RB209, P K & Mg recommendations on your farm***
- **Tailor N applications to variety and length of intended growing season**
- **Refer to BPC factsheet *How to implement RB209, N recommendations on your farm***

BPC National Bruising Survey

46% of respondents thought N had a moderate or greater influence on bruising susceptibility and 52% of respondents thought the same for K.

See www.potato.org.uk for electronic versions of 'How to implement RB209'. For a project report on 'Improving crop quality by minimising damage' or copies of 'How to implement RB209', call BPC publications on 01865 782222.

Potatoes are more likely to bruise.....

-on soils where potash is limited.
-on crops that are stressed due to a nutrient imbalance.

Potatoes are less likely to bruise.....

-on soils with higher potash levels.

