Fight against Blight

ISSUE 12: STORE LOADING

Store Loading
Risk assessments of what you are likely to store and how you can store it, is crucial to help reduce any potential problems in store.

Risk assessment
Any risk assessment for storage ability should take into consideration the following

Prior to harvest
- Blight on haulm
- Significant rainfall on crops with blighted haulm, particularly after warm, humid conditions
- Cracked drills / Exposed tubers

During harvest
- Crops where desiccation of blighted haulm is slow or re-growth becomes blighted
- Harvest before all haulm is dead
- Tubers become wet during harvest
- Poor lifting conditions

Other factors to consider include:
- Known daughter tuber infection (from wash-up assessment)
- Capability to dry and cool the crop
- Prolonged store loading
- Intended market
- Planned storage temperature

Note: Varieties with a lower resistance to tuber blight will be at higher risk for a given set of conditions.
Wash-up
To find out what crops are suitable for longer-term storage, carry out a wash-up of samples of the unharvested crops. For an accurate assessment of risk, tubers should be sampled, washed and assessed for blight on the same day. This will not only help assess risk for storage soft rots but will also help with the marketing of the crop.

Carrying out wash-ups is simple and highly effective. Here’s how:

Step 1
Randomly collect a minimum of 100 - 200 tubers from each field (this can be combined with test yield digs). Ideally this should be done throughout the growing season and should be carried out right up to harvest and throughout the storage period. Remember, just because you cannot see blight infected tubers at store loading does not mean that there is no infection there. Tuber blight symptoms can be expressed several weeks or months after infection.

Step 3
Wherever possible, do not enter into long term storage any crops that have more than 1% visible tuber infection prior to harvest, or you feel are at high risk under your storage regime. If you have any doubts contact your Agronomist.

Step 2
Wash samples and carefully inspect each tuber. The main sites for infection of blight are the eyes and lenticels and any damage caused by handling.
Tubers may require to be cut to see blight.
This is an ideal opportunity to lookout for other defects.

Tuber blight symptoms

Early visible symptoms – Foxy red-brown discolouration just under the skin.

More advanced symptoms – Sunken lesions on the tuber surface and brown discolorations of the tuber flesh enlarge and have ‘marbled’ appearance.

Note: Greater infection may be present than is detected through individual sampling, hence there is a need for regular sampling in conjunction with risk assessment.

Loading the store
• Ensure that temperature probes are placed throughout the store to pick up potential hotspots within the crop.
• Leave space for access to the crop to enable regular monitoring and unloading of the store.
Note: See PCL Store Managers’ Guide for more information on store planning.

Dealing with high risk stocks
• Crops with extremely high risk or showing signs of more than 1% infection should not be entered in to long term storage. However some premium value crops may need to be stored. Management of these crops in store will be more difficult.
• Crops that are high risk should be placed where you can get the most air through them but are easy to get to. To be able to both inspect, and remove if they start to deteriorate.

Have you got your copy of the Potato Council Store Managers’ Guide?
Free to levy payers and corporate members – contact PCL Publications at publications@potato.org.uk.
For more information on store loading, please consult your local advisor or phone the PCL Storage Advice Line on 0800 02 82 111.