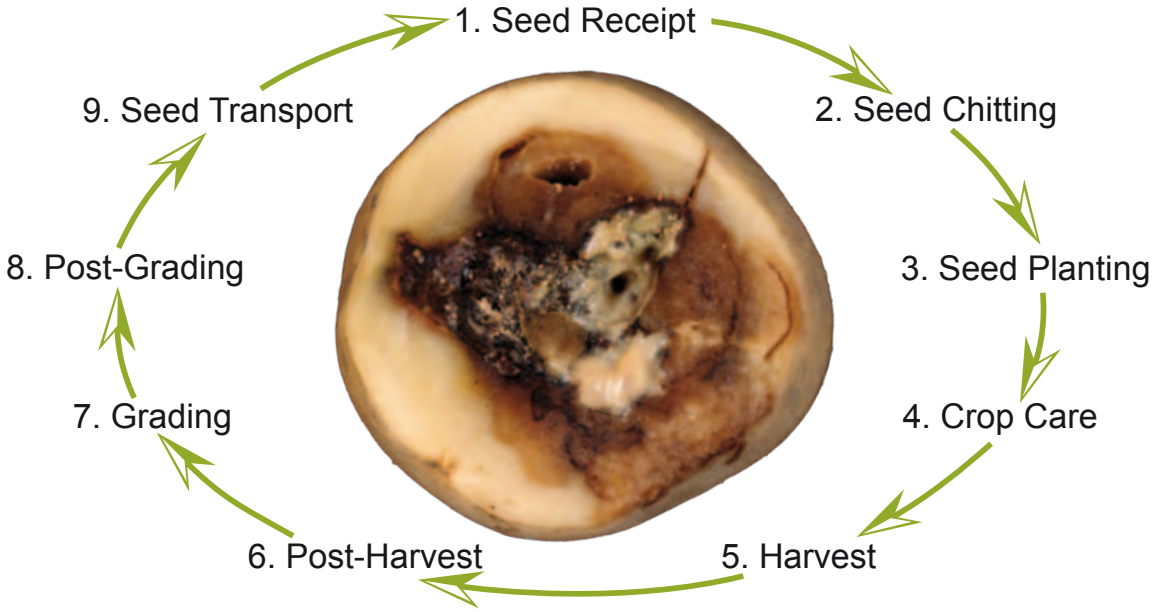
Control of Blackleg

ATTENTION TO DETAIL AT ALL STAGES

Blackleg remains the principal cause of downgrading and rejections in Scottish seed potatoes. Incidence has been significantly reduced since the 1960's, thanks largely to the efforts of growers and changes to industry practices influenced by R&D funded by government and the Potato Council. Despite this, recent years have seen a marked upward trend in blackleg in both seed and ware crops. To ensure effective management into the future, blackleg control should be viewed as a year round task; both seed and ware growers have responsibilities.

This information leaflet summarises current advice and outlines simple measures to ensure we stay on top of blackleg.

Blackleg control is a year round task; both seed and ware growers have responsibilities



1. Seed Receipt

- Decant from bags into boxes and ventilate with cool air to remove any condensation and heat of respiration
- Ventilate and maintain at temperature that avoids condensation and sprout development

2. Seed Chitting

- Chitting can enhance emergence but excessive day degrees can increase blackleg
    - Do not chit if sprouts are likely to be damaged prior to / during planting

3. Seed Planting

- Plant seed with low levels of contamination
- Avoid de-sprouting seed

- Avoid / control other diseases which weaken plants (e.g. *Rhizoctonia*, watery wound rot, gangrene)
- Plant into warm soils (7°C or more) to ensure rapid emergence
- Choose free draining land with good soil depth and tilth
- Avoid deep planting
- Do not plant damaged or diseased tubers
- Do not plant cut seed

4. Crop Care

- Use recommended rates of fertiliser:
    - Too little Nitrogen = more blackleg
    - Too much Nitrogen = delayed symptom expression and haulm destruction issues
- Avoid irrigating seed crops
- During roguing (seed crops) completely remove plants showing blackleg. Roguing should only be conducted post haulm collapse when necessary to meet tolerance in a seed crop.
    - Rogued plants including tubers must be physically removed from the field
- Destroy haulm rapidly.
    - It is preferable to use desiccant when the haulm is senescing.
    - Pulverisation may spread bacteria between crops but will have little effect on tuber contamination

CLEAN AND DISINFECT STORES AND MACHINERY BEFORE STORAGE SEASON

5. Harvest

- Lift early in dry conditions
- Ensure skin set is complete
- Minimise damage
- Remove mother tubers, rots, clods and stones
- Never harvest when wet

6. Post- Harvest

- Positively ventilate to: remove field heat; remove moisture; dry up rots
- Reduce holding temperature as soon as possible
- Eliminate ground keepers during rotation

7. Grading

- Avoid condensation, especially if warming prior to grading
- Do not allow rotten tubers to get onto the grader
- Minimise damage
- Clean and disinfect the grader after a problem stock

8. Post-Grading

- Keep bags / boxes in a well ventilated area to remove any moisture
- Avoid ventilating with warm air

9. Seed Transport

- Ensure recipient knows how to handle seed on arrival
- Protect boxes / bags to prevent condensation developing and avoid condensation events during transport and delivery
- Minimise time in bags, especially jumbo bags

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