Minimising Leatherjacket Damage in Organic Cereals

OFTS5

Where damage occurs
- First year cereals after ploughing grass leys
- Grass reseeds, permanent grass, especially in:
  - high rainfall areas
  - poorly drained soils

Anticipation and avoidance
- In final year of ley, graze down hard in August/September to reduce egg-laying by crane fly
- Listen to SAC leatherjacket population forecasts in February/March
- Soil sample grass for leatherjackets before ploughing - then you know the risk
- Plough ley in January, at least two months before anticipated sowing date of cereals
  - Leatherjackets start feeding voraciously in March and die because of lack of food
  - More soil N is released giving higher grain yield, compared with later ploughing
- If winter ploughing not possible, and forecast is for high leatherjacket populations, delay ploughing until late April/early May
Control
- When forecast is for high populations,
  - cultivations reduce populations by about 50% so do an extra cultivation
  - roll seedbed with heavy roller immediately after sowing.
- Harrowing crop for weed control will help reduce leatherjackets.
- Observe cereal seedbed at night, during days immediately after sowing, before crop emerges: If leatherjackets present in large numbers, use flame weeder at night to destroy grubs (suitable for small areas only).
- Cover damaged patches with tarpaulin overnight after rain, collect grubs in morning and destroy (small areas only).

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Collette Coll,
SAC Plant & Crop Science Division,
Craibstone Estate,
Bucksburn
Aberdeen AB21 9YA

Tel 01224 711277
Fax 01224 711293
e-mail: c.coll@ab.sac.ac.uk