



Common beetle pests associated with stored grain in Canada



Primary pests (cause damage to sound grain)

Rusty grain beetle (CFE)
Cryptolestes ferrugineus



- Length: 2 mm or less.
- Body: flattened, rust-red.
- Pronotum: two raised ridges running down length.
- Antennae: bead-like, not clubbed.
- Cold tolerant.
- Most common primary pest in Canada.

Sawtoothed grain beetle (OSU)
Oryzaephilus surinamensis



- Length: 2.5 to 3.5 mm.
- Body: flattened, light to dark brown.
- Pronotum: lateral edges with 6 large teeth.
- Antennae: slightly clubbed at ends.
- Temple longer than in *O. mercator*.

Lesser grain borer (RDO)
Rhyzopertha dominica



- Length: 2 to 3 mm.
- Body: cylindrical, red-brown.
- Pronotum: many small bumps on anterior half.
- Antennae: loose 3-segmented club.
- Head not visible from above.

Granary weevil (SGR)
Sitophilus granarius



- Length: 2.5 to 4.5 mm.
- Body: cylindrical, red to dark brown.
- Pronotum: pits oval in SGR and circular in SOR.
- Antennae: elbow-shaped, clubbed.
- Head elongated into a snout.
- Pale 'X' pattern on elytra indicates SOR.

Rice weevil (SOR)
Sitophilus oryzae



- Length: 2.5 to 4.5 mm.
- Body: cylindrical, red to dark brown.
- Pronotum: pits oval in SGR and circular in SOR.
- Antennae: elbow-shaped, clubbed.
- Head elongated into a snout.
- Pale 'X' pattern on elytra indicates SOR.

Confused flour beetle (TCO)
Tribolium confusum



- Length: 2.5 to 4 mm.
- Body: flattened, red-brown.
- Antennae: slightly clubbed.
- Eyes 4-5 facets wide laterally in TCA, only 1-2 in TCO.

Red flour beetle (TCA)
Tribolium castaneum



- Length: 2.5 to 4 mm.
- Body: flattened, red-brown.
- Antennae: slightly clubbed.
- Eyes 4-5 facets wide laterally in TCA, only 1-2 in TCO.

Secondary pest (incidental in grain)

Foreign grain beetle (AAD)
Ahasverus advena



- Length: 2 to 2.5 mm.
- Body: flattened, rust-red.
- Pronotum: small nubs on anterior corners.
- Antennae: clubbed.
- Easily confused with rusty grain beetle.
- Secondary insect, incidental in grain.

Larvae (worm-like stage before adult)

Flour beetle larvae



- Length: up to 10 mm.
- Body: yellow throughout.
- Urogomphi (pair of prongs): present at anal end.

Rusty grain beetle larvae



- Length: up to 5 mm.
- Body: milky white, head and anal segments brown.
- Urogomphi: present.

Sawtoothed grain beetle larvae



- Length: up to 6 mm.
- Body: milky white, brown head.
- Urogomphi: absent.

- Lesser grain borer and weevil larvae not displayed because larvae are internal feeders and are rarely seen.