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Pests of grass and clover seed crops

Grass and clover seed crops are attacked by a wide range of pests, although relatively few cause serious loss of yield. Described here are (i) those pests which affect seedling establishment, (ii) pests of the leaf and stem, and (iii) pests of the flower head and seed. Pest
situations in reseeded grassland are not dealt with.

**Pests affecting seedling establishment**

The main seedling pests are slugs, frit fly, clover weevils and stem nematode. Clover cyst nematode may also attack the roots of young plants.

**Slugs (see also page 467)**

**Damage** On heavy soils in wet seasons, slugs, particularly the field slug (*Deroceras reticulatum* (Müller)), can severely thin newly germinated crops, especially those which follow trashy crops or stubbles. Seedlings are attacked below ground and at soil level, usually in the spring and autumn.

**Cultural control** Fine, firm seedbed conditions are essential for good establishment of grass and clover seedlings. Poor tilth or inadequate consolidation will increase the likelihood of slug damage.

**Chemical control** Test-baiting with small quantities of molluscicide pellets can be used to assess the need for treatment before sowing. When slugs are readily found, molluscicide pellets broadcast on the soil surface a week before sowing will decrease numbers and will be more effective than when applied with the seed or after sowing. Treatment should be timed to coincide with moist conditions suitable for slug activity.

**Frit fly (see also page 258)**

**Damage** The maggots (larvae) of the frit fly (*Oscinella frit* (L.)) burrow into the shoots of most of the grasses grown for seed. Very young plants are killed outright, while the growth of older plants is weakened. Grasses most likely to be attacked are Italian and perennial ryegrasses and the fescues, but cocksfoot is rarely infested. Damage by the maggots of the first generation occurs in late spring and the third-generation maggots attack early autumn sowings. In some years, however, egg laying on grasses is continuous because of an overlap of generations.

**Cultural control** Early spring sowings of grasses undersown in barley are unlikely to be damaged by frit fly.

**Chemical control** In those areas prone to frit fly attacks local warnings will indicate the risks to late summer sowings. Where damage is expected, prompt treatment with a recommended insecticide is advised.

**Clover weevils (see also page 190)**

**Damage** Clover weevils (*Sitona hispidulus* (Fabricius) and *Sitona sulcifrons* (Thunberg)) and the related pea and bean weevil (*Sitona lineatus* (L.))