

Dry Peas

Pea leaf weevil

Sue Blodgett



Weevil adult, left; larva, right.

Identification (and life cycle/seasonal history)

The Pea leaf weevil (*Sitona lineata*) is a pest of seedling pea plants. The adult which is the overwintering stage is gray-brown in color measuring between about 1/5 of an inch, with a short, blunt shaped beak and has 3 light but inconspicuous stripes that run lengthwise from the thorax to the wing covers. The larvae is legless, curved and resembles a grub. It is white in color with a dark brown head reaching 1/4 inch in length. Both adults and larvae have chewing mouthparts. Larvae feed on nitrogen-fixing nodules on roots. Larval feeding does not cause economic damage.

Adults overwinter in alfalfa fields, roadsides or protected by crop residues and debris. Adults emerge in the spring seeking their preferred hosts, peas and vetch but have also been noted to feed on alfalfa and clover. Fields or areas that are low-lying, with heavy soils, and only partially incorporated residues are more likely to harbor large numbers of adults and receive greater injury to the subsequent pea crop.

Damage

Adult feeding results in scalloped leaf edges which can coalesce causing significant injury to seedling alfalfa. Typically the damage is more severe on edges of field adjacent to grassland, pasture, riparian areas or other similar refuges.

Monitoring

Pea leaf weevil can be very damaging to the growing point of seedling plants. Plant inspection is recommended. When more than 25% of the leaves are notched or there are more than 0.2 – 1 weevils per plant, treatment is justified. Another threshold is between the 2-4 leaf stage when 1/4 of the plants have feeding injury and insects are present. Once 6 leaf stage is reached, some defoliation can be tolerated.

Management

Cultural control

Variety trials conducted in Washington indicate that semi-leafless peas are more susceptible to pea leaf weevil than conventional peas.

Chemical Control

Product List for Pea Leaf Weevil:

| Insecticide | Lbs Active Ingredient per Acre (Fl oz. or oz. product) | Preharvest Interval, remarks |
|--------------------------------------|---|--|
| Carbaryl 4L, 80S, XLR ^{1,3} | 1 – 1.5 qt (4L) 1 ¼ - 1 7/8 lbs (80S) 1 – 1.5 qts (XLR) | 14 days grazing or harvest for forage, 21 days harvest dry seed. Do not apply more than 6 qts (4L or XLR) or 7.5 lbs (80S)/A/season. |
| Imidan 70 WP ¹ | 1 – 1.3 lbs | 7 day. 10 days for hay or 7 days for forage. Pacific Northwest only. Do not apply more than 4 lbs/A/season. Minimum tank mix of 5 gal/A. |
| Fury 1.5 ^R | 3 – 4.3 oz | 21 days. 12 hr REI. Do not apply more than 24 oz per season. |
| Mustang Max, 1.5 EC ^R | 2.72 – 4. oz | 21 days. 12 hr REI. Do not apply more than 24 oz per season. |
| Malathion ³ | 1 – 2.5 pt (8EC) | 3 days. 12 REI. Do not feed or graze treated foliage. |

^R Restricted Use Pesticide, ¹ Labeled for chemigation, ² 24c labels may be available, check with State Dept of Agriculture, ³ Several formulations

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Categories: Dry Peas, Insects, Pea Leaf Weevil, *Sitona lineata*

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