

## **Insect Pests - IPM Guideline for Common Bean (dry, snap, fresh market, seed)**

Note: this guideline may be applicable to other legume crops including:

Cool Season (chickpea, lentil, field pea)

Warm Season (cowpea, lima bean, soybean)

### **Pest Diagnostic Confirmation**

Work with local crop consultants, field specialists and diagnosticians to confirm identity of insect pests. Provide background information on the field and problem, and deliver representative samples (including plant damage and stages of the insect; e.g., eggs, larvae, adults) to qualified experts for diagnosis and confirmation.

<http://wiki.bugwood.org/PIPE:Legume>

### **Vegetative Growth Stages**

Insecticide applications during planting - V 4 may reduce the initiation and damage of soil-borne and seedling insect pests (e.g., seedcorn maggot, wireworm, white grub, Symphylan, army cutworm, pale western cutworm, flea beetle, grasshopper, Western corn rootworm, Mexican bean beetle) in regions with a history of the pest(s) and following periods of favorable weather (generally cool, wet conditions). Refer to insecticide labels for specific directions and restrictions, and check with local extension specialists and pest management personnel.

### **Reproductive Growth Stages**

Insecticide applications during V4 - R 3 may reduce the initiation and damage of foliar and pod insect pests (e.g., grasshopper, Western corn rootworm, Mexican bean beetle, aphid, leafhopper, spider mite, thrips, Western bean cutworm, variegated cutworm) in regions with a history of the pest(s) and following periods of favorable weather. Refer to insecticide labels for specific directions and restrictions, and check with local extension specialists and pest management personnel. In addition, storage insect pests affecting legume seed quality can include Bruchids, lesser grain borer, Indian meal moth, Angoumois grain moth, Mediterranean flour moth; refer to IPM strategies such as sanitation and pesticide labels.

- Rotate to exclude susceptible host crops (i.e., legume and other host volunteers) for 3 + years; examples of non-host crops include small grains and corn
- avoid planting in fields with a history of insects (and diseases) during the last 3 years
- plant resistant or less susceptible varieties if available
- plant high quality seed treated with approved pesticides
- follow recommended plant population - row & plant spacing
- soil test and use a moderate fertility program
- incorporate fall and/or spring tillage to eliminate carryover seed and volunteer plants in last year's bean fields
- promote root health and moisture drainage in this year's bean fields to minimize plant stress
- monitor irrigation scheduling to avoid deficiency or excess
- utilize timely scouting, pest forecasting, and weather monitoring services
- Pesticide Information available at: <http://www.highplainsipm.org/>

[ Guideline adapted for Colorado and surrounding region by Dr. H. F. Schwartz, M. S. McMillan, and K. L. Otto ]