

**Insect Pest Crop Scout Calendar: Shaded areas represent primary scouting and/or pest control windows.**

March	April	May	June	July	August	September
Burn grass headlands, terraces, etc. adjacent to corn fields for Common stalk borer control. Kills overwintering eggs.						
	Common stalk borer, apply insecticide to grass borders to kill larvae at egg hatch 575-750 DD base 41°F from Jan. 1.					
	Seedcorn maggot, crop emergence-seedlings, eggs laid in fields with spring manure or spring incorporation of green manure.					
	Wireworm, crop emergence-seedlings, row crop rotation from CRP, pasture, etc., eggs laid in grassy fields, larval stage 3-7 seasons.					
	True white grub, crop emergence-seedlings, row crop rotation from CRP, pasture, etc., eggs laid in grassy fields, larval stage 2-3 seasons.					
	Hop vine borer, consider insecticide application at VE corn if a field history of the pest has been identified.					
	Alfalfa weevil larva feeding begins ~250 DD base 48°F from Jan. 1. ET~1-2 larvae per stem.					
	Bean leaf beetle on VC-V2 soybean, ET > 40% defoliation.					
	Black cutworm, scout VE-V5 corn starting 300 DD base 50°F from a significant moth flight (Pheromone traps placed late March).					
	True armyworm larvae in corn, small grains, forage grasses.					
	Slugs on seedling corn and soybeans in high moisture, high residue environments.					
	Potato leafhopper in alfalfa, after 1 <sup>st</sup> crop harvest through Aug. ET= a total of 1 PLH/inch plant height in 10 sweeps.					
	Common stalk borer larva migration starts ~1,300 DD base 41°F. Apply insecticide to first few rows of corn up to V7.					
	Throughout V & R stages, scout for defoliation from various insects: Japanese beetle, Grasshopper, Caterpillars (Soybean looper, Green cloverworm, etc.). ET~30% defoliation in V stages & 20% defoliation in R stages.					
	Corn rootworm egg hatch starts ~500 DD base 52°F soil temperature from Jan. 1, with 50% hatch ~687-767 DD. Larval feeding June-July. Conduct node-injury rating mid- to late July.					
	European corn borer 1 <sup>st</sup> generation, scout for shothole feeding once corn >17-21 inch extended leaf height.					
	Bean leaf beetle 1 <sup>st</sup> generation, start scouting ~1,212 DD base 46°F from Jan. 1					
	Spider mites in corn and soybeans in a drought season.					
	Western bean cutworm, scout for egg masses ~1,400 DD base 46°F from May 1.					
	Corn leaf aphid, scout whorls for aphids prior to pollination.					
	Scout for silk clipping prior to pollination, Corn rootworm & Japanese beetles.					
	European corn borer 2 <sup>nd</sup> generation, scout for egg masses VT-R2.					
	Soybean aphid, "Speed Scouting" is fastest easiest scouting method.					
	Corn rootworm beetle scouting with sticky traps or other means.					
	Bird cherry-oat aphid in corn, starts on lower stalk and moves up.					
	Bean leaf beetle 2 <sup>nd</sup> gen. leaf feeding and pod clipping.					
	Nematode symptoms: Scout corn June-July, scout soybeans June-August.					

## Scouting Tips and Degree Day (DD) Temperatures for Crops and Common Insect Pests

Check other reference materials for determination of economic thresholds and recommended treatments.

Crop and Insect Pest	Daily min. air temp. °F	Daily max. air temp. °F	Comments
<b>Corn</b>	Base 50	Upper 86	Recommend ISU Extension publication PMR 1009, " <i>Corn Growth and Development</i> " from the Extension Store at <a href="https://store.extension.iastate.edu/product/6065">https://store.extension.iastate.edu/product/6065</a>
Seedcorn maggot	39	84	Starting Jan. 1 it is ~360 DD to adult emergence, ~400 to 800 DD for larval stages and ~810 DD to pupal stage.
Common stalk borer	41	86	575-750 DD from Jan. 1 to egg hatch in grassy borders, and 1,300-1,400 DD from Jan. 1 to initial migration from grassy border to first few corn rows. Corn safe at V7.
Black cutworm	Base 50	86	300 DD from a significant moth catch (pheromone trap) to begin scouting larval feeding in corn. Most common in weedy fields and fields with cover crops. Corn safe at V5.
Corn rootworm	Soil DD base 52		Egg hatch starts at 500 soil DD from Jan. 1 (average June 6 in Iowa), and about 50% egg hatch at 684 to 767 soil DD from Jan. 1.
European corn borer	50	85	1 <sup>st</sup> generation egg hatch ~200 DD after a significant moth catch. Scout for shot-holes ~300 DD and once plants are > 17-21 inches extended leaf height. Most commonly found in early planted fields. For 2 <sup>nd</sup> generation scout for egg masses ~1,400 DD. Most commonly found in late planted fields.
Western bean cutworm	50	85	1,319 DD from May 1 to 25% egg hatch and 1,422 DD to 50% egg hatch.
<b>Soybean</b>	50	86-90	Recommend ISU Extension publication PM 1945, " <i>Soybean Growth and Development</i> " from the Extension Store at <a href="https://store.extension.iastate.edu/product/6451">https://store.extension.iastate.edu/product/6451</a>
Bean leaf beetle	46		Overwinters as beetles under plant debris, can feed on emerging soybeans, lay eggs in fields, and the seasons 1 <sup>st</sup> generation beetles start feeding mid-season on soybeans ~1,212 DD from Jan. 1, which is usually in July.
<b>Alfalfa</b>	41-42	110	Recommend publication " <i>Alfalfa Management Guide</i> " from American Society of Agronomy. Google a free pdf copy. Research suggests 600 DD from March 1 to reach 35% NDF, 750 DD to reach 40% NDF, and 970 DD to reach 45% NDF for 1 <sup>st</sup> crop (plus or minus 3%), however, the PEAQ method seems to offer a more consistent prediction of forage quality.
Alfalfa weevil	48		Begin scouting for larval feeding 250 DD from Jan. 1 in northern Iowa, and 200 DD from Jan. 1 in southern Iowa.
<b>Cereals</b> Barley, Oat, Wheat	32	70 prior to Haun Stage 2 and 95 after Haun Stage 2	Small grain growth & development, go to: <a href="http://www.extension.umn.edu/agriculture/small-grains/">http://www.extension.umn.edu/agriculture/small-grains/</a> Haun stage 2 is approximately the 2 leaf stage. While the lower growth limit for cereals is about 42°F, research found a better correlation between accumulated GDD and growth stage using base 32°F.