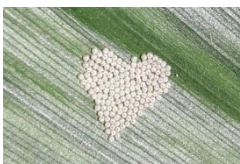




Historically, there have been 4 main pests in the Lepidopteran family that we monitor closely in corn in the Great Plains. These four insects have similarities that make identification difficult but their differences in biology can drastically influence the severity of their infestation and the time where application is required. In recent years, many of these insects have developed resistance to Bt traits in field corn but fortunately a newer class of insecticide has proven to have ovi-larvicidal control on all four.

Western Bean Cutworm
(*Striacosta albicosta*)



European Corn Borer
(*Ostrinia nubilalis*)



Corn Earworm
(*Ostrinia nubilalis*)



Fall armyworm
(*Spodoptera frugiperda*)



Tips for 2020:

Flight has started already so it is critical to start scouting right away.

Peak flight is likely taking place in the next week for most of Nebraska.

Look for clusters of 5-200 eggs on the top surface of the upper leaves.

Spray 14-20 fl. oz. Prevathon[®] insect control if 4% of the corn plants have egg masses or larvae.

Eggs hatch 5 days after being laid. Residual insecticides are more effective the closer to hatch they are applied.

Tips for 2020:

1st generation are already here. Examine 25 whorls. Consider applying Hero[®] insecticide if significant live larvae or damage is observed.

2nd generation can be expected in 3-5 weeks. Look for eggs on the underside of leaves in the middle 3rd of the corn plant and treat if 25% of the plants have eggs.

Apply Prevathon insect control 14-20 fl. oz./A if warranted. Financial sheets are available on most University websites and can assist with the ROI.

Tips for 2020:

Moth flight is currently underway.

1st generation larvae can be expected in 3 weeks, but will likely only cause slight defoliation in corn.

To control 2nd generation larvae which feed on grain, begin scouting as soon as silking begins

If 10% of plants have eggs on silks consider applying Prevathon insect control at 14-20 fl. oz./A for residual control.

Tips for 2020:

Larval feeding has already been documented in pastures and oats this year and can be expected to move to late planted corn in the next 2-3 weeks.

Fall armyworm generally feed during the day and in patches so be sure to grid scout the field.

If 75% of the plants show leaf feeding and are less than 1.25 inches, apply Prevathon insect control at 14-20 fl. oz./A for residual control.

It's important to note that while insect population dynamics are fluid and complicated, the greatest limiting factor must be addressed in order to optimize crop protection. Insecticide application should commence as soon as possible when the first of these species hits threshold. Waiting as little as one week to treat after noticing eggs or larvae could result in poor control.

INSIDE THIS ISSUE

July 1, 2020

Lepidopteran Scouting Report for Corn in 2020

Insect Scouting Report or Soybean in 2020

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How do I maximize the value of that fungicide or insecticide trip across the field at tassel?

Answer: Just like Western Bean Cutworm control requires a long-residual product like Prevathon® insect control, corn diseases can set in quickly in July and August but one can never know exactly when. Lucento® fungicide provides the residual disease control needed when making a timed insecticide application.



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| <ul style="list-style-type: none"> ✓ 14-20 fl. oz./A ✓ 14+ days of control of leps ✓ Rainfast in 2 hours ✓ Controls pyrethroid-resistant insects ✓ Won't flare mites ✓ No signal word = great toxicity profile ✓ Ground/Air/Chemigation | <ul style="list-style-type: none"> ✓ 5 fl. oz./A ✓ 50 days of control ✓ Rainfast in 2 hours ✓ Controls strobilurin-resistant diseases ✓ Dual MOA ✓ Most systemic triazole commercially available ✓ Ground/Air/Chemigation |
|--|--|

With insect and disease control, coverage is essential. Greater carrier volumes result in better residual control.

David City, Nebraska
9/26/20



Lucento® fungicide 5 fl. oz./A @ R1



Nontreated

2019 Lucento® Fungicide On-Farm Grower Trials Across the Midwest Competitive Comparison: Corn		
Comparative Treatment	Lucento® Fungicide Advantage - % of trials where Lucento fungicide out yielded competitive comparison (head-to-head).	Lucento Fungicide Advantage vs. Competitive Comparison in Head-to-Head trials (bu/A)
Untreated	96% of trials (24 out of 25 trials across U.S.)	+14.2 bu/A
Trivapro® fungicide	78% (7 of 9 locations)	+3.6 bu/A
Headline AMP® fungicide	75% (3 of 4 locations)	+4.3 bu/A
Delaro fungicide / Delaro® fungicide + Luna® fungicide	100% (3 of 3 locations)	+10.9 bu/A
Veltima® fungicide	100% (2 of 2 locations)	+2.3 bu/A

The heat and relative dryness have aggressively spawned several calls on insect pests in soybeans. While it may be too late to do anything about those impacted by the new Soybean Gall Midge, weekly scouting should commence for other troublesome pests.

Bean Leaf Beetle
(*Cerotoma trifurcata*)



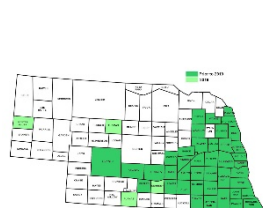
Tips for 2020:

BLB pressure has been lighter than it was in 2019 so far as overwintering adults are concerned, but two more generations are common in Nebraska and significant defoliation can occur.

Look for first generation beetles actively chewing on foliage or eggs at the base of plants in the next two weeks.

While defoliation below 40% rarely impacts yield, chemical control may be merited in order to prevent these insects from vectoring diseases like bean pod mottle virus.

Japanese Beetle
(*Popillia japonica*)



Tips for 2020:

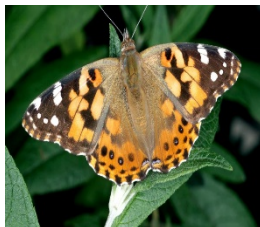
JAPANESE BEETLE ALERT!

Heavy infestation observed in Northwest Missouri last week of June.

Singe generation clusters can form as beetles are attracted to volatile chemicals produced by damaged plants.

Consider control if defoliation reaches 20% while beetles are still present.

Thistle Caterpillar/Painted Lady
(*Popillia japonica*)



Tips for 2020:

A typical 2-generation insect that doesn't overwinter in Nebraska, Thistle caterpillars had 3 generations in 2019.

Females will lay eggs singly on soybean leaves and thistles which will then hatch in one week.

In the Great Plains and Western Corn Belt, most of the eggs have hatched and scouting should initiate immediately.

Soybeans between V3-V5 are most vulnerable to feeding but treatments should be considered at any stage if defoliation reaches 20%.

Dectes Stem Borer
(*Dectes texanus*)



Tips for 2020:

Overwintering in NE and KS, beetles lay eggs on leaf petioles between June and August.

Once tunneled, larvae can destroy soybean stalk integrity and lead to severe lodging.

Apply Hero[®] insecticide 5 fl. oz./A + NIS if any adults are caught in ten sweeps.

If egg lay is already in process apply Prevathon[®] insect control 20 fl. oz./A for systemic control of larvae.

Control host weeds like sunflower and ragweed for future population management



New from FMC is a soybean insecticide with unparalleled spectrum, residual and efficacy.

- 2 MOA (Rynaxypyr[®] active [28] + Bifenthrin [3A])
- Knockdown and longest residual in soybean insecticide market
- Excellent control of leps, stink bugs, aphids, loopers, and many others
- PHI: 18 days
- REI: 12 hours
- 5.0 – 9.6 fl. oz./A

Nontreated



Elevest[™] insect control 4.8 fl. oz./A



Elevest[™] insect control has high translaminar movement and efficacy. Applications were made to the top of soybean leaves and, once dried, soybean looper larvae were caged to the underside of the leaf.

How do I maximize the value of that insecticide trip across the field at R3?

Answer: Timing is critical for successful insect management. As we make those applications based on local agronomic thresholds, its beneficial that we can make fungicide applications at the same time that will provide reliable residual control for weeks to come.



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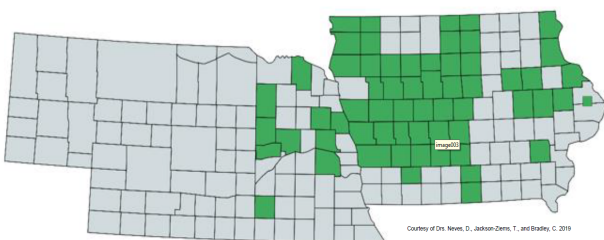


- ✓ 5 fl. oz./A
- ✓ Contact and residual control of stink bugs and beetles
- ✓ Miticidal activity
- ✓ Ground/air/chemigation

- ✓ 5 fl. oz./A
- ✓ 50 days of control
- ✓ Rainfast in 2 hours
- ✓ Controls strobilurin-resistant diseases
- ✓ Dual MOA
- ✓ Most systemic triazole commercially available
- ✓ Ground/Air/Chemigation

With insect and disease control, coverage is essential. Greater carrier volumes result in better residual control.

Iowa and Nebraska Counties Confirmed to Have GoI (Strobilurin)-Resistant Frogeye Leaf Spot in 2019



108 of 111 *Cercospora sojae* isolates submitted for testing were confirmed to be resistant to FRAC Group 11 fungicides

LUCENTO[®] FUNGICIDE – 2019 ON-FARM GROWER TRIALS ACROSS THE MIDWEST COMPETITIVE COMPARISON: SOYBEANS.

Comparative Treatment	Lucento [®] Fungicide Advantage % of trials where Lucento fungicide out yielded competitive comparison (head-to-head)	Lucento Fungicide Advantage vs. Competitive Comparison in Head-to-Head trials (bu/A)
Untreated	90% (73 of 80 trials across U.S.)	+4.3 bu/A
Trivapro [®] Fungicide	100% (5 of 5 locations)	+2.8 bu/A
Priaxor [®] D Fungicide	85.7% (5 of 7 locations)	+2.3 bu/A
Delaro [®] Fungicide	80% (4 of 5 locations)	+2.2 bu/A
Revytek [®] Fungicide	50% (2 of 4 locations)	+1.7 bu/A
Stratego [®] YLD Fungicide	100% (4 of 4 locations)	+2.8 bu/A
Approach [®] /Approach [®] Prima Fungicide	100% (3 of 3 locations)	+3.2 bu/A
Quadris Top [®] SBX Fungicide	63% (5 of 8 locations)	+4.6 bu/A
Miravis [®] Neo fungicide	50% (3 of 6 locations)	+1.67 bu/A
Miravis [®] Top fungicide	50% (5 of 10 locations)	+1.0 bu/A

