MINN-DAK FARMERS COOPERATIVE

BEET TOPics

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E. Burt - Editor

Insect Management for 2024

As we progress further into the growing season, some pests are starting to be found throughout the region. This issue features a summary of the key pests to be looking out for. If you're seeing symptoms and you think you may have a problem with any of the insects listed below, or have any questions, please consult your agriculturist to dive into it further. Remember, if you need to make an insecticide application, **full rates are the best way to achieve control.**

WIREWORMS

Wireworms feed on the roots of growing sugarbeets. They have a yellowish-white color or copper appearance sometimes. They thrive in grassy areas, so wheat or other small grains from the previous season are key hosts. No threshold has been established for this pest and they can be difficult to control. There are a few things we can do to protect from these pests — the first one being tillage between crops. We can also look at an insecticide seed treatment or an in-furrow insecticide application at planting. In some cases, a postemergence application of Mustang Maxx @ 4 oz/acre may be warranted.

CUTWORMS

Cutworms are black and grey in color and are ¾ to 1 inch long (smaller than a grub worm). They hatch into larvae during late May and early June. Most often, the moth will lay eggs in a previous year's soybean field. However, they have been seen on wheat and corn stubble in places. Cutworms are located directly under or near the root of a wilted 4-8 leaf sugarbeet. Feeding occurs where the leaf petioles meet the root of the plant at the soil surface and typically only during the evening when temperatures are cool. The best control will consist of a full broadcast rate of a labeled insecticide (such as Asana @ 9.6 oz/acre) during the late afternoon or early evening when temperatures are forecasted into the low 60s at night. If heat is persistent, use rainfall to wash chemical down to where the cutworm is, below the soil surface. The threshold is 3-5 larvae per square foot.

Information provided in this issue is largely credited to Dr. Mark Boetel, NDSU Extension Entomologist

SUGARBEET ROOT MAGGOT

Sugarbeet Root Maggot (SBRM) will be starting to show shortly. The flies are lazy and don't move around a whole lot. They have stout black bodies that are shiny and hairless. They lay their eggs along the rows and will burrow themselves into the soil. The eggs are little and white. The maggots are legless, white, and about 1/3 inch long. SBRM usually start emerging in the last week of May to early June. Peak fly activity is around 650 GDD. Currently, we are right around 367 growing degree days (as of 5/21). The first application will be targeted for a couple days before peak fly and will be monitored for extra applications if need be. Some potential products to be used would be Asana @ 9.6 oz/ac, Mustang Maxx @ 4 oz/ac, or a labeled chlorpyrifos product for 2024 @ 1.5 - 2 pt/ac.

Chlorpyrifos Products Registered for Use in 2024

Product Name	*Manufacturer*	*Registration*
Pilot 4E	Gharda	MN & ND
Pilot 15G	Gharda	MN & ND
Chlorpyrifos 15G	Drexel	MN & ND
Chlorpyrifos 4E-AG	Drexel	MN & ND
Lambdafos	Drexel	MN & ND
Warhawk	Loveland	MN & ND
Warhawk Clearform	Loveland	MN & ND
Govern	Tenkoz	MN & ND

LEAF-FEEDING WEEVIL

Adult leaf-feeding weevils are a brownish-grey and about 1/2 inch long. Their head narrows slightly toward the snout. Ragweed and pigweed are known host plants. Leaf-feeding weevils in sugarbeets usually occur during the first three weeks in May. Damage usually appears as circular or oval-shaped patches in affected areas. These were found in an area southwest of Wahpeton. Along with control of early season broadleaf weeds, insecticides that act as stomach poisons in other beetles should control the leaf-feeding weevil. Consider using Asana @ 9.6 oz/acre of Mustang Maxx @ 4 oz/acre.

Damage to a small sugarbeet from leaf-feeding weevil

Adult leaf-feeding weevil on damaged sugarbeet leaf

GRASSHOPPERS

Grasshoppers seem to be a pest year in and year out in the region. Egg hatch has just begun so expect numbers to start increasing. They will show up first on field edges and slowly work their way into the rest of the field. The thresholds for grasshopper control are 20 or more adults per square yard on the field edges and 8-14 adults per square yard in the field itself. A few good products to use would be Asana @ 9.6 oz/acre or a labeled chlorpyrifos product for 2024 (refer to table on page 2).

SPRINGTAILS

Springtails are wingless and are white/cream-colored insects with antennas pointing forward. You will only find these insects below the surface and the most critical damage occurs right around the seedling stage. Plant injury varies from punctures from feeding to root scarring and sometimes seedling mortality. Wilted plants and stand losses in irregular shaped areas can be an indication of the presence of springtails. Early planting where conditions include cooler temperatures on top of an abundance of moisture is a favorable environment (much like the pattern we're in now). The best plan of attack is to use seed treatments combined with an insecticide at plant if you know you have a history of springtails in your fields. If you have an unexpected infestation, consider using Movento in a 10" band postemergence application @ 2.5 oz/acre

WHITE GRUBS

White grubs (larval stage) feed on germinating seeds and small sugarbeets, which can reduce stands. The grubs are c-shaped and have white on their backs. They use their strong chewing mouthparts to feed on the sugarbeet seedlings and roots. A big indication of their presence can actually be noted with spring tillage — if you see birds following the tractor bringing them to the surface. They are also tasty to skunks and other mammals so thin areas in the field and digging signs from these mammals this could indicate the presence of white grubs. Control measures are a combination of a seed treatment or an insecticide at planting. No post options have been known to be effective.

The product label trumps this information at all times - Always read & follow label instructions

Calendar of Potential Insect Pest Activity in Red River Valley Sugarbeet Fields															
April	May				June				July				August		
Flea Beetles															
	Springtails														
	White Grubs														
	Wireworms														
			Cutworms - Dingy, Dark-sided,												
				Beet Webworm - adults											
					Beet Webworm - larvae										
				Sugarbeet Root Maggot - adults											
					Sugarbeet Root Maggot - larvae										
												Tarnished Plant (*Lygus*) Bugs			
												Cutworms - Black and Variegated			

From the North Dakota Field Corp Insect Management Guide, prepared by NDSU Extension