SUGARBEET ROOT MAGGOT
- Sugarbeet root maggots feed on the roots between mid-June through July
- Injury has the most impact during warm, dry weather
- Sugarbeet root maggots feed on succulent roots and cause plants to wilt and become stunted
- Their feeding scrapes the root surface and may provide entry points for soil-borne pathogens
- Heavy injury can result in severed tap roots, causing plants to die during dry periods

Crop rotation, cultural methods and other crop protection methods are necessary to provide a comprehensive program to prevent wireworm larvae, which are sporadic but serious pests in sugarbeets, feeding on the germinating seed and/or the developing root.

SPRINGTAILS (Order: Collembola)
- Annually cause major sugarbeet yield losses in North America.
- Subterranean (entire life below soil surface)
- Small (0.8 to 2.4 mm long)
- Semi-aquatic
- Problematic if cold and wet weather occurs after planting (slow development makes plants susceptible to attack)

Wireworm larvae are sporadic but serious pests in sugarbeets, feeding on the germinating seed and/or the developing root, working below the soil surface, attacking and killing the seedlings, and causing stand reduction. Under a heavy infestation, bare spots may appear in fields, making reseeding necessary. Wireworm infestations are more likely to develop where grasses, including grain crops, are growing or were grown in the previous year.

CruiseMaxx Sugarbeets, the first insecticide/fungicide seed treatment combination for use on sugarbeets, is the latest in a long line of innovative seed treatment offerings from Syngenta Seed Care. Featuring Cruiser® seed treatment insecticide, combined with Maxim® 4Fs and Apron XL® seed-delivered fungicides, CruiseMaxx Sugarbeets offers growers convenient protection against both early-season diseases and insects.

Disease protection guards against early-season seedling diseases such as Pythium and Rhizoctonia, while insect protection includes activity against sugarbeet leaf hopper, sugarbeet root maggot, springtails and wireworms. The combination of separate products provides a convenient solution for growers to increase vigor, improve stand establishment and increase yield potential by protecting the plant before the seeds even germinate.

Syngenta is committed to the healthy growth of your crop—today and in the future. After all, we have more than 100 years of experience in the sugarbeet industry, beginning with our Syngenta Seed-Hilleshög division, and we are dedicated to offering top-of-the-line products and seed treatments to help growers achieve high-quality yield. With solutions like CruiseMaxx Sugarbeets, our local crop experts, field representatives and industry support, we are working to bring you more vigorous stands and higher beet yields.

CruiseMaxx Sugarbeets:
CruiseMaxx Sugarbeets is a combination of the insecticide Cruiser with two different seed treatment fungicides — Apron XL and Maxim 4FS.

We look forward to continuing to work with you to provide the right products to help you grow your sugarbeets with confidence and success.
OVERALL BENEFITS OF CRUISERMAXX SUGARBEETS SEED TREATMENT TECHNOLOGY

- Simple and accurate delivery of desired rate
- Convenience of an all-in-one insect and disease offer
- Up to 70–95 percent reduction in active ingredient per acre
- Complements high value seed and ensures good stand
- Helping every seed to produce a plant
- Integrates well with other methods of crop protection

**Cruiser**

Alon XL seed treatment fungicide provides effective protection against Pythium sp. damping-off.

**BENEFITS INCLUDE:**

- Proven activity – seeds treated with Alon XL show excellent seed safety, crop emergence and crop health
- Adapted to wide range of soils and conditions
- Preserves the high yield potential of the sugarbeet varieties at harvest

Pythium sp. is the most common and widespread pathogen that causes damping off of young sugarbeet seedlings. Pythium damage can easily happen to seed that is not protected by a seed treatment fungicide.

**Maxim® 4FS**

Maxim® 4FS seed treatment fungicide provides unsurpassed protection against seed-borne and soil-borne fungi.

**BENEFITS INCLUDE:**

- Long-lasting activity at very low use rates
- Extremely effective against Rhizoctonia
- Complements existing IPM methods

Rhizoctonia is a soil-borne fungus that can cause seed rot but more often causes damping-off or stunting of young sugarbeet plants. Rhizoctonia sp. is active over a temperature range from 54° to 95° F but most active around 68° to 80° F. The fungus infects seedlings when soil conditions range from somewhat dry to wet. In wet soils, the pathogen can move from plant to plant, damaging or killing adjacent plants. This is why every seed should be protected with a seed treatment fungicide. Maxim 4FS protects against this pathogen due to its excellent soil binding properties.

**Cruiser®**

Cruiser insecticide provides seed-delivered protection from a broad spectrum of seed, soil and foliar chewing and sucking insects such as sugarbeet root maggot, leaf miners, wireworms, root aphids, white grubs, springtails and beet leaf hopper, which may vector curly top virus. Thiamethoxam controls insects through contact and stomach activity:

- Target site - the nervous system
- Mortality occurs 24 to 48 hours after exposure
- No cross resistance with other chemistries

**WHY CRUISER IS EFFECTIVE AGAINST BEET LEAF HOPPER**

Cruiser’s (Thiamethoxam) properties and systemic mode of action — move well inside a young sugarbeet plant and re-distribute

**BENEFITS INCLUDE:**

- Convenient early-season insect protection
- Saves time at planting
- Works in variable weather conditions
- Helps increase stand, uniformity and vigor, and protects yield potential

Thiamethoxam controls insects through contact and stomach activity:

- Target site - the nervous system
- Nicotinic acetylcholine receptor
- Mortality occurs 24 to 48 hours after exposure
- No cross resistance with other chemistries