



# CROP SOLUTIONS



## SYNGENTA TOBACCO PRODUCTS TAKE YOU THROUGH HARVEST

*Over the past several years, the tobacco industry has undergone major changes. As growers adjust to this new era of production, Syngenta Crop Protection has many products to help make producing your crop easier and more profitable.*

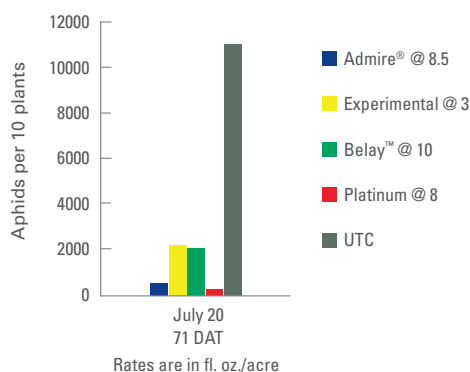




*Platinum<sup>®</sup> 75SG insecticide is a soil-applied product that protects young transplants from major sucking pests and wireworms.*

## Aphid Control on Tobacco with Tray Drench Treatments

Virginia Tech Trials

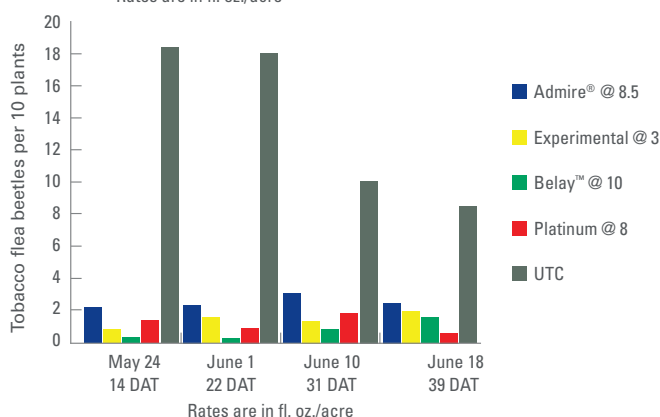


## Key Benefits:

- Excellent residual activity at low use rates
- Rapid root uptake
- Highly systemic within plants
- Minimal impact on beneficial insects
- Ideal for Integrated Pest Management (IPM) programs
- Suppression of Tomato Spotted Wilt Virus (TSWV)

## Flea Beetle Control on Tobacco with Tray Drench Treatments

Virginia Tech Trials



## Use Guidelines:

Platinum 75SG can be applied through tray and transplant water treatments. Do not apply Platinum 75SG to float-bed water. Make only one soil or tray treatment application per season, and do not exceed a total of 8 ounces of Platinum 75SG per acre.

**Tray Treatment:** Apply to transplants while still in trays. Thoroughly water transplants with enough water to wash the chemical off the foliage and into the soil. Set transplants in the field within two days of treatment. During transplanting, workers handling transplants must wear waterproof gloves.

**Transplant Water Treatment:** Mix appropriate amounts of Platinum 75SG in water and drench transplants as they are being placed in the ground.

## Application Rates:

Target Pests	Rate/A per Application	Remarks
Aphids	0.8* - 1.3 ounces	Apply at transplant using tray or transplant water treatment.
Flea beetles		
Japanese beetles		
Thrips	0.8 ounce	Apply at transplant using tray or transplant water treatment. Use lower rates for short residual control and higher rates for long residual control. Tomato spotted wilt virus (TSWV) is vectored by thrips and controlling or suppressing thrips can help to reduce TSWV. Use the higher rate where TSWV pressure is higher.
Wireworms		

\* Platinum may be used at a rate of 0.5 ounces under a 2(ee) recommendation approved in certain states. Please contact an extension agent for the label and recommendations applicable for your area.



*Through years of university testing, Denim® insecticide has proven it can help tobacco growers win the battle against troublesome pests, including tobacco budworms, hornworms, armyworms and loopers.*



## Key Benefits:

- Excellent broad spectrum worm control
- Long residual of up to 14 days
- Works through three modes of action (contact, ingestion and ovi-larvicidal)
- Rapid translaminar activity creates a reservoir of active ingredient in leaves
- Effective at low use rates and has no known cross-resistance
- Minimal impact on beneficial arthropods; ideal for Integrated Pest Management (IPM) programs

## Use Guidelines:

Denim is foliar applied and should be targeted at small (1/4 inch in length) larvae. At least two applications may be needed to control a generation during an extended egg laying period. Allow a minimum of five days between applications. Do not apply following a field failure of another product if larvae are large (>1/4 inch in length).

Thorough spray coverage of plant foliage is recommended for optimum performance. Apply in a minimum of 20 gallons of water per acre through ground equipment only. The use of a penetrating-type spray adjuvant at the manufacturer's suggested rate is recommended to provide optimum coverage and insect control. Do not use a sticker/binder type adjuvant.

## Application Rates:

Pest	Rate/A per Application	Remarks
Beet armyworm	6.0 - 8.0 fl. oz./A	Application should be targeted at small (1/4 inch) larvae. At least 2 applications may be needed to control a generation during an extended egg laying period.
Cabbage looper	8.0 - 12.0 fl. oz./A	Application should be targeted at small (1/4 inch) larvae. At least 2 applications may be needed to control a generation during an extended egg laying period.
Fall armyworm		
Soybean looper		
Tobacco budworm		
Tobacco hornworm		
Tomato hornworm		

Notes: (1) Do not apply at rates lower than those recommended on the label. (2) Do not apply more than 12 ounces per acre per application. (3) Do not exceed a total of 36 ounces per acre per crop per season. (4) Do not make more than two sequential applications without rotating to another product with a different mode of action. (5) Do not apply closer than 14 days before harvest. (6) Do not graze livestock in treated areas.





*Warrior II with Zeon Technology® and Karate with Zeon Technology™ provide tobacco growers with an excellent insecticide investment that delivers the broad spectrum of control on yield-robbing insects. These insecticides offer excellent residual activity, consistency, flexibility and value.*

### Key Benefits:

- UV protectant extends residual activity of the active ingredient
- Flows smoothly, mixes easily and disperses completely in water
- Decreases handler and applicator exposure by placing a barrier around the active ingredient
- Improved rainfastness
- Quick-release capsules for fast pest knockdown
- Superior tank-mix compatibility

### Use Guidelines:

Initial and residual control is contingent upon thorough crop coverage. Apply using sufficient water to obtain full coverage of foliage. Apply in a minimum of 10 gallons per acre by ground unless otherwise specified on the label. When foliage is dense or pest pressure is high (heavier insect or egg pressure, larger larval stages, feeding in bud), use of higher application volumes and/or higher use rates may improve initial and residual control. For cutworm control, Warrior II with Zeon Technology or Karate with Zeon Technology may be applied before, during or after planting. For soil incorporated applications, use higher rates for improved control.

### Application Rates:

Pest	Rate/A per Application	Remarks
Tobacco hornworm	0.96 – 1.92 fl. oz./A	• Apply as required by scouting, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold.
Tomato hornworm		
Cabbage looper		• Apply with ground equipment using sufficient water to obtain full coverage of the foliage.
Corn earworm		
Cutworm spp.		• Do not apply within 40 days of harvest.
Tobacco budworm <sup>2</sup>		
Salt marsh caterpillar		• Do not apply more than 0.09 lb. a.i. (5.76 fl. oz. or 0.36 pts.)/A per year.
Armyworm spp. <sup>1</sup>		
Webworm spp.		
Potato tuberworm		
Tobacco flea beetle (adult)		
Cucumber beetle spp. (adult)		
Blister beetle spp.		
Vegetable weevil (adult)		
Japanese beetle (adult)		
Grasshopper spp.		
Tree cricket spp.		
Katydid spp.		
Plant bug spp. <sup>3</sup>		
Stinkbug spp.		
Tobacco thrip spp. <sup>2</sup>		
Tobacco aphid spp. <sup>2,3</sup>		

Notes: (1) For control of first and second instars only. (2) Suppression only.  
(3) See resistance statement under General Directions for Use.



*With Actigard® 50WG fungicide, you can put your plants on guard against both sensitive and insensitive strains of blue mold. Actigard 50WG bridges the gap between genetic resistance and conventional disease control by activating the plant's natural defense genes to fight off disease.*

## Key Benefits:

- Stimulates natural defense mechanism
- Systemic activity protects new growth between sprays
- Rainfast after spray dries
- Easy application – no need to modify existing equipment
- Residual activity of up to 10 days
- Active against all strains of blue mold, including mefenoxam resistant strains
- Low resistance potential
- Low use rates

## Use Guidelines:

Begin applications once plants reach a height of 12 inches (flue-cured) and 18 inches (burley). Apply on a preventive schedule when blue mold threatens. Another registered blue mold product should be used prior to plant height of 12 inches (flue-cured) and 18 inches (burley) for early-season control and after the final application of Actigard if conditions are conducive for disease infection. Make up to three applications on a 10-day schedule. Apply in a minimum of 20 gallons of water per acre.

## Application Rates:

Target Pest	Use Rate	Remarks
Blue mold	0.5 oz./A	<p>Notes:</p> <ul style="list-style-type: none"><li>• Do not apply Actigard to plants that are stressed due to drought, excessive moisture, cold weather, herbicide injury, etc.</li><li>• Do not apply Actigard to tobacco in plant beds or in greenhouse/plant houses.</li><li>• Do not apply Actigard with foliar fertilizers and crop oils.</li><li>• Avoid spray overlap because injury may result.</li><li>• Do not apply by air.</li><li>• Do not apply more than 1.5 ounces of Actigard per acre per season. Applications of Actigard may result in leaf yellowing. This cosmetic yellowing normally disappears after the final application.</li><li>• Allow 21 days between the last application and harvest.</li></ul>



# RidomilGold®

*Ridomil Gold® fungicide provides an excellent foundation for disease control, particularly *Pythium* and black shank. It protects your crop from transplant to lay-by to help produce high yielding, quality leaves.*

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## Key Benefits:

- Best foundation for disease control program
- Controls all races of black shank
- Also controls *Pythium* and mefenoxam sensitive blue mold
- Helps produce higher yielding, high quality, more profitable tobacco

## Use Guidelines:

Ridomil Gold is a soil-applied systemic fungicide for use in plant beds for damping off (*Pythium* spp.) and in the field before transplanting to control black shank and susceptible strains of blue mold.

**Tobacco Transplant Production, Plantbeds:** Apply Ridomil Gold SL as a preplant broadcast soil application at 0.5 pint per acre in 50 gallons of water to control damping off caused by *Pythium* spp. Apply before or at the time of seeding to the surface of the plantbed and lightly incorporate or follow with ½ inch sprinkler irrigation water. On broadleaf tobacco, use 1 pint per acre in 50 gallons of water. Not labeled for use in plant houses.

**Field-Planted Tobacco:** Apply Ridomil Gold SL as a broadcast soil application and incorporate in the top two to four inches of soil to control blue mold and black shank.

- For **blue mold control** in flue-cured tobacco, apply 0.5 to 1 pint per treated acre prior to transplant. For prolonged blue mold control, make a supplemental application of 0.5 pint per acre as a soil application at lay-by or last cultivation. Do not make this application if more than 1 pint per acre was applied prior to transplanting or if no Ridomil Gold SL was applied prior to transplanting.
- For **black shank control**, apply within one week before planting and apply subsequently as needed, not to exceed 3 pints per acre per season. In flue-cured tobacco, use 1 pint per acre for low to moderate disease pressure and 1 quart per acre for high pressure (Florida and Georgia use 1.5 quarts per acre where there is heavy black shank pressure).



*Once Prime+® touches the sucker bud, sucker growth is restricted longer than with any other available product. Prime+ will extend sucker control to nine or 10 weeks as compared to the six or seven weeks maleic hydrazide (MH) offers.*

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### Key Benefits:

- Season-long sucker control allows for optimal leaf growth
- Continued leaf development for a fuller and healthier crop with additional weight gain
- No bronzing or leaf bleaching, ensuring maximum quality
- Extended sucker control allows growers more flexibility to make recommended number of primings needed by auction buyers and contracts
- Fewer suckers as foreign matter in cured tobacco helps ensure quality
- Reduced use of MH lowers residues on cured leaf, helping to give growers a more marketable product
- Short two-hour rainfastness keeps Prime+ working longer
- Reliable control helps sustain profits during adverse conditions
- Flexible application – apply sequentially with MH, tank mix with MH or apply Prime+ alone

### Use Guidelines:

To control suckers, apply Prime+ when most tobacco plants are in the elongated button to early flower stage, either before or after topping. If applied after topping, apply within 24 hours of topping. During topping, remove all suckers one inch or longer. Direct Prime+ into the top of the plants. For best results, Prime+ should run down the stalk and into each leaf axil, where suckers develop. Prime+ can be applied alone through hand application or spray equipment (1 gallon of Prime+ in 49 gallons of water), in sequential applications with MH (2 quarts of Prime+ in 49.5 gallons of water) or as a tank mix with MH (2 quarts of Prime+ with 1/2 rate of MH in sufficient water to total 50 gallons).



*A leading fungicide in many field crops, Quadris® is the newest addition to the Syngenta tobacco portfolio. This outstanding fungicide controls yield-robbing diseases such as frog-eye leaf spot, target spot and blue mold.*

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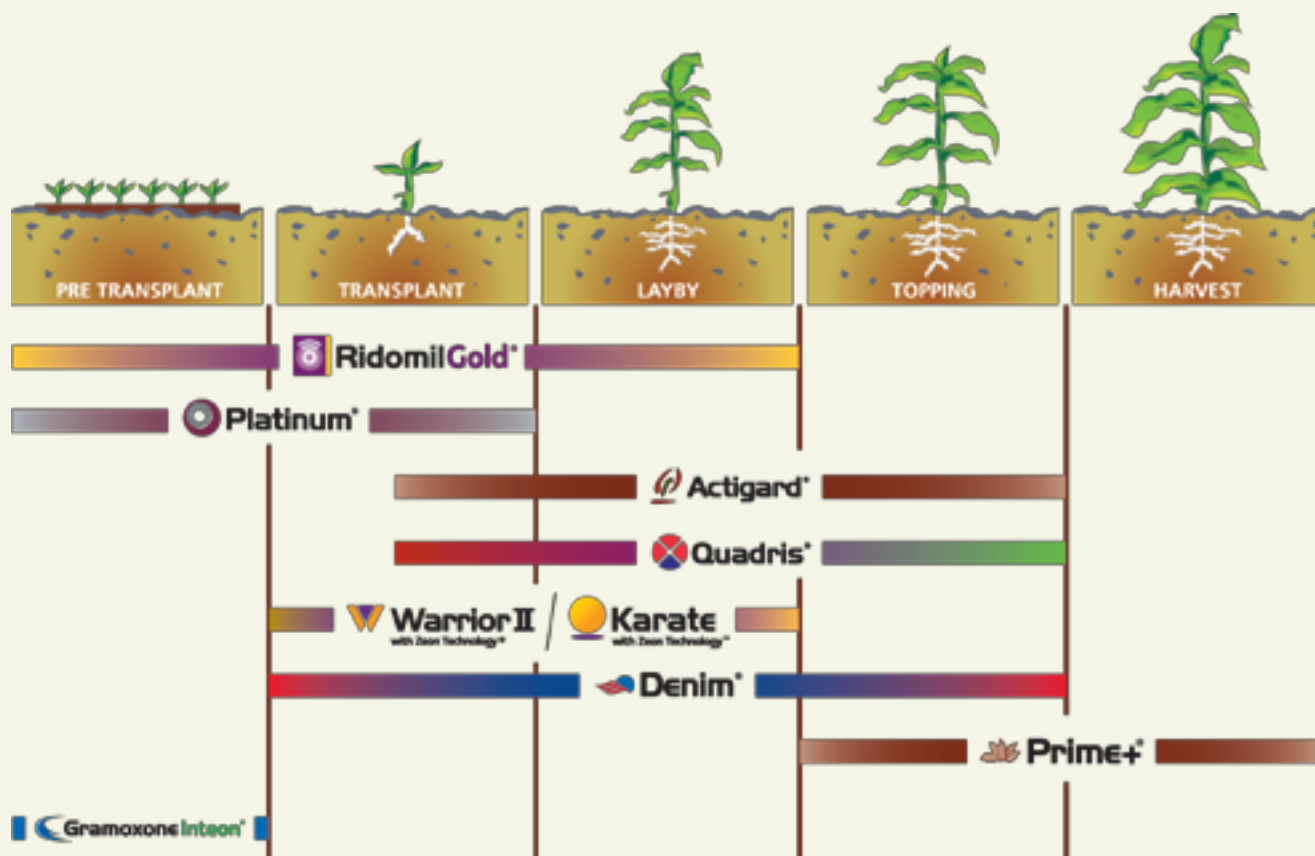
### Use Guidelines:

Quadris should only be applied as preventive treatment for blue mold control. If blue mold is present in the field, initiate applications with recommended fungicide products. Quadris should be applied prior to or in the early stage of disease development for target spot and frog-eye leaf spot control.

Quadris may be applied in the rate range of 6 to 12 fluid ounces (0.1 to 0.2 pounds active ingredient) per acre. Do not apply more than 31.2 fluid ounces of product (0.52 pounds active ingredient) per acre per season. Do not mix with Thiodan® (endosulfan-containing products). Do not apply with surfactants. Tank mixing Quadris with insecticides formulated as ECs or containing high amounts of solvents may cause some crop injury. Quadris may be applied up to the day of harvest. Quadris may enhance weather flecking on the leaves of certain tobacco types.



## Syngenta Tobacco Solutions



For more information, visit [www.farmassist.com](http://www.farmassist.com), or call Syngenta Customer Center at 1-866-SYNGENTA (866-796-4368).

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**Denim, Gramoxone Inteon, Karate with Zeon Technology and Warrior II with Zeon Technology are Restricted Use Pesticides.**

**Platinum 75SG is not currently registered for sale or use in all states. Please check with your state or local extension service before buying or using this product.**

Denim, Karate with Zeon Technology, Platinum 75SG and Warrior II with Zeon Technology are highly toxic to bees exposed to direct treatment on blooming crops and weeds. Do not apply these products or allow them to drift onto blooming plants while bees are foraging adjacent to the treatment area.

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