



**A GUIDE TO  
NUFARM SOLUTIONS**

# **POTATOES**



**Grow a better tomorrow.**

# A GUIDE TO NUFARM SOLUTIONS FOR POTATOES

Nufarm offers a wide range of crop protection products to help you harvest the most yield from your potato crop.

This *Guide to Nufarm Solutions* provides an easy reference for when and how to use our products on potato crops.

- **Potato Calendar** - a visual guide for when to use Nufarm products during the potato growing season.
- **Potato Solutions Overview** - at-a-glance summary of product application timing to help you plan your season.
- **Product Summary** - key information on benefits, application guidelines and timing for all the Nufarm products covered in this guide.

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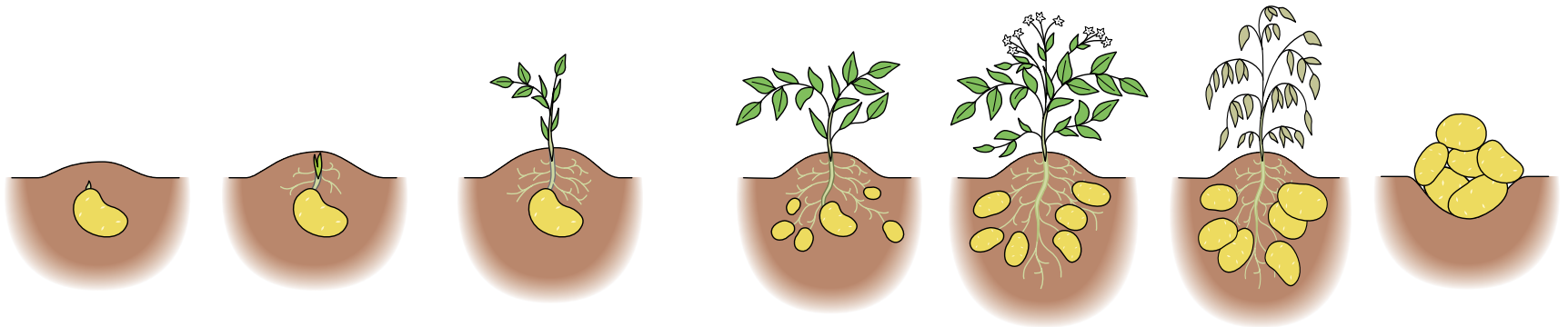
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800-345-3330  
Nufarm.com/us

# POTATO CALENDAR

Plan your growing season with Nufarm solutions for weed, insect, and disease control.



## GROWTH STAGES

	<b>PLANTING</b> (SEED TREATMENT)	<b>BEFORE GROUND CRACK/ HILLING</b>	<b>VEGETATIVE GROWTH</b>	<b>TUBER INITIATION</b>	<b>TUBER BULKING</b>	<b>MATURATION</b>	<b>POST HARVEST</b>
	Agri-Mycin® 17	Tuscany® SC	Abamex™	Abamex™	Abamex™	Agri Tin® Flowable	Phostrol®
	Salient™ 372 FS			Agri Tin® Flowable	Agri Tin® Flowable	Cheetah® (desiccation)	
	Spirato® 480 FS			Champ® Formula 2 Flowable	Champ® Formula 2 Flowable	Nufarm Diquat 2L (desiccation)	
	ST-Methyl 540 FS			Champion++™	Champion++™	Phostrol®	
				Phostrol®	Phostrol®		

# POTATO SOLUTIONS OVERVIEW

Use this grid for a quick overview of Nufarm solutions for your crop. For product details, go to the product pages in this booklet.

	PRODUCT	RE-ENTRY INTERVAL	PRE-HARVEST INTERVAL
<b>SEED TREATMENT</b>			
Blackleg, soft rot	<b>Agri-Mycin® 17</b>	N/A	N/A
Suppression of dry rot ( <i>Fusarium spp.</i> ), black scurf and stem canker ( <i>Rhizoctonia solani</i> ), silver scurf ( <i>Helminthosporium solani</i> )	<b>Salient™ 372 FS</b>	N/A	N/A
Decay, damping-off, and seedling blight caused by seed- and soil-borne fungi	<b>Spirato® 480 FS</b>	N/A	N/A
Suppression of dry rot ( <i>Fusarium spp.</i> ), black scurf and stem canker ( <i>Rhizoctonia solani</i> ), silver scurf ( <i>Helminthosporium solani</i> )	<b>ST-Methyl 540 FS</b>	N/A	N/A
<b>HERBICIDES / DESICCANTS</b>			
Potato vine desiccation	<b>Cheetah®</b>	12 hours	9 days
Potato vine desiccation	<b>Nufarm Diquat 2L</b>	24 hours	7 days
Annual and biennial grassy weeds, chickweed, clover, crabgrass, dandelion, fleabane, henbit, junglerice, kochia, lambsquarters, mallow, malva, marestail, morningglory, nutsedge, purslane, ragweed, spurge, vetch, woodsorrel*	<b>Tuscany® SC</b>	12 hours	N/A
<b>INSECTICIDES</b>			
Colorado potato beetles, <i>Liriomyza</i> leafminers, potato psyllids, spider mites	<b>Abamex™</b>	12 hours	14 days
<b>FUNGICIDES / BACTERICIDES</b>			
Early and late blight, Colorado potato beetle suppression	<b>Agri Tin® Flowable</b>	48 hours	7 days
Early and late blight, Colorado potato beetle suppression	<b>Champ® Formula 2 Flowable</b>	48 hours	0 days
Early and late blight	<b>ChamplON<sup>++</sup>™</b>	48 hours	0 days
Late blight, pink rot, pythium leak, silver scurf	<b>Phostrol®</b>	4 hours	0 days

\*See label for complete list

# Agri-Mycin® 17

## PROVEN BACTERICIDE FOR SEED PROTECTION.

Agri-Mycin® 17 is a protectant bactericide labeled for use on potato seed pieces. As a potato seed treatment, Agri-Mycin 17 delivers proven control over blackleg and soft rot. Combine Agri-Mycin with other fungicides, such as a dithiocarbamate active ingredient, to increase control of fungal diseases associated with potato seed pieces.

### ACTIVE INGREDIENT

streptomycin sulfate 22.4% (equivalent to 17% streptomycin)  
(Group 25 fungicide)

### BENEFITS OF AGRI-MYCIN 17

- Effective control against blackleg and soft rot
- Compatible with other fungicide products for increased spectrum of disease control

### KEY DISEASES CONTROLLED *See label for complete list*

Blackleg, soft rot

### APPLICATION GUIDELINES

Soak cut seed pieces in 100 ppm prepared solution for several minutes and plant as usual.

A suitable fungicide should be used as an adjunct to this treatment for the control of fungal diseases associated with potato seed pieces.

*See label for complete directions for use.*

# Salient™ 372 FS

## POWERFUL PROTECTION FOR POTATO SEED.

Prevent disease with new Salient™ 372 FS Seed Treatment from Nufarm. Difenoconazole, the active ingredient in Salient, delivers excellent protection to potato seed against devastating early-season seed rots, root rots and damping-off.

### ACTIVE INGREDIENT

difenoconazole 372 g/l (Group 3 fungicide)

### BENEFITS OF SALIENT 372 FS

- Provides broad-spectrum disease control with low use rates
- Controls seed- and soil-borne diseases as listed on label
- Allows for reduced rates of fludioxonil
- Prevents resistance development
- Compatible formulation
- Convenient 4x1 gallon, 15 gallon and 250 gallon package sizes

### KEY DISEASES CONTROLLED *See label for complete list*

Dry rot (*Fusarium spp.*), black scurf and stem canker (*Rhizoctonia solani*), silver scurf (*Helminthosporium solani*)

### APPLICATION GUIDELINES

Apply as a seed treatment at 0.103 fl oz of product per 100 lb of seed using standard slurry or mist-type seed treatment equipment.

Use Salient 372 FS in a tank mix with Spirato 480 FS (or equivalent fludioxonil product) to prevent or reduce the development of resistance to fludioxonil by *Fusarium spp.* that cause dry rot seed decay, seed-borne *Rhizoctonia spp.* that cause stem canker and tuber black scurf, and seed-borne *Helminthosporium solani* that causes silver scurf.

*See label for complete directions for use.  
Not labeled for use in California.*

# Spirato® 480 FS

## PROTECT AND IMPROVE FOR THE STRONGEST START.

Spirato® seed treatment fungicide helps give potato crops the best shot at a strong, healthy stand. Spirato contains a proven active ingredient, fludioxonil, to prevent early season damage from decay, damping-off, and seedling blight caused by seed-borne and soil-borne fungi.

## ACTIVE INGREDIENT

fludioxonil 40.3% (Group 12 fungicide)

## BENEFITS OF SPIRATO 480 FS

- Protects against decay, damping-off and blight for a strong start to help maximize yield potential
- Provides excellent protection at very low rates
- Low use rates allow room for other materials (such as inoculants) to be applied to the seed
- Excellent seed and crop safety
- Formulation compatible with other products in the slurry mixture
- Labeled for use on a wide variety of crops

## KEY DISEASES CONTROLLED See label for complete list

Decay, damping-off, and seedling blight caused by seed-borne and soil-borne fungi

## APPLICATION GUIDELINES

Apply at 0.08 to 0.16 fl oz of product per 100 lb of seed, propagating root, tuber material. Spirato 480 FS applications to potato seed pieces must be made only through specific types of equipment.

Please contact your Nufarm Americas seed treatment representative to obtain information on proper equipment for application.

*See label for complete directions for use.*

# ST-Methyl 540 FS

## PLANT PROTECTION STARTS WITH SEED PROTECTION.

ST-Methyl 540 FS gives growers economical early-season disease protection against dry rot, black scurf, stem canker and silver scurf in potatoes. ST-Methyl 540 FS protects during critical development stages to improve stands and yield. Plus, ST-Methyl 540 FS can help enhance the performance of other fungicides, especially for Rhizoctonia and Fusarium control.

## ACTIVE INGREDIENT

thiophanate-methyl 540 g/l (Group 1 fungicide)

## BENEFITS OF ST-METHYL 540 FS

- Offers economical, broad-spectrum disease protection
- Helps improve stands and encourages stronger, healthier roots
- Enhances performance of other fungicides in tough-to-control situations, especially for Rhizoctonia and Fusarium
- Proven chemistry worldwide
- Seed-safe formulation that mixes well with other seed protectants

## KEY DISEASES SUPPRESSED See label for complete list

Dry rot (*Fusarium spp.*), black scurf and stem canker (*Rhizoctonia solani*), silver scurf (*Helminthosporium solani*)

## APPLICATION GUIDELINES

Apply at 0.5 to 0.7 fl oz of product per 100 lb of seed pieces and ensure that cut seed pieces are thoroughly coated with ST-Methyl 540 FS.

For improved protection against the listed diseases that originate from surface infestations of potato seed pieces apply this product in combination with a product that is active on the targeted disease(s) and use a treatment following application to absorb liquid from the seed piece.

*See label for complete directions for use.*





### SATISFACTION: CLEANER. QUICKER. CHEETAH®.

Cheetah® Herbicide offers outstanding potato vine desiccation activity. By enhancing natural senescence, Cheetah can help potatoes add bulk while vines desiccate, leading to larger, easier harvests. Cheetah also burns down weeds – even glyphosate-resistant species – fast.

### ACTIVE INGREDIENT

glufosinate-ammonium 24.5% (Group 10 herbicide)

### BENEFITS OF CHEETAH

- Complete desiccation that complements natural process
- Potatoes 'bulk up' during desiccation, leading to improved yield

### APPLICATION GUIDELINES

Apply 21 fl oz/A once per season.

Apply in 20 to 100 gal/A of water to ensure thorough coverage.

Apply using nozzles and pressures that generate a medium (about 250 to 350 microns) spray droplet.

- Re-entry interval: 12 hours
- Pre-harvest interval: 9 days
- Maximum applications per harvest: 1\*

*See label for complete directions for use.*

*\*Do not split applications.*

## Nufarm Diquat 2L

### A BETTER CHOICE FOR A CLEANER HARVEST.

Nufarm Diquat 2L Herbicide provides desiccation of green plant material on contact, enabling faster, cleaner, more efficient harvest. Count on Diquat 2L for economical pre-harvest vine kill.

### ACTIVE INGREDIENT

diquat dibromide 37.3% (Group 22 herbicide)

### BENEFITS OF DIQUAT 2L

- Quick desiccation – fast-acting, non-selective, foliar-applied, plant desiccant and plant herbicide allows growers to plan harvest timing
- Rainfast 30 minutes after application
- Water-soluble formulation makes mixing simple
- No specialized equipment required – can be applied using conventional ground or aerial sprayers
- No harmful soil residues – use with an adjuvant

### APPLICATION GUIDELINES

Apply 1 to 2 pints/A by ground or air according to the label for pre-harvest desiccation. Do not apply to potatoes that are drought stressed. Make a second application if necessary to obtain additional desiccation where vine growth is dense.

For improved vine coverage, a 5-day interval is recommended between applications.

- Re-entry interval: 24 hours
- Pre-harvest interval: 7 days
- Application rate: 1-2 pts/A
- Minimum total spray volume: 20 gals/A (ground), 5 gals/A (air)
- Maximum application rate per year: 4 pts/A

*See label for complete directions for use.*



## STAY WEED-FREE WITH THE POWER OF TUSCANY® SC.

New liquid Tuscany® SC Herbicide takes out more problem weeds with lasting residual control. Tuscany SC stays put; it won't leach or volatilize. Plus, it offers excellent rotational flexibility. Count on Tuscany SC for proven crop safety and dependable control even in challenging weather conditions.

### ACTIVE INGREDIENT

flumioxazin 44.0% (4 lb per gallon) (Group 14 herbicide)

### BENEFITS OF TUSCANY SC

- Suppresses 13 annual broadleaf and grass weeds
- Offers residual control for long-term activity on key weeds

### KEY WEEDS CONTROLLED See label for complete list

Common lambsquarters, mustard (wild), nightshade (black, Eastern black, hairy), pigweed (Palmer amaranth, redroot, smooth, spiny amaranth, tumble), prickly lettuce, prickly sida, radish (wild)

### APPLICATION GUIDELINES

Apply 1.5 fl oz/A to soil covered potatoes for pre-emergence weed suppression. Tuscany SC may be tank mixed with other labeled herbicides to increase spectrum of control. A minimum of 2 inches of settled soil must cover the vegetation portion of the potato plant. In areas with sprinkler irrigation, incorporate with 0.5 to 0.75 inches of irrigation after application and before any sprouts are within 2 inches of settled soil surface.

- Rainfast: 1 hour
- Spray interval: 60 days
- Maximum application rate: 1.5 fl oz/A
- Maximum application rate per year: 1.5 fl oz/A

*See label for complete directions for use.*



## TARGET MITES AND OTHER TOUGH PESTS.

For years, abamectin has provided growers with a powerful tool to protect crops against leafminers, mites, psyllids, Colorado potato beetles and other pests. Now, new Abamex™ packages that power in a low-volatility, water-based formulation. Abamex starts working quickly to affect pests within hours of exposure. Its translaminar activity means it protects the entire leaf, inside and out. And, selective chemistry makes it a useful rotation partner for resistance management programs.

### ACTIVE INGREDIENT

abamectin 2.0% (Group 6 insecticide)

### BENEFITS OF ABAMEX

- Control mites and leafminers, Colorado potato beetles
- Controls potato psyllids that vector diseases such as zebra chip
- Flexible application timing in an easy-to-use, low-volatility liquid formulation

### KEY INSECTS CONTROLLED

Colorado potato beetles, *Liriomyza* leafminers, potato psyllids, spider mites

### APPLICATION GUIDELINES

Apply 8 to 16 fl oz/A using conventional ground or aerial application\*. Apply when mites and adult leafminer flies first appear. Use sufficient volumes of water to ensure thorough foliage coverage.

If needed, a second application may be made but allow at least 7 days between applications.

- Re-entry interval: 12 hours
- Pre-harvest interval: 14 days
- Spray interval: 7 days
- Maximum application rate per year: 32 fl oz/A for spider mites and Colorado potato beetle, 48 fl oz/A for leafminers

**Abamex™ is a Restricted-Use Pesticide. Always read and follow label directions.**

*See label for complete directions for use.*

*\*Do not apply by air in New York state.*



# Agri Tin® Flowable

## PROTECT AND IMPROVE.

Agri Tin® Flowable Fungicide gives growers a superior choice in protectant fungicides. The advanced tin formulation is easy to use, efficacious in the field and offers resistance management when used in integrated disease control programs.

## ACTIVE INGREDIENT

triphenyltin hydroxide 80% (Group 30 fungicide)

## BENEFITS OF AGRI TIN FLOWABLE

- Actively controls several disease causing fungi
- Multi-site mode of action
- Water-soluble packs allow for convenience and safety
- Resistance management for strobilurins and sterol-inhibitors
- Suppression of Colorado potato beetle

## KEY DISEASES CONTROLLED

Early and late blight + Colorado potato beetle suppression

## APPLICATION GUIDELINES

Apply 4 to 6 fl oz/A. When used in combination with another fungicide registered for disease control on potatoes, a 3 fl oz rate may be employed.

**Ground (Closed Cabs Only):** Apply in at least 15 gallons of water.

**Aerial:** Apply in 3 to 10 gallons of water.

**Chemigation:** Diluted spray should be directed uniformly to all parts of the plant and the gallonage increased according to the size of the plants.

Application should begin with the appearance of blight weather conditions and continue on a 7-day schedule.

- Re-entry interval: 48 hours
- Pre-harvest interval: 7 days
- Spray interval: 7 days
- Maximum application rate per year: 18 fl oz/A
- Maximum rate per application: 16 fl oz/A

Agri Tin® Flowable is a Restricted-Use Pesticide. Always read and follow label directions. See label for complete directions for use.

# Champ® Formula 2 Flowable

## DON'T SETTLE FOR LESS.

Champ® Formula 2 Flowable Fungicide is an advanced copper formulation that delivers excellent disease control. Developed with a small particle size, Champ Formula 2 Flowable stays in suspension longer, mixes easier in water and covers plants better to deliver superior protection.

## ACTIVE INGREDIENT

copper hydroxide 37.5% (24.4% metallic copper equivalent) (Group M1 fungicide)

## BENEFITS OF CHAMP FORMULA 2 FLOWABLE

- Excellent control of key diseases
- Uniformly optimized crystal size combined with state-of-the-art surfactants means Champ Formula 2 Flowable provides excellent leaf coverage and performs better
- Long shelf life
- Pours and mixes easily - even after extended storage

## KEY DISEASES CONTROLLED

Early and late blight + Colorado potato beetle suppression

## APPLICATION GUIDELINES

Apply 0.66 to 2.66 pints/A. Apply at 5 to 10 day intervals starting when plants are 6 inches high. Apply the lower rate in those locations where disease is light and the higher rate where disease is severe.

- Re-entry interval: 48 hours
- Spray interval: 5 days
- Maximum application rate per year: 69 pts/A

See label for complete directions for use.

# ChampION<sup>++</sup>™

## SMALLEST COPPER PARTICLES, MORE COMPLETE CONTROL.

ChampION<sup>++</sup>™ Fungicide/Bactericide has the smallest, most uniform copper particle distribution of any WG copper formulation. The result: better coverage and better disease control. And, ChampION<sup>++</sup> delivers all that with less environmental load than high dose copper products.

## ACTIVE INGREDIENT

copper hydroxide 46.1% (30% metallic copper equivalent) (Group M1 fungicide)

## BENEFITS OF CHAMPION<sup>++</sup>

- Small particle size results in excellent coverage and disease protection
- Stable WG formula pours easily and disperses quickly
- High density copper product means lower use rates and smaller pack sizes
- OMRI Listed® for organic crop production

## KEY DISEASES CONTROLLED

Early and late blight

## APPLICATION GUIDELINES

Apply 0.5 to 1.75 lbs/A starting when plants are 2 to 6 inches high. Apply the lower rate in those locations where disease is light and the higher rate where disease is severe. Tank mixing this product with other registered potato fungicides will improve disease control under severe disease conditions.

- Re-entry interval: 48 hours
- Spray interval: starting at 5-10 days
- Maximum application rate per year: 83.3 lbs/A

*See label for complete directions for use.*

# Phostrol®

## SYSTEMIC ACTIVITY FOR EFFECTIVE DISEASE CONTROL.

Phostrol® Agricultural Fungicide is one of the few phosphorous acids labeled as a fungicide. A neutral pH requires no buffering and allows integration with many other fungicides. These traits allow for compatibility in tank mixes, making Phostrol an excellent fit for any disease management program. Phostrol applied post-harvest (as potatoes are going into storage) provides effective control of pink rot, late blight and silver scurf.

*Consult your crop protection retailer or Nufarm sales representative for more information on setting up a post-harvest application system.*

## ACTIVE INGREDIENT

mono- and di-basic sodium, potassium, and ammonium phosphites 53.6% (Group 33 fungicide)

## BENEFITS OF PHOSTROL

- Provides prevention and control of a broad spectrum of diseases
- Clear, virtually odorless formulation
- No buffer necessary

## KEY DISEASES CONTROLLED

**In-furrow application:** (storage rot disease): Pink rot, pythium leak

**Foliar application:** Late blight + (storage rot disease): Pink rot, pythium leak

**Post harvest:** Late blight, pink rot, silver scurf

## APPLICATION GUIDELINES

Apply first foliar application when tubers are dime size, with subsequent applications at 14 day intervals as needed.

For post harvest disease control, apply 12.8 fl oz of this product in a total spray volume at 64 fl oz/T of tubers.

- Re-entry interval: 4 hours
- Spray interval: 4 days

*See label for complete directions for use.*



## We're Growing Too.

Our crop protection portfolio is better than ever. With additions including OMRI Listed® ChampION<sup>++</sup>™, we can deliver more options for your business to grow, too. And, as always, we back all of our products with the knowledge, service and support you've come to know from Nufarm.

Learn more about our product line.  
[www.nufarm.com/USAG](http://www.nufarm.com/USAG)



[www.nufarm.com/us](http://www.nufarm.com/us)

Abamex™ and Agri Tin® Flowable are Restricted-Use Pesticides. Always read and follow label directions.

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