

# SEED TREATMENT FUNGICIDE OPTIONS for CORN in SOUTH DAKOTA

Data from FS949, "Managing Crop Diseases with Seed Treatments"

By Larry Osborne and Kay Ruden

The following products may be used to treat seed on-farm (always read and follow label directions):

Trade Name:	Broad-Spectrum Fungicide(s)	Phenylamide <sup>1</sup> Component	Add'l Fung. or Biologicals <sup>2</sup>	Systemic Insecticide <sup>3</sup>	Seed(ling) Rots <sup>4</sup>	Fusarium	Rhizoc.	Pythium	Head Smut	Nematode <sup>5</sup>
<b>Fungicide or Biological Seed Treatments</b>										
Kodiak HB			<i>Bacillus subtilis</i>							
Captan Moly	captan									
Vitavax-34	carboxin									
Prevail	carboxin	metalaxyl	PCNB							
Vitaflo-280	carboxin + thiram									
Maxim XL	fludioxonil	mefenoxam								
Dithane M45	mancozeb									
Dithane F-45										
Manzate Pro-Stick	mancozeb + surfactant									
Manex	maneb									
Stamina	pyraclostrobin									
Allegiance Dry Allegiance FL Dyna-Shield Metalaxyl MetaStar ST Sebring 480 FS		metalaxyl								
<b>Fungicide plus Insecticide Seed Treatments</b>										
Latitude	carboxin	metalaxyl		imidacloprid						
Kernel Guard Supreme	carboxin			permethrin						
Concur		metalaxyl		imidacloprid						



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The following seed-treatment products are for commercial use only (always read and follow label directions):

Trade Name:	Broad-Spectrum Fungicide(s)	Phenylamide <sup>1</sup> Component	Add'l Fung. or Biologicals <sup>2</sup>	Systemic Insecticide <sup>3</sup>	Seed(ling) Rots <sup>4</sup>	Fusarium	Rhizoc.	Pythium	Head Smut	Nematode <sup>5</sup>
<b>Fungicide Seed Treatments</b>										
Dynasty	azoxystrobin									
Captan 400, 400-C	captan									
Maxim 4FS	fludioxonil									
Maxim Quattro	fludioxonil azoxystrobin thiabendazole	mefenoxam								
Vortex	ipconazole									
Stamina F <sup>3</sup> HL	pyraclostrobin	metalaxyl	triticonazole							
Trilex	trifloxystrobin									
Trilex 2000	trifloxystrobin	metalaxyl								
Apron XL Apron XL LS		mefenoxam								
Aquire Sebring 2.65 ST		metalaxyl								
<b>Fungicide plus Insecticide/Nematicide/Biological Seed Treatments</b>										
Poncho/VoTivo			<i>Bacillus firmus</i> I-1582	clothianidin						
Avicta Duo Corn				abamectin thiamethoxam						
Avicta Complete Corn	fludioxonil	mefenoxam		abamectin thiamethoxam						
Cruiser Extreme	fludioxonil + azoxystrobin	mefenoxam		thiamethoxam						

<sup>1</sup> Phenylamide fungicides include metalaxyl and mefenoxam and target *Pythium* damping-off/root rot as well as downy mildews.

<sup>2</sup> *Bacillus* spp. are soil bacteria applied as a seed treatment to manage root-affecting pathogens and/or nematodes; PCNB (syn: terrachlor) targets *Rhizoctonia* spp.

<sup>3</sup> Clothianidin, Imidacloprid, Permethrin and Thiamethoxam are different systemic insecticides targeting seed- or seedling-attacking insects such as bean leaf beetles. Abamectin is an insecticide/nematicide that targets soil insects and many parasitic nematodes.

<sup>4</sup> Seedling rots include (generally) weakly pathogenic fungi: *Penicillium*, *Aspergillus*, *Alternaria*, and others.

<sup>5</sup> Nematode pests of corn in South Dakota include needle, dagger, lance, stunt, pin, spiral, and lesion nematode, among others, and may be differentially managed by products indicated.

**Product names and availability are subject to change without notice. These lists may not include all registered seed treatment products, and may include products not registered for use in South Dakota. Always read and follow product label instructions and restrictions.**

**Efficacy is not guaranteed, and no product endorsements are made or implied. Every attempt has been made to ensure the accuracy of the information presented; however, errors may occur.**

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