



Fungicide Efficacy for Control of Soybean Seedling Diseases

The North Central Regional Committee on Soybean Diseases (NCERA-137) has developed ratings for how well fungicide seed treatments control seedling diseases of soybean in the United States. Members of NCERA-137 determine efficacy ratings for each fungicide listed in the table by field testing the materials over multiple years and locations, and by summarizing ratings from national fungicide trials published in Plant Disease Management Reports by the American Phytopathological Society at <http://www.apsnet.org>

Ratings are based on the level of disease control for each active ingredient and does not necessarily reflect efficacy of combinations of active ingredients and/or yield increases obtained from applying the active ingredient. An active ingredient's efficacy depends on proper rate and application method as determined by the product label. Efficacy ratings may be dependent on the rate of the fungicide product on seed. A number of different species of Pythium and Fusarium impact seed and seedling health in soybean. Therefore, wide ranges in efficacy may be observed in fungicide active ingredients listed in the table. This is why several fungicide active ingredients are combined in seed treatments to provide protection to a broader spectrum of pathogens. Contact your local Extension plant pathologist for recommended fungicide product rate information for your area.

The table is not intended to be a list of all labeled active ingredients. Additional active ingredients may be available but have not been evaluated in a manner allowing a rating. Additional active ingredients may be available in some products for insect and nematode control, however; only some active ingredients for pathogen control are rated. Many products have specific use restrictions. Read and follow all use restrictions before applying any fungicide to seed, or before handling any fungicide-treated seed. To see the fungicide active ingredients available in various seed treatment products, please check the **"What's on Your Seed"** publication from the University of Wisconsin-Madison Nutrient Pest Management Program.

The information in this publication is only a guide, and the authors assume no liability for practices implemented based on this information. Reference to active ingredients in this publication is not intended to be an endorsement to the exclusion of others that may be similar. Individuals using these active ingredients assume responsibility for their use in accordance with current directions of the manufacturer.



Seedling damping off from Pythium seedling blight and root rot
Image: Martin Chilvers

Find Out More

The Crop Protection Network (CPN) is a multi-state and international collaboration of university and provincial extension specialists, and public and private professionals who provide unbiased, research-based information to farmers and agricultural personnel. Our goal is to communicate relevant information that will help professionals identify and manage field crop diseases.

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Fungicide Efficacy for Control of Soybean Seedling Diseases Table (01/2024)

Efficacy categories:

NR = not recommended; P = Poor; F = Fair; G = Good; VG = Very Good; E = Excellent; NL = Not labeled for use against this disease; U = Unknown efficacy or insufficient data to rank active ingredient.

Fungicide active ingredient	<i>Pythium</i> spp. ¹	<i>Phytophthora</i>	<i>Rhizoctonia</i> spp.	<i>Fusarium</i> spp. ^{1,3}	Sudden death syndrome (SDS) <i>Fusarium virguliforme</i>	<i>Diaporthe</i> spp.
Azoxystrobin	P-G	NL	VG	F-G	P	P
Carboxin	NL	NL	G	NL	NL	NL
Ethaboxam	E	E	NL	NL	NL	NL
Fludioxonil	P	P	G	F-VG	P	G
Fluopyram	NL	NL	NL	NL	VG	NL
Fluxastrobin	NL	NL				NL
Fluxapyroxad	NL	NL	E	G	P	NL
Ipconazole	NL	NL	F-G	F-E	P	G
Mefenoxam	E ²	E	NL	NL	NL	NL
Metalaxyl	E ²	E	NL	NL	NL	NL
Oxathiapiprolin	NL	E	NL	NL	NL	NL
Penflufen	NL	NL	G	NL	NL	NL
Prothioconazole	NL	NL	G	G	NL	NL
Pydiflumetofen	NL	NL	NL	NL	VG	NL
Pyraclostrobin	NL	NL	F-G	F	P	G
Sedaxane	NL	NL	E	NL	NL	NL
Thiabendazole	NL	NL	NL	U	P	G
Trifloxystrobin	NL	NL	F-E	F-G	P	NL

¹ Active ingredients may vary in efficacy against different *Fusarium* and *Pythium* species.

² Areas with mefenoxam or metalaxyl insensitive populations may see less efficacy with these products.

³ Listed active ingredients for *Fusarium* spp. do not have efficacy against *Fusarium virguliforme*, causal agent of sudden death syndrome.

Common Fungicide Trade Names and Active Ingredients (01/2024)

Product trade name	Active ingredient(s)
Acceleron	DX-612 Fluxapyroxad, DX-309 Metalaxyl, DX-109 Pyraclostrobin
Allegiance FL	Metalaxyl
Allegiance LS	Metalaxyl
Apron XL LS	Mefenoxam
ApronMaxx RFC	
ApronMaxx RTA	
CruiserMaxx	Fludioxonil, Mefenoxam
CruiserMaxx Advanced or CruiserMaxx Plus	
CruiserMaxx Vibrance or Vibrance Trio	Fludioxonil, Mefenoxam, Sedaxane
Dynasty	Azoxystrobin
EverGol Energy SB	Metalaxyl, Penflufen, Prothioconazole
ILEVO	Fluopyram
Inovate Pro	Ipconazole, Metalaxyl
Intego	Ethaboxam
Lumisena	Oxathiapiprolin, Metalaxyl
Maxim 4FS	Fludioxonil
Mertect 340 F	Thiabendazole
Prevail	Carboxin, Metalaxyl, PCNB
Saltro	Pydiflumetofen
Trilex 2000	Metalaxyl, Trifloxystrobin
Vibrance	Sedaxane
Warden CX	Fludioxonil, Mefenoxam, Sedaxane
Warden RTA	Fludioxonil, Mefenoxam

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