Sugar Beet
SEED TREATMENT

Chemical	Application	Dosage[1]	Disease Control[2]				Remarks
			Aphanomyces	Pythium	Phoma	Rhizoctonia	
Chloroneb Chloroneb 65W, 65%	Liquid or slurry	6 fl oz/cwt		X		X	For control of Pythium and Rhizoctonia. For use as a supplement to another fungicide.
Fludioxonil Maxim 4 FS, 40.3%	Slurry	0.08-0.16 fl oz/cwt			X	X	For control of seed-borne and soil-borne fungi.
Hymexazol Tachigaren, 70%	Pelleted seed	45-90 g/unit of 100,000 seed (approx. 1 kg)	X	X			For control of Pythium and Aphanomyces. Use of rates greater than 45 g may result in phytotoxicity. In fields with known heavy disease pressure, use of Tachigaren and a tolerant variety is suggested.
Mefenoxam Apron XL LS, 32.3% Sebring 318 FS, 32.3%	Slurry or mist	0.32-0.64 fl oz/cwt		X			For control of Pythium. May be combined with other fungicides if products are known to be compatible. For use only with commercial seed treatment equipment.
Metalaxyl Allegiance FL, 28.35% Dyna-Shield 28.35%	Mist or slurry Slurry	0.75 fl oz/cwt 0.75 fl oz/cwt		X X			For control of Pythium. May be combined with other fungicides if products are known to be compatible.
Thiram Thiram 50 WP Dyed, 50% 42-S Thiram, 42% Signet 480 FS, 42%	Slurry or drill box Liquid or slurry	8 oz/cwt 8 fl oz/cwt		X X		X X	

[1]Dosage = amount of formulated product to apply.
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Sugar Beet
SOIL APPLICATION

Chemical (Fungicide Group)	Application	Dosage[1]	Control[2] of Pythium	Control[2] of Rhizoctonia	Remarks
***Bacillus subtilis* strain QST 713 (44)** Serenade Soil, 1.34%	In-furrow at planting	2.2-13.2 fl/oz/1,000 row ft	X		
Qols **Azoxystrobin (11)** Quadris, 22.9%	Band 7" or less	0.4-0.7 fl oz/1,000 ft of row (9.5-16.6 fl oz/A as a band, not broadcast, with 22" row)	X	X	Resistance statement 5[3]. Apply Quadris in a band (7" or less) over 4- to 8-leaf sugar beets when soil temperatures at 4" soil depth average 65°, using 5-15 gpa. Rate is already determined as a BAND spray, not breadcast.
Pyraclostrobin (11) Headline, 23.6% Headline SC, 23.3%	In-furrow spray	0.4 -0.8 fl oz/1,000 ft of row		X	For suppression of Rhizoctonia. For 22" row, use maximum of 0.5 fl oz/1,000 ft of row. For 30" row, use maximum of 0.7[2] fl[2] oz/1,000 ft of row.
Trifloxystrobin (11) Gem 500 SC, 42.6%	In-furrow spray	2.9-3.6 oz/A in band		X	Resistance statement 5[3]. For suppression of Rhizoctonia.
Mefenoxam (4) Ridomil Gold EC, 48%	7"" band preplant incorporated	0.21-0.43 fl oz/1,000 ft. of row	X		Resistance statement 4[3]. See label for planting restrictions within 12 months of application.
Ridomil Gold GR, 2.5%	7" band preplant incorporated	4.3-8.6 oz/1,000 ft. of row	X		
Ultra Flourish, 25.1%	7" band preplant incorporated	0.43-0.86 fl oz/1,000 ft. of row	X		

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[3]See fungicide resistance management statements on Pages 9-10.

Sugar Beet
FOLIAR SPRAYS

Chemical (Fungicide Group)	Application[1]	Dosage[2]	Disease Control[3]		Remarks
			Cercospora Leaf Spot[4]	Powdery Mildew	
Bacillus subtilis strain QST 2808 (44) BalladPLUS	Spray or fungigation	2-4 qt/A		X	Begin applications when environmental conditions and plant stage are conducive to disease development.
Copper (M)					
Basicop WP, 53%	Spray	4 lb/A	X		Do not provide adequate control of cercospora leafspot.
Champ DP, 57.6%	Spray or fungigation	1.33-3.33 lb/A	X		
Champ WG, 77%	Spray or fungigation	2-5 lb/A	X		
Champ Formula 2 Flowable, 35.5%	Spray or fungigation	1.33-3.33 pt/A	X		
Cuprofix Ultra 40 Disperss, 71.1%	Spray or fungigation	1.25-3.0 lb/A	X		
Kocide 2000, 53.8%	Spray or fungigation	1.5-3.75 lb/A	X		
Kocide 3000, 46.1%	Spray or fungigation	0.75-2.0 lb	X		
Kocide 4.5 LF, 37.5%	Spray or fungigation	1.33-2.66 pt/A	X		
Difenoconazole (3) + Propiconazole (3) 22.8%:22.8% Inspire XT, 23.2%	Spray or fungigation	7 fl oz/A	X	X	Resistance statement 3. Do not apply within 21 days of harvest. Do not apply more than 21 fl oz/A/season.
Fenbuconazole (3) Enable 2F, 23.5%	Spray	8 fl oz/A	X	X	Preharvest interval of 14 days. Resistance statement 3[7].
Mancozeb (M3)					
Dithane DF Rainshield NT, 75%	Spray or fungigation	1.5-2 lb/A	X		Do not apply mancozeb within 14 days of harvest. Do not exceed 11.2 lb ai/A per season of total EBDC (mancozeb and/or maneb), i.e,, do not exceed 14 lb/A of formulated WP or DF or 11.2 qt/A of formulated flowable product per season.
Dithane F-45, 37%	Spray or fungigation	1.2-1.6 qt/A	X		
Dithane M-45, 80%	Spray or fungigation	1.5-2 lb/A	X		
Manex II, 37%	Spray or fungigation	1.2-1.6 qt/A	X		
Manzate ProStick, 75%	Spray or fungigation	1.5-2 lb/A	X		
Penncozeb, 80%	Spray or fungigation	1.5-2 lb/A	X		
Penncozeb DF, 75%	Spray or fungigation	1.5-2 lb/A	X		

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[4]Begin when disease is first observed in field. Higher rates are used when disease is severe on susceptible varieties. Use 5-10 gal. water with airplane or 20-40 gal. water and at least 100 psi with ground equipment. Repeat tin or copper at 10-14 days. Repeat maneb or mancozeb at 7-10 days.

Sugar Beet (continued)
FOLIAR SPRAYS

Chemical (Fungicide Group)	Application[1]	Dosage[2]	Disease Control[3]		Remarks[5]
			Cercospora Leaf Spot[4]	Powdery Mildew	
Mancozeb (M3) + Copper (M) ManKocide 15%: 46.1% Cuprofix MZ Disperss, 30.4% + 22.1%	Spray or fungigation Spray or fungigation	2.5-6.5 lbs/A 3.75-4.75 lbs/A	X X		Do not exceed 36.8 lbs product/acre/season. Do not apply within 14 days of harvest.
Metconazole (3) Caramba, 8.6%	Spray or fungigation	9-14 fl oz/A		X	For optimal powdery mildew control, begin application prior to disease development.14-day PHI. Maximum of 34 fl oz/season.
Propiconazole (3) Tilt 3.6 E.C. 41.8% or Propiconazole E-AG 41.8% Bumper 41.8 EC, 41.8%	Spray or fungigaion	4 fl oz/A	X	X	Resistance statement 3. Begin application at first sign of disease. Do not exceed 12 fl oz/year. PHI = 21 days.
Prothioconazole (3) Proline 480 SC, 41.0%	Spray	5.0-5.7 fl oz/A	X	X	Resistance statement 3. Proline at 5.7 fl oz/A in a 7" or less band at the 4-leaf stage also manages Rhizoctonia stem and crown canker. Do not apply more than 17.1 fl oz of Proline per year. Do not apply within 7 days of harvest.

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[5]See **current "Sugar Beet Production Guide"** for management strategies.
[6]See fungicide resistance management statements on Pages 9-10.

Sugar Beet (continued)
FOLIAR SPRAYS

Chemical (Fungicide Group)	Application[1]	Dosage[2]	Disease Control[3]		Remarks
			Leaf Spot[4]	Powdery Mildew	
QoIs					Resistance statement 5[6].
Azoxystrobin (11) Quadris, 22.9%	Spray or fungigation	6.2-15.4 fl oz/A	X	X	2.88 qt Quadris/Acre/season maximum. May be applied the day of harvest. Band application at 4-leaf stage for management of Rhizoctonia stem and crown canker.
Pyraclostrobin (11) Headline, 23.6% Headline SC, 23.3%	Spray or fungigation	9-12 fl oz/A	X	X	48 fl oz Headline/Acre/season maximum. Has a 7-day PHI.
Trifloxystrobin (11) Gem 500 SC, 42.6%	Spray only	2.9-3.6oz/A	X	X	15.2 oz Gem/Acre/season maximum. Has a 21-day PHI.
Sulfur (M) Super Six, 52%	Spray or fungigation	8 pt/A		X	Apply sulfur fungicide if mildew appears prior to mid-September. One application gives protection for 4 weeks. Degree of control depends on amount of sulfur used (if less than 5 lb ai is used, only partial control may result).
Microthiol Disperss 80%	Spray or fungigation	5-10 lb/A		X	
Micro Sulf, 80%	Spray or fungigation	5-10 lb/A		X	
Tetraconazole (3) Eminent, 11.6%	Spray or fungigation	13 fl oz/A	X	X	Preharvest interval of 14 days. Resistance statement 3[7].

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[5]Because benzimidazole (Topsin M)-resistant strains of *Cercospora beticola* have developed in many sugar beet-growing areas, Topsin M should be used only once per season and only in combination with a nonbenzimidazole fingicide.
[6]See **current "Sugar Beet Production Guide"** for management strategies.
[7]See fungicide resistance management statements on Pages 9-10.
***Designates restricted-use pesticide.**

Sugar Beet (continued)
FOLIAR SPRAYS

Chemical (Fungicide Group)	Application[1]	Dosage[2]	Disease Control[3]		Remarks
			Leaf Spot[4]	Powdery Mildew	
Thiophanate methyl (1)					Resistance statement 1[7].
Thiophanate methyl 85 WDG, 85%	Spray	0.4 lbs/A	X[5]	X	Tank mix with tin for resistance management.
Topsin 4.5 FL, 45% or T-Methyl E-AG 4.5F	Spray or fungigation	10-20fl oz/A	X[5]	X	
Topsin M WSB, Topsin 70W, or T-methyl 70W WSB, 70% or T-Methyl E-AG 70WSB	Spray or fungigation	0.5-1.0 lb/A	X[5]	X	
Triphenyltin Hydroxide (TPTH) RUP* (30)					**RESTRICTED-USE PESTICIDE.** Do not exceed 15 oz/A of Super Tin 80WP per season. Do not feed treated tops to livestock. Do not enter treated areas within 48 hours of treatment without protective clothing specified on label. Ground application must be with closed cabs. A Sec 24 (c) state label allows treatment up to 7 days before harvest.
Super Tin 80WP AgPak, 80% or Agri Tin, 80%	Spray	2.5-5.0 oz/A	X[6]		
Super Tin 4L or Agri Tin 4L, 40%	Spray	4.0-8.0 fl oz/A	X[6]		Do not exceed 24 fl oz/A/season for Super Tin 4L.

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