

NOTE: THE FOLLOWING INFORMATION IS OFFERED AS A GUIDE FOR PROSPECTIVE CHALLENGES TO MANAGING SEASHORE PASPALUM. ALL TURFGRASSES ARE SUBJECTED TO INSECT, DISEASE, AND WEED PRESSURES. PROPER MANAGEMENT IS THE KEY TO SUCCESS. YOU MUST CHECK ALL LABELS OF THE PESTICIDES TO BE USED ON THIS GRASS FOR LEGAL AND PROPER USE. MENTION OF A PARTICULAR PRODUCT IS NOT AN ENDORSEMENT OF THAT PRODUCT BUT REFLECTS WHAT IS KNOWN AT THE PRESENT TIME. ENVIRONMENTAL INTERACTIONS, INCLUDING SALINITY THAT IMPACT SPECIFIC SITES, MAY GIVE VARIABLE RESULTS IN THE USE OF SOME PRODUCTS.

FUSARIUM BLIGHT

MICRODOCHIUM BLIGHT

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Fusarium blight

(Fusarium acuminatum, F. avenaceum, F. oxysporum, F. tricinctum)

Symptoms: most serious during hot, humid conditions when turf is under drought stress. Starts as light green patches 2-6 inches in diameter. Circular patches, elongated streaks. Patches turn from light green to reddish brown, to tan, to straw color. Frogeye pattern with healthy grass in the center of a doughnut-shaped area up to 3 feet in diameter. Grass dies as the roots and crown die.

Mowing height is critical for incubation of the organism, and heights above 2 inches might create an ideal environment for the pathogen. High nitrogen and moisture in conjunction with a stress like drought or scalping will escalate the pathogen problem in paspalum over 1 1/2-2 inches in height.

Cultural control: avoid severely drought stress conditions
 maintain functional drainage
 core aerate
 maintain mowing heights below 1 inch (25 mm)

Suggested Fungicides: (ROTATE MODE-OF-ACTION CHEMISTRIES)

trifloxystrobin (Compass)

azoxystrobin (Heritage) Heritage Action (acibenzolar-s-methyl for stress tolerance inducement)

azoxystrobin + cyproconazole (Quadris Xtra)

azoxystrobin + chlorothalonil (Renown)

azoxystrobin + tebuconazole (ArmorTech ZOXY-T; Strobe T)

Solatenol®+difenoconazole+azoxystrobin+propiconazole (Contend)

vorlan/vinclozolin (Curalan, Touche)

cyproconazole (Sentinel, Alto)

iprodione (Chipco 26019, Iprodione Pro, Chipco 26GT, Raven 26GT, Tazz™, Eclipse ETQ)

iprodione + trifloxystrobin (Interface™)

fludioxonil (Medallion)

difenoconazole + fludioxonil (Instrata Elite)

fludioxonil + mefenoxam (Apron Maxx, Warden, Maxim®)

mancozeb + copper hydroxide (Junction)

thiophanate methyl (Cleary's 3336 & 26/36, Topsin, Fungo, Systec 1998, T-Bird, 'Systemic Fungicide')

triadimefon (Bayleton)

fenarimol (Rubigan)

carbendazim (benzimidazole) (Tartan)

fluoxastrobin (Disarm/Evito/Fame)

fluoxastrobin + chlorothalonil (Fame + C)

fluoxastrobin + tebuconazole (Fame + T)

propiconazole (Kestrel, Tenacity, Banner Maxx, Echo, Spectator, Propensity, PropiMax, Tilt, Prophecy, Strider)

chlorothalonil (Chlorosel, Echo Ultimate, Pegasus, Concord, Countdown, Daconil, Manicure, Legend, Echo Dyad ETQ, Enclave™)

chlorothalonil + acibenzolar-S-methyl (Daconil Action)

trifloxystrobin + triadimefon (Armada, Tartan)

etridiazole + thiophanate methyl (Banrot)

Zn + Mn ethylene-bisdithiocarbamate/mancozeb (Pentathalon, WingMan, Fore, Protect, Formec, Manzate, Dithane)

Banner + Daconil (Concert, Echo

Tourney (metconazole)

chlorothalonil + thiophanate-methyl (Tee-1-Up, Peregrine, Spectro 90, ConSyst, Broadcide)

chlorothalonil + tebuconazole (E-Scape ETQ)

PCNB+propiconazole+chlorothalonil (FF III)

PCNB + tebuconazole (Oreon)

ammonium chlorides (Agrisan 20, Pro-Tech)

tebuconazole (Lynx, Torque, Muscle®, ArmorTech TEB360, Clearscape ETQ, Skylark, Fame, Mirage™StressGard™)

thiram (Spotrete, Tersan, Defiant)

iprodione + thiophanate-methyl (Dovetail, Chipco 26/36, Proturf Fluid Fungicide)

Bacillus subtilis strain GB03 biofungicide (Companion)

pyraclostrobin + triticonazole (Pillar G)

fluazinam (Secure biofungicide; Rotator)

fluazinam + tebuconazole (Traction)

fluopyram + trifloxystrobin (Exteris Stressgard)

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Sparse leaf patch/Microdochium blight (or Fusarium blight)

(Microdochium nivale or paspali)

Symptoms: Fungus is active parasitically on grasses during cool (-3 to 18°C) (or up to 70°F) wet periods and will be active at higher temperatures. Requires continuous contact with water for at least 10 hours to infect a turfgrass plant. Fungus inhabits both the infected grass leaves giving a water-soaked appearance, and the soil beneath with networks of mycelium and jelly-like spore masses. Feeds on organic matter for carbon and energy. Grass appears as reddish brown to salmon colored (pink color is due to whitish pinkish sporodochia on the leaf surface, with conidia produced on the sporodochia) with irregular shaped patches 4-12 inches in diameter and surrounded by a dark brown or bronze colored ring, with a greasy appearance. Symptom pattern coincides with the mowing pattern. Often associated with yellow patch.

Causal predisposition: Constantly wet/moist conditions, excessive foliar growth due to high nitrogen applications, thatch buildup, restricted air movement, poor soil drainage, inadequate potassium concentrations, heavy cart/golf traffic.

Cultural control: Regular aeration, high K fertilization and frequent applications, reduced N fertilizers going into colder temperatures, removal of cart traffic, maintain pH around 6.5-6.7.

Suggested Chemical Control: (ROTATE MODE-OF-ACTION CHEMISTRIES)

quintozene (PNCB, Terraclor, Turfcide)

chlorothalonil + propiconazole + fludioxonil (Instrata)

difenoconazole + fludioxonil (Instrata Elite)

fludioxonil (Medallion)

fludioxonil + mefenoxam (Apron Maxx, Warden, Maxim®)

thiophanate methyl (3336, Fungo, Systec, T-Storm, 'Systemic Fungicide')

flutolanil + thiophanate methyl (SyStar)

iprodione (26GT, Iprodione Pro, Raven, Tazz™, Eclipse ETQ)

iprodione + thiophanate methyl (26/36, Dovetail)

iprodione + trifloxystrobin (Interface™)

propiconazole (Banner MAXX, Propiconazole G-Pro & Pro, Quali-Pro Propiconazole, Savii, Spector, Tilt, PropiMax, Strider, Prophesy™)

triticonazole (Trinity)

triticonazole + chlorothalonil (Reserve™)

triadimefon + trifloxystrobin (Tartan, Armada)

chlorothalonil + thiophanate methyl (ConSyst, Spectro, Peregrine, Broadcide, Tee-1-Up)

polyoxin D zinc salt (Endorse, Affirm)

trifloxystrobin (Compass)

azoxystrobin + propiconazole (Headway, Quilt)

azoxystrobin + cyproconazole (Quadris Xtra)

azoxystrobin + chlorothalonil (Renown)

azoxystrobin + difenoconazole (Briskway)

azoxystrobin + tebuconazole (ArmorTech ZOXY-T; Strobe T)

Solatenol®+difenoconazole+azoxystrobin+propiconazole (Contend)

tebuconazole (Mirage™StressGard™)

vinclozolin (Curalan, Touche)

fenarimol (Rubigan)

myclobutanil (Eagle, Siskin, Myclobutanil 20EW, Systhane, Rally, Nova, Laredo, Golden Eagle™)

triadimefon (Bayleton)

chlorothalonil (Daconil, Chlorostar, Echo, Manicure, Legend, Enclave™)

chlorothalonil + acibenzolar-S-methyl (Daconil Action)

chlorothalonil + fenarimol (TwoSome)

azoxystrobin (Heritage) Heritage Action (acibenzolar-s-methyl for stress tolerance inducement)

fluoxastrobin (Disarm, Evito, Fame)

fluoxastrobin + chlorothalonil (Disarm C and M, Fame + C)

fluoxastrobin + tebuconazole (Fame + T)

pyraclostrobin (Insignia)

fluxapyroxad + pyraclostrobin (Lexicon)

mancozeb (Fore, Dithane, Protect, WingMan, Formec, Manzate)

mancozeb + copper hydroxide (Junction)

maneb (Pentathlon)

thiram (Spotrete, Tersan, Defiant)

ammonium chlorides (Agrisan 20, Pro-Tech)

pyraclostrobin + boscalid (Pageant, Honor)

pyraclostrobin + triticonazole (Pillar G)

***Bacillus subtilis* strain GB03 biofungicide (Companion)**

Fluazinam (Secure biofungicide; Rotator)

Fluazinam + tebuconazole (Traction)

fluopyram + trifloxystrobin (Exteris Stressgard)

flutolanil (Prostar, Pedigree)