

TURF DISEASES (Commercial)

Wendell Hutchens and Terry Spurlock

| Disease | Product | Active Ingredient | FRAC Code | Rate/1,000 sq ft | Comments |
|-------------|-------------------------|-------------------------------------|-----------|------------------|---|
| Brown Patch | Heritage 50 WG | azoxystrobin | 11 | 0.2 - 0.4 oz | Apply in 2 - 4 gals water/1,000 sq ft every 14 - 28 days as a preventative during warm, humid weather favorable for the disease. Use the higher rate and shorter interval if disease is evident and conditions are very favorable. |
| | Insignia 20 WG | pyraclostrobin | 11 | 0.5 - 0.9 oz | |
| | Compass 50 WG | trifloxystrobin | 11 | 0.15 - 0.25 oz | 14 day interval at first sign of disease. |
| | Renown 5.16 SCII | chlorothalonil + azoxystrobin | M5 + 11 | 2.5 - 4.5 oz | Apply at a 14 - 21 day interval. Commercial use only. |
| | Endorse 2.5 WP | polyoxin D | 19 | 4 oz | Apply in a minimum of 0.5 gal/1,000 sq ft. Repeat on a 7 - 14 day interval as needed. |
| | Medallion 50 WP | fludioxonil | 12 | 0.25 - 0.5 oz | Begin applications before disease development and repeat on 7 - 14 day intervals. May be used with Banner Maxx for extended control of various leaf spots. |
| | Daconil WeatherStik 6 F | chlorothalonil | M5 | 3 - 7 fl oz | Apply in 2 - 5 gals water/1,000 sq ft at 7 - 10 day intervals as a preventative (before disease is noticed). Use high rate on 7 day schedule once disease is evident. See label for fairway rates. Commercial use only. |
| | Daconil Ultrex 82.5 SDG | chlorothalonil | M5 | 1.8 - 3.25 oz | Protectant qualities. Commercial use only. |
| | Chipco 26019 50 W | iprodione | 2 | 1.5 - 2 oz | Apply in 2 - 5 gal water/1,000 sq ft at 14 - 21 day intervals as a preventative. See label for restrictions. Iprodione is for commercial use only. |
| | Eagle 40 WSP | myclobutanil | 3 | 0.6 - 1.2 oz | |
| | Fore Rainshield 80 WP | mancozeb | M3 | 4 - 8 oz | Apply in 3 - 5 gals water/1,000 sq ft every 7 - 14 days as a preventative. A non-ionic surfactant should be used. Use 7 day interval if disease is severe. |
| | Banner MAXX 1.3 EC | propiconazole | 3 | 1 - 2 fl oz | Apply in 2 - 5 gals water/1,000 sq ft at 7 - 21 day intervals as a preventative. Can be tank-mixed with certain contact fungicides – see label for details. Do not exceed 2 fl oz rate on bermudagrass and St. Augustinegrass. |
| | Concert II 4.3 SE | propiconazole + chlorothalonil | 3 + M5 | 3 - 5.5 oz | Begin applications in May or June before disease is present. Commercial use only. |
| | Spectro 90 WDG | chlorothalonil + thiophanate-methyl | M5 + 1 | 3 - 8 oz | Best applied when conditions favor disease. Repeat as needed at 14 - 21 days as indicated on label. Commercial use only. |

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| Brown Patch (cont.) | Cleary's 3336 F 4 F | thiophanate-methyl | 1 | 2 - 4 oz | Apply in 3 - 5 gals water/1,000 sq ft every 7 - 14 days at first sign of disease. |
| | 26/36 Fungicide 3.8 F | iprodione + thiophanate-methyl | 2 + 1 | 2 - 4 oz | Iprodione is for commercial use only. |
| | Secure 0.88 EC | fluzinam | 29 | 0.5 oz | Commercial use only. |
| | Prostar 70 WP | flutolanil | 7 | 2 - 3 oz | Apply in 2 - 5 gals water at first sign of disease with a non-ionic surfactant. Repeat as needed every 14 - 21 days. |
| | Bayleton 50 WSP | triadimefon | 3 | 0.5 - 1 oz | |
| | Tartan 9.85 L | trifloxystrobin + triadimefon | 11 + 3 | 1 - 2 oz | Begin applications prior to or in early stages of disease onset. 14 - 28 day interval. |
| | Rhapsody 68 WG | <i>Bacillus subtilis</i> | 44 | 2 - 10 oz | Apply in 2 gal/1,000 sq ft. Apply when conditions are conducive for disease. May be used in organic production. |
| Dollar Spot | Daconil WeatherStik 6 F | chlorothalonil | M5 | 3 - 7 fl oz | Apply in 2 - 5 gals water/1,000 sq ft at 7 - 10 day intervals as a preventative (before disease is noticed). Use high rate on 7 day schedule once disease is evident. See label for fairway rates. Commercial use only. |
| | Daconil Action 6.11 F | chlorothalonil + acibenzolar-S-methyl | M5 + P1 | 1 - 3.5 fl oz | See label restrictions. Commercial use only. |
| | Chipco 26019 50 W | iprodione | 2 | 1.5 - 2 oz | Apply in 2 - 5 gals water/1,000 sq ft at 14 - 21 day intervals as a preventative. See labels for restrictions. Iprodione is Commercial use only. |
| | Eagle 40 WSP | myclobutanil | 3 | 0.6 - 1.2 oz | |
| | Fore Rainshield 80 WP | mancozeb | M3 | 4 - 8 oz | Apply in 3 - 5 gals water/1,000 sq ft every 7 - 14 days as a preventative. A non-ionic surfactant should be used. Use 7 day interval if disease is severe. |
| | Banner MAXX 1.3 EC | propiconazole | 3 | 1 - 2 fl oz | Apply in 2 - 5 gals water/1,000 sq ft at 7 - 21 day intervals as a preventative. Can be tank-mixed with certain contact fungicides – see label for details. Do not exceed 2 fl oz rate on bermudagrass or St. Augustine grass. |
| | Spectro 90 WDG | chlorothalonil + thiophanate-methyl | M5 + 1 | 3 - 8 oz | Best applied when conditions favor disease. Repeat as needed at 14 - 21 days as indicated on label. Commercial use only. |
| | Cleary's 3336 F 4 F | thiophanate-methyl | 1 | 2 - 4 oz | Apply in 3 - 5 gals water/1,000 sq ft every 7 - 14 days at first sign of disease. |
| | Insignia 20 WG | pyraclostrobin | 11 | 0.9 oz | Suppression only. 14 - 28 day intervals. |

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| Dollar Spot (cont.) | Tartan 9.85 L | trifloxystrobin + triadimefon | 11 + 3 | 1 - 2 oz | Begin applications prior to or in early stages of disease onset. Apply at a 14 - 28 day intervals. |
| | Emerald 70 WDG | boscalid | 7 | 0.13 - 0.18 oz | Begin applications prior to or in early stages of disease onset. Apply at a 14 - 28 day intervals. |
| | Trinity 2.21 SE | triticonazole | 3 | 0.5 - 2 oz | See label. Apply in 1 - 5 gals/1,000 sq ft. |
| | Rhapsody 68 WG | <i>Bacillus subtilis</i> | 44 | 2 - 10 oz | 2 gal/1,000 sq ft. Begin when conditions are conducive for disease. May be used for organic production. |
| | Junction 61.1 DF | mancozeb + copper hydroxide | M3 + M1 | 2 - 4 oz | Begin at disease onset, then at 5 day intervals. See label. |
| | Secure 0.88 EC | fluzinam | 29 | 0.5 oz | Commercial use only. |
| Rhizoctonia Large Patch (zoysia and bermuda) | Heritage 50 WG | azoxystrobin | 11 | 0.4 oz | Apply in 2 - 5 gals water/1,000 sq ft between September 10 and October 10 and again between March 15 and April 15. In very severe instances, an additional application may be made about 4 weeks after the first fall application. |
| | Prostar 70 WP | flutolanil | 7 | 3 oz | |
| | Eagle 40 WSP | myclobutanil | 3 | 1.2 oz | |
| | Trinity 2.21 SE | triticonazole | 3 | 0.5 - 2 oz | |
| | Bayleton 50 WSP | triadimefon | 3 | 1 oz | |
| Fairy Ring (suppression) | Prostar 70 WP | flutolanil | 7 | 2.2 - 4.5 oz | Apply in 3 - 5 gals water/1,000 sq ft at first sign of disease and repeat in 28 days if necessary. Apply as soon as possible after initial symptoms. Reapply after 28 days if needed. |
| | Heritage 50 WG | azoxystrobin | 11 | 0.4 oz | |
| | Insignia 20 WG | pyraclostrobin | 11 | 0.9 oz | |
| | Headway 1.39 EC | azoxystrobin + propiconazole | 11 + 3 | 3 oz | Apply at 4 gals/1,000 sq ft at first disease evidence. |
| | Tourney 1.15 WDG | metconazole | 3 | 0.37 oz | Apply at 4 gals/1,000 sq ft. Reapply at 21 days. |
| | Affirm 11 WDG | polyoxin D zinc salt | 19 | 1 oz | Use 2 - 3 applications at 7 day intervals with a wetting agent. |
| | Pillar G 0.81 G | pyraclostrobin + triticonazole | 3 + 11 | 3 lbs | Use at 14 - 28 day intervals with a wetting agent. |
| | Torque 50 WDG | tebuconazole | 3 | 0.6 oz | 66 - 132 GPA water volume. See label directions. |

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|--|---|-----------------------------|-----------|------------------|---|
| Pythium Blight (also Pythium Root and Crown Rots) | Heritage 50 WG | azoxystrobin | 11 | 0.4 oz | Apply in 2 - 4 gals water/1,000 sq ft every 10 - 14 days as a preventative. Use the 10 day interval during prolonged hot, wet weather. Do not make more than 2 sequential applications. |
| | Terrazole 35 WP | etridiazole | 14 | 2 - 4.5 oz | Apply to established turf in 5 gals water/1,000 sq ft every 5 - 10 days as a preventative. Water in immediately. |
| | fosetyl-AI (various trade names 80 WDG) | fosetyl-AI | 33 | 4 - 8 oz | Apply in 5 gals water/1,000 sq ft every 5 - 10 days at the first sign of disease and when conditions favor the disease. See label for tank-mixing suggestions. |
| | Fore Rainshield 80 W | mancozeb | M3 | 8 oz | Apply in 1 - 5 gals water/1,000 sq ft every 14 - 21 days as a preventative when hot, wet conditions persist. Use high rate and 14 day interval when disease is present. Allow foliage to dry before watering or mowing. |
| | Subdue MAXX 40 WP | mefenoxam | 4 | 0.5 - 1 fl oz | Apply to established turf every 10 - 21 days in 3 - 5 gals water/1,000 sq ft as a preventative during hot, wet weather. See label for tank mix information. |
| | Banol 66.5 L | propamocarb | 28 | 1.33 - 4 fl oz | Apply in 2 - 5 gals water/1,000 sq ft every 7 - 21 days as a preventative during hot, wet weather. |
| | Alude 6.27 SC | salts of phosphorus acid | 33 | 5 - 10 oz | Apply at 14 - 21 day intervals. |
| | Junction 61.1 DF | mancozeb + copper hydroxide | M3 + M1 | 2 - 4 oz | Begin at disease onset, then at 5 day intervals. |
| | Stellar 2.08 SC | fluopicolide + propamocarb | 43 + 28 | 1.2 fl oz | Apply when conditions favor disease development. |
| Leaf Rust Gray Leaf Spot (St. Augustinegrass, ryegrass, tall fescue) | Heritage 50 WG | azoxystrobin | 11 | 0.2 - 0.4 oz | Apply at first sign of disease and repeat every 2 - 4 weeks until conditions become less favorable. |
| | Compass 50 WG | trifloxystrobin | 11 | 0.15 - 0.25 oz | |
| | Banner MAXX 1.3 EC | propiconazole | 3 | 2 - 4 fl oz | Apply as above but on a 2 - 3 week schedule. |
| | Bayleton 50 WSP | triadimefon | 3 | 0.5 - 1 oz | Apply at first sign of disease, then at 14 day intervals. |
| | Torque 50 WDG | tebuconazole | 3 | 0.6 - 1.1 fl oz | See label. |
| | Insignia 20 WG | pyraclostrobin | 11 | 0.5 - 0.9 oz | Apply when conditions are favorable for disease. 14 - 28 day intervals. See label. |
| | Eagle 40 WSP | myclobutanil | 3 | 1.2 oz | See label. |

TURF DISEASES (Commercial) – continued

| Disease | Product | Active Ingredient | FRAC Code | Rate/1,000 sq ft | Comments |
|--|-----------------------|-------------------|-----------|------------------|--|
| Leaf Spots | Heritage 50 WG | azoxystrobin | 11 | 0.2 - 0.4 oz | Apply at first sign of disease and repeat every 2 - 4 weeks until conditions become less favorable. |
| | Compass 50 WG | trifloxystrobin | 11 | 0.15 - 0.25 oz | |
| | Insignia 20 WG | pyraclostrobin | 11 | 0.5 - 0.9 oz | |
| | Fore Rainshield 80 WP | mancozeb | M3 | 4 oz | Apply as above but on a 1 - 2 week schedule. |
| | Banner MAXX | propiconazole | 3 | 2 - 4 fl oz | Apply as above but on a 2 - 3 week schedule. |
| | Chipco 26019 50 WP | iprodione | 2 | 2 oz | Apply as above but on a 2 - 3 week schedule. Commercial use only. |
| | Eagle 40 WSP | myclobutanil | 3 | 0.6 oz | |
| Spring Dead Spot (bermuda only; provides suppression) | Heritage 50 WG | azoxystrobin | 11 | 0.4 oz | Make one application in early fall (two if disease history is very severe) in 2 - 4 gals water/1,000 sq ft. |
| | Eagle 40 WSP | myclobutanil | 3 | 1.2 oz | |
| | Disarm 480 SC | fluoxastrobin | 11 | 0.36 oz | Apply 1 - 2 months before dormancy. Irrigate 0.25 - 0.50 in. after application. |
| | ProPensity 1.3 ME | propiconazole | 3 | 4 oz | Use 1 - 3 applications beginning Sep/Oct. |
| | Torque 50 WDG | tebuconazole | 3 | 0.6 oz | For prevention. Apply in fall and spring. |
| Summer Patch | Heritage 50 WG | azoxystrobin | 11 | 0.4 oz | Apply two applications in the fall and two in early spring at 28 day intervals. Apply in 2 - 4 gal water/1,000 sq ft. |
| | Compass 50 WG | trifloxystrobin | 11 | 0.25 oz | |
| | Eagle 40 WSP | myclobutanil | 3 | 0.6 - 1.2 oz | |
| | Insignia 20 WG | pyraclostrobin | 11 | 0.5 - 0.9 oz | |
| Take-All Patch | Heritage 50 WG | azoxystrobin | 11 | 0.4 oz | Apply two applications in the fall and two in early spring at 28 day intervals. Apply in 2 - 4 gals water/1,000 sq ft. |
| | Eagle 40 WSP | myclobutanil | 3 | 1.2 oz | |
| | Insignia 20 WDG | pyraclostrobin | 11 | 0.9 oz | |
| | Disarm 480 SC | fluoxastrobin | 11 | 0.36 oz | Apply at 28 day intervals. |
| | Torque 50 WDG | tebuconazole | 3 | 0.6 oz | For prevention. Apply in fall and spring. |

TURF DISEASES (Commercial) – continued

| Disease | Product | Active Ingredient | FRAC Code | Rate/1,000 sq ft | Comments |
|--|---------------------------|----------------------------------|-----------|---|--|
| Yellow Patch (cool season brown patch) | Heritage 50 WG | azoxystrobin | 11 | 0.2 - 0.4 oz | Apply one application in late fall (two at 28 day intervals if severe disease history). |
| | Prostar 70 WP | flutolanil | 7 | 1.5 oz | Apply at first sign of disease and repeat as needed. |
| | Daconil 2787 4 F | chlorothalonil | M5 | 3 - 11 fl oz | Apply at first sign of disease and repeat as needed. Commercial use only |
| | Daconil 2787 90 WDG | chlorothalonil | M5 | 1.75 - 6.5 oz | Apply at first sign of disease and repeat as needed. Commercial use only. |
| | Daconil Ultrex 82.5 SDG | chlorothalonil | M5 | 1.8 - 7.4 oz | Apply at first sign of disease and repeat as needed. Commercial use only. |
| | Fore Rainshield 80 WP | mancozeb | M3 | 4 oz | Apply at first sign of disease and repeat as needed. |
| | Renown 5.16 SC | chlorothalonil + azoxystrobin | 11 + M5 | 2.5 - 4.5 oz | Apply at a 14 - 28 day interval. Commercial use only. |
| Nematodes | MultiGuard Protect 8.6 EC | furfural | | 0.126 - 0.184 gal (5.5 - 8 gal/A) | Apply up to 6 applications per year at 14 - 28 day intervals. Irrigate immediately after application with 1/4 - 1/2 acre inch water using overhead sprinklers. |
| | Indemnify 3.34 SC | fluopyram | 7 | 0.195 - 0.39 fl oz (8.49 - 16.98 oz/A) | Do not apply more than 17.1 fl oz/A per year. Irrigate to depth of the root zone. Minimum time between applications is 14 days. |
| | Nimitz Pro G 1.5 G | fluensulfone | | 60 - 120 lbs/A | Do not apply more than 240 lbs of product per acre per calendar year. |

CAUTION: Chlorothalonil, Iprodione, Vinclozolin and PCNB are prohibited on home lawns (turf).