Brown Patch

**Symptoms:**
- Stems with light green to olive-green color and 0.5" to 1.0" in diameter.
- Stems of infected areas show water-soaked lesions that dry to a brown color.

**Conditions Favoring Disease:**
- Cool moist conditions are ideal for disease development.
- Leaves should be kept dry during this time.

**Recommended Fungicide:**
- Headway G fungicide

Fairy Ring

**Symptoms:**
- Headway G fungicide

**Recommended Fungicide:**
- Headway G fungicide

**Conditions Favoring Disease:**
- Cool moist conditions are ideal for disease development.
- Leaves should be kept dry during this time.

**Recommended Fungicide:**
- Headway G fungicide

**Additional Options:**
- Heritage G fungicide

**Lawn Disease Identification Guide**

**Lawn Disease**
- **Summer Patch**
  - **Symptoms:**
    - Foliar lesions are white-to-tan with a grayish-brown margin that develops during very humid conditions.
  - **Conditions Favoring Disease:**
    - Dark, wet soil conditions that persist for hours after mowing.
  - **Recommended Fungicide:**
    - Headway G fungicide
  - **Additional Options:**
    - Heritage G fungicide

**Leaf Spot/Melting-Out**

**Symptoms:**
- Leaf spots are circular and tan to gray lesions.
- Symptoms may fade.

**Conditions Favoring Disease:**
- Frequent periods of leaf wetness.
- Prolonged periods of leaf wetness.

**Recommended Fungicide:**
- Headway G fungicide

**Garden Quality**

### Additional Options:
- Heritage G fungicide

**Tools to Help You Grow**

- **GreenCastOnline.com**
  - **Tools to Help You Grow**
    - **Dallisgrass. Source:** Syngenta, 2018.
    - **Over-seeding**
      - **Weeds like creeping bentgrass and nimblewill can help. We use Tenacity® herbicide to keep broad-leaf weeds like crabgrass and grassy weeds like browntop in check.**
    - **Other instructions:**
      - **Do not mow your lawn until after the new seed has germinated.**
      - **Do not mow your lawn for at least 2 days.**
      - **We have over-seeded your lawn today.**
      - **Tenacity was applied on ____________________**

**Leaf Spot/Pink Snow Mold**

**Symptoms:**
- Stems with 10 hours a day of foliar wetness for several consecutive days.
- Areas with 10 hours a day of foliar wetness.
- Prolonged periods of leaf wetness.

**Conditions Favoring Disease:**
- Frequent periods of leaf wetness.
- Prolonged periods of leaf wetness.

**Recommended Fungicide:**
- Headway G fungicide

**Additional Options:**
- Heritage G fungicide

**Leaf Spot/Elliptical Spots**

**Symptoms:**
- Dark, wet soil conditions that persist for hours after mowing.
- Prolonged periods of leaf wetness.

**Conditions Favoring Disease:**
- Frequent periods of leaf wetness.
- Prolonged periods of leaf wetness.

**Recommended Fungicide:**
- Headway G fungicide

**Additional Options:**
- Heritage G fungicide

**Tools to Help You Grow**

- **GreenCastOnline.com**
  - **Tools to Help You Grow**
    - **Dallisgrass. Source:** Syngenta, 2018.
    - **Over-seeding**
      - **Weeds like creeping bentgrass and nimblewill can help. We use Tenacity® herbicide to keep broad-leaf weeds like crabgrass and grassy weeds like browntop in check.**
    - **Other instructions:**
      - **Do not mow your lawn until after the new seed has germinated.**
      - **Do not mow your lawn for at least 2 days.**
      - **We have over-seeded your lawn today.**
      - **Tenacity was applied on ____________________**

**Leaf Spot/Pink Snow Mold**

**Symptoms:**
- Foliar lesions are white-to-tan with a grayish-brown margin that develops during very humid conditions.
- Symptoms may fade.

**Conditions Favoring Disease:**
- Dark, wet soil conditions that persist for hours after mowing.
- Prolonged periods of leaf wetness.

**Recommended Fungicide:**
- Headway G fungicide

**Additional Options:**
- Heritage G fungicide

**Tools to Help You Grow**

- **GreenCastOnline.com**
  - **Tools to Help You Grow**
    - **Dallisgrass. Source:** Syngenta, 2018.
    - **Over-seeding**
      - **Weeds like creeping bentgrass and nimblewill can help. We use Tenacity® herbicide to keep broad-leaf weeds like crabgrass and grassy weeds like browntop in check.**
    - **Other instructions:**
      - **Do not mow your lawn until after the new seed has germinated.**
      - **Do not mow your lawn for at least 2 days.**
      - **We have over-seeded your lawn today.**
      - **Tenacity was applied on ____________________**
Syngenta offers several digital tools to put you in control of turf growth alerts, dollar spot alerts, powdery mildew, and other turf issues.

**Growing Degree Day Alerts**
- Syngenta’s digital tools can help predict the best time to apply nutrients and pesticides.
- Use the Growing Degree Day Calculator to determine the optimal time to plant, irrigate, and apply chemicals.

**Digital Tools Put You in Control**
- **Heritage G fungicide** for turf growth alerts.
- **Headway G fungicide** for dollar spot alerts.
- **Laetisaria fuciformis** for powdery mildew.
- **Puccinia graminis** for rusts: crown, leaf, stem and stripe.

**Tips to Help Your Customers**
- Minimize the amount of shade. Increase soil drainage. Reduce thatch by vertical cutting. Irrigate turf deeply and as infrequently as possible. Increase the height of cut and mow at regular intervals. Improve soil drainage. Reduce thatch by vertical cutting. Core aero. Lightly fertilize turf in early spring to encourage new growth.

**Learn more at:**
- [GreenCastOnline.com/LawnBestPractices](https://GreenCastOnline.com/LawnBestPractices)
- [GreenCastOnline.com/SmallPacks](https://GreenCastOnline.com/SmallPacks)
- [GreenCastOnline.com/LawnBestPractices/HeritageGfungicide](https://GreenCastOnline.com/LawnBestPractices/HeritageGfungicide)
- [GreenCastOnline.com/LawnBestPractices/HeadwayGfungicide](https://GreenCastOnline.com/LawnBestPractices/HeadwayGfungicide)
- [GreenCastOnline.com/LawnBestPractices/Laetisariafungicide](https://GreenCastOnline.com/LawnBestPractices/Laetisariafungicide)
- [GreenCastOnline.com/LawnBestPractices/Pucciniafungicide](https://GreenCastOnline.com/LawnBestPractices/Pucciniafungicide)

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**Additional Options:**
- **Recommended Fungicide:** Heritage G fungicide
- **Additional Options:** Heritage G fungicide
- **Recommended Fungicide:** Headway G fungicide
- **Additional Options:** Heritage G fungicide
- **Recommended Fungicide:** Heritage G fungicide
- **Additional Options:** Heritage G fungicide

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**Small Packs Solutions**
- Protect turf from diseases like leaf spot, brown patch, gray leaf spot, and more for up to 28 days.
- Can be used with Velista for exceptional summer patch control.

**Learn more at:**
- [GreenCastOnline.com/SmallPacks](https://GreenCastOnline.com/SmallPacks)
- [GreenCastOnline.com/SmallPacks/HeritageGfungicide](https://GreenCastOnline.com/SmallPacks/HeritageGfungicide)
- [GreenCastOnline.com/SmallPacks/HeadwayGfungicide](https://GreenCastOnline.com/SmallPacks/HeadwayGfungicide)
- [GreenCastOnline.com/SmallPacks/Laetisariafungicide](https://GreenCastOnline.com/SmallPacks/Laetisariafungicide)
- [GreenCastOnline.com/SmallPacks/Pucciniafungicide](https://GreenCastOnline.com/SmallPacks/Pucciniafungicide)

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**Learn more:**
- [To learn more visit GreenCastOnline.com/LawnBestPractices](https://GreenCastOnline.com/LawnBestPractices)
- [To learn more visit GreenCastOnline.com/SmallPacks](https://GreenCastOnline.com/SmallPacks)
- [To learn more visit GreenCastOnline.com/LawnBestPractices/Velista](https://GreenCastOnline.com/LawnBestPractices/Velista)
- [To learn more visit GreenCastOnline.com/LawnBestPractices/SubdueMaxxfungicide](https://GreenCastOnline.com/LawnBestPractices/SubdueMaxxfungicide)

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**Digital Tools Put You Ahead of Pests**
- Syngenta offers several digital tools to help you identify your target pests and stay ahead of their development.

**Dollar Spot Alerts**
- **Recommended Fungicide:** Headway G fungicide
- **Additional Options:** Heritage G fungicide

**Soil Temperature Alerts**
- **Conditions Favoring Disease:**
  - More sun in transitional periods or on sunny days, especially during the transition from winter to summer.

**Growing Degree Day Alerts**
- **Conditions Favoring Disease:**
  - High humidity and low temperatures. Leaf spot is more common in areas where temperatures are high during the day and low at night.

**Turf Growth Alerts**
- **Conditions Favoring Disease:**
  - Low light and high humidity. Leaf spot is more common in areas where light levels are low and humidity is high.

**Powdery Mildew**
- **Conditions Favoring Disease:**
  - Severe infections occur on slow-growing turf, particularly in areas that are high in nitrogen. Turfgrass that are high in nitrogen during the spring and summer are more susceptible to powdery mildew.

**Additional Options:**
- **Recommended Fungicide:** Heritage G fungicide

**Red Thread and Pink Patch**
- **Symptoms:**
  - Severe rust infections occur on slow-growing turf, particularly in areas that are high in nitrogen. Turfgrass that are high in nitrogen during the spring and summer are more susceptible to powdery mildew.

**Rusts: Crown, Leaf, Stem and Stripe**
- **Symptoms:**
  - Rusts are caused by fungi that infect turf grass and cause disease. Rusts usually appear as small, red or brown spots on the leaves, stems, and blades of grass. The spots are usually oval or circular in shape and may be scattered or clustered together.

**Additional Options:**
- **Recommended Fungicide:** Heritage G fungicide

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**Dollar Spot**
- **Conditions Favoring Disease:**
  - Areas that experience more than 10 hours a day of foliar wetness for several consecutive days. Areas with low air circulation as well as in locations that are high in salinity or nitrogen.

**Additional Options:**
- **Recommended Fungicide:** Headway G fungicide

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**Red thread—Laesovia/Aecidium**
- **Symptoms:**
  - Red thread—Laesovia/Aecidium is a fungal disease that infects turf grass and causes leaf spot. The disease usually appears as small, brown spots on the leaves of the grass. The spots may be scattered or clustered together. The leaf spot may be accompanied by a characteristic powdery appearance.

**Additional Options:**
- **Recommended Fungicide:** Heritage G fungicide

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**Blasts**
- **Symptoms:**
  - Leaf blight—Pythium blight is a fungal disease that infects turf grass and causes leaf spot. The disease usually appears as small, brown spots on the leaves of the grass. The spots may be scattered or clustered together. The leaf spot may be accompanied by a characteristic powdery appearance.

**Additional Options:**
- **Recommended Fungicide:** Heritage G fungicide

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**Fungi**
- **Symptoms:**
  - Necrotic Ring Spot—Ophiosphaerella korrae is a fungal disease that infects turf grass and causes ring spot. The disease usually appears as small, brown spots on the leaves of the grass. The spots may be scattered or clustered together. The ring spot may be accompanied by a characteristic powdery appearance.

**Additional Options:**
- **Recommended Fungicide:** Heritage G fungicide

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**Diseases**
- **Symptoms:**
  - Dollar Spot—Pythium aphanidermatum is a fungal disease that infects turf grass and causes leaf spot. The disease usually appears as small, brown spots on the leaves of the grass. The spots may be scattered or clustered together. The leaf spot may be accompanied by a characteristic powdery appearance.

**Additional Options:**
- **Recommended Fungicide:** Heritage G fungicide

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**Powdery Mildew—Erysiphe graminis**
- **Symptoms:**
  - Powdery Mildew—Erysiphe graminis is a fungal disease that infects turf grass and causes powdery mildew. The disease usually appears as a white, powdery mass of fungal spores on the surface of the leaves. The spores are usually spread by the wind and may be scattered or clustered together. The powdery mildew may be accompanied by a characteristic powdery appearance.

**Additional Options:**
- **Recommended Fungicide:** Heritage G fungicide

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**Red Thread**
- **Symptoms:**
  - Red Thread—Laesovia/Aecidium is a fungal disease that infects turf grass and causes leaf spot. The disease usually appears as small, brown spots on the leaves of the grass. The spots may be scattered or clustered together. The leaf spot may be accompanied by a characteristic powdery appearance.

**Additional Options:**
- **Recommended Fungicide:** Heritage G fungicide

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**Rusts**
- **Symptoms:**
  - Rusts—Puccinia coronata is a fungal disease that infects turf grass and causes rust. The disease usually appears as small, brown spots on the leaves of the grass. The spots may be scattered or clustered together. The rust may be accompanied by a characteristic powdery appearance.

**Additional Options:**
- **Recommended Fungicide:** Heritage G fungicide

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**Blasts**
- **Symptoms:**
  - Blast—Puccinia coronata is a fungal disease that infects turf grass and causes rust. The disease usually appears as small, brown spots on the leaves of the grass. The spots may be scattered or clustered together. The rust may be accompanied by a characteristic powdery appearance.

**Additional Options:**
- **Recommended Fungicide:** Heritage G fungicide

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**Syngenta Lawn Fungicide Portfolio**
- **Heritage G fungicide**
- **Headway G fungicide**
- **Laetisaria fuciformis**
- **Puccinia graminis**
- **SubdueMaxx fungicide**

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- [GreenCastOnline.com/SmallPacks](https://GreenCastOnline.com/SmallPacks)

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