

Bermudagrass Mites

Overview

Bermudagrass mites, *Eriophyes cynodoniensis*, can be a serious problem on golf courses, athletic fields, sod farms, and home lawns across the southern United States. All bermudagrass cultivars can be affected with the prevalence of damage having increased in recent years, likely due to changes in management practices including the use of more narrow-spectrum products.

Life Cycle

- Adult mites infest and lay eggs under the leaf sheath with entire life cycle taking 5-14 days.
- They spend most of life cycle protected inside the leaf sheath with up to 200 individuals within this region (Figure 1).
- Mites reproduce numerous times per year generating large populations, however, damage is most pronounced in spring as bermudagrass comes out of dormancy.

Symptoms

- Mites are practically invisible to the naked eye, so the presence of witches' broom (stunting of terminals) is often the best symptom (Figure 2) for identifying a potential mite infestation.
- During heavy infestations, turfgrass stems and stolons may die, resulting in thin or dead areas.
- Witches' broom symptoms are most noticeable around perimeter of dead areas.

Figure 1. Bermudagrass mites infesting beneath leaf sheath. Photo credit: Lyle Buss, UF/IFAS



Figure 2. Undamaged bermudagrass (left) vs. infected bermudagrass (right).
Photo credit: M. Williamson, Clemson University



Cultural Management Strategies

- Sound cultural practices like irrigation, fertilization, and mowing will promote healthy turf and help reduce the risk of mite damage but can't offset symptoms of severe infestations.
- Mowing height less than 1", especially in athletic fields or lawns along with collection/removal of clippings, may help reduce populations.

Miticide/Insecticide Solutions

- Regardless of product, applications need to start in early-spring and be repeated every 14 days to keep mite populations in check.
- For optimal control, university researchers recommend a programmatic approach with abamectin (Divasi™) and a product containing spirotetramat.
- Include a surfactant with each application to improve miticide penetration into the leaf sheaths.