Turfgrass Summer Complaint
Lawn going yellow? Consider the possibilities!

Doug Caldwell

Left: St. Augustinegrass has been going through a little more of the summer stress than usual. Note the bright yellow blades, a symptom of distress, mixed in with apparently healthy green blades.

Right: Yellowing may be caused by insects, disease or nutrient deficiencies. In this case note the fungal infection pads (black spots) or hyphopodia (“puzzle-shaped” structures, see inset close-up) a sign of TARR on the stolons, of take-all root rot disease. Photos by UF/IFAS Phil Harmon.

Have you been seeing a few streaks of yellow turf in your St. Augustinegrass lawn? Then the streaks grow into patches and some thinning? I am seeing a lot of turfgrass under stress with these symptoms. It is pretty common, maybe in 20% of the lawns or so. And yikes, especially in MY front lawn! However, my yard has two large oak trees that are casting a significant amount of shade which is contributing to a less than ideal environment for the grass to thrive in a dense and desirable fashion. We are going to see more of this as our oak tree canopies grow.

But the issue I am talking about is also happening in open sunny lawns. It happens during the summer when we are experiencing fast turf growth and lots of rain. The food reservoir (nutrients) in the soil “pantry” or root zone gets depleted by the fast growth and the daily or frequent showers. I've started calling the random yellowing "summer complaint". It seems to come and go, that is, it greens up again when temperatures are cooler and there is less rainfall and we can go back to mowing one time per week instead of twice.

BUT! People would like to know what is going on. So the first rule in diagnosing and treating a problem is to make sure you know what the problem is, and if there is one, identify the pest first! A lot of pesticides (known as cocktail mixes in the trade) are getting dumped on lawns as a desperate remedy. This shotgun approach isn’t so good for the environment or the good insects and spiders in your turf environment. Plus, it is money out the window if isn’t solving the problem.
So let us narrow down the possibilities. Your lawn could be plagued by insects, diseases and micronutrient problems. You may have a little bit of everything, but usually only one of these problems is the major culprit. This is a tough crime scenario, but hang in there, let’s approach this methodically!

The easiest to rule out are the insect perpetrators. For St. Augustinegrass, these include: tropical sod webworm, chinch bugs, or sugar cane grubs. Insects are easy to diagnose because you can see them unlike pathogens (in general). So you may need to do a soap drench to find out if you have chinch bugs or webworm caterpillars (two TB of liquid detergent in two gallons and apply with a watering can to a three foot by three foot area). You may need to get familiar with what the bad bugs look like. Their “faces” and “MO” or habits are posted at:


To find grubs, you will have to do some digging down to a two inch depth and usually one or two grubs per square foot are not cause for concern. See: http://edis.ifas.ufl.edu/lh037 . If you tug on the off-color turf and it pulls up easily, you could have grubs or you could have take-all root rot disease.

The diseases this time of year include gray leaf spot and take-all root rot (TARR). The leaf spot is usually found in every lawn and unless it is new sod it is usually considered no big deal. But TARR is a BIG deal. And as UF Professor Phil Harmon stated in a recent e-mail, “If the (yellowing) distribution is uniform, I would suspect nutritional issues. Take-all root rot could be a factor also; I would suspect a blotchy random distribution with more damage in the low and stressed areas. To find out, look at the stolons with a hand lens or dissecting scope where the yellow shoots attach. Look for mycelium and the black, puzzle-piece-shaped hyphopodia of Gaeumannomyces graminis var. graminis or send a few samples to the plant disease clinic and we will do it for you. A fungicide available to professionals called Armada is one of the preferred choices. For more see, http://edis.ifas.ufl.edu/lh079 also please use this form to send samples to the UFIFAS Plant Disease Clinic in Gainesville, http://tinyurl.com/2vlpprb . It costs $40 for each plant disease analysis.

Several professionals reported that applying nutrient blends helped. A combination product with Fe (iron), Mn (manganese), Mg (magnesium) and K (potassium) seems the best approach until we understand what is happening better. Look for granular products with a 0-0-14 (or close) formula plus the Fe, Mn and Mg should be in sulfate or chelate forms. Do not expect much with polysucrate or oxide sources of Fe or Mn. Iron sulfate and manganese sulfate works well as long as you keep it on the lawn and off of walls and concrete (it stains).

So, this is one of those complicated landscape situations where you may want to seek out the opinions of two or three professional landscapers for their services or perhaps consider some alternative, walkable groundcovers. Stay tuned for more on that!

Doug Caldwell, Ph.D., is the commercial landscape horticulture extension agent and landscape entomologist with the University of Florida Collier County Extension Service. The Cooperative Extension Service is an off-campus branch of the University of Florida, Institute of the Food and Agricultural Sciences and a department of the Public Services Division of Collier County government. E-mail dougbug@ufl.edu; phone, 353-4244 x203. Extension programs are open to all persons without regard to race, color, creed, sex, handicap or national origin. For updates on Southwest Florida Horticulture visit: http://collier.ifas.ufl.edu