

# **It's a Weed.... It's a Forage.... It's CRABGRASS?! From Villain to Superhero: A Crabgrass Story**

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As temperatures begin to warm up across the state, our warm season pastures are beginning to green up and many are in the process of determining what forages will be utilized for the next few months. The pastures throughout Georgia are dominated by warm season perennial forages bermudagrass or bahiagrass, that are relied on heavily for grazing throughout the summer. Additionally, there are pastures that are dedicated solely for warm season annual forage production to improve forage quality and enhance animal performance beyond what the perennial grass pastures typically provide. With the continual rise in costs of our cattle operations endured over recent months, producers are looking for ways to effectively cut costs while still being able to provide quality nutrition in the summer months.

What if there was an excellent warm season annual forage that is often overlooked but grows all around us? An annual that could be utilized with the current perennial forages to improve the nutritive value of the forage base. A grass that could be grown in monoculture or polyculture in prepared warm season annual pastures. A forage that requires lower input in establishment and growth compared to the other larger warm season annual grass options. A plant that in any other instance or location outside of our pastures would be considered a nuisance, a weed, a villainous unwanted species that's hard to control and easy to grow. This superhero forage that can help us through the summer grazing season is Crabgrass!

Crabgrass has gotten a bad rap over the years; however, this grass has great potential and should be considered for inclusion into our forage programs. Crabgrass can be found volunteering throughout most of Georgia, it is adaptable to many soil types and environments, establishes relatively easily, is highly palatable to cattle, somewhat drought tolerant, and has a prolific reseeding ability. Crabgrass has also shown to be an excellent stored forage option to feed later in the year, although, it serves better in a baleage production system because of the high leaf area and moisture retention thus it requires a longer dry down period for dry hay when compared to bermudagrass.

While crabgrass commonly volunteers in our pastures and hayfields without much cultivation, there are improved varieties available on the market that have enhanced yield and quality in comparison. Recent work at UGA has evaluated MOJO crabgrass (Barenbrug USA) in both grazing and baleage systems. One study conducted at the UGA Alapaha Range Cattle Research Station compared the performance of cow/calf pairs continuously grazing bahiagrass monoculture pastures to bahiagrass pastures that had been interseeded with improved crabgrass. This work found that by including crabgrass into bahiagrass dominated pastures there was an increase in the nutritive value of the forage base for both CP and TDN (13.5% CP and 55.2% TDN) when compared to bahiagrass monoculture. Additionally, calf performance when grazing crabgrass-bahiagrass mixtures averaged 2.1-2.5 lbs/hd/day over a three-year grazing evaluation.

Crabgrass has a nutritive value that is very competitive with other warm season annual grasses, ranging from 11% - 15% CP and 58% - 63% TDN, depending on time of year you are utilizing the forage (Southern Forages 5th Edition). The summer of 2021 was extremely wet for most of Georgia, wreaking havoc on dry hay production, and even providing challenges for baleage production. During this time a preliminary study occurred at the UGA-Tifton Animal Science Farm in which Mojo crabgrass was grown in monoculture and harvested for baleage twice across the growing season. Nutritive value of the baleage produced averaged 11.9% CP and 64.9% TDN.

Another study conducted by Harmon et al., 2017, at the University of Georgia Eatonton Beef Research Unit, evaluated warm season annual forages in a forage-finishing beef system. This study compared stocker steers rotationally grazing brown-midrib sorghum x sudangrass, pearl millet, and a mixture of crabgrass and pearl millet. The mixture of crabgrass and pearl millet produced an average 19% CP and 58% TDN, and stocker cattle had an ADG of 2.1 lbs/hd/day. They also observed that in the mixture the crabgrass filled in the bare ground between the pearl millet plants, shading out unwanted weed species, while serving as a complementary forage to the pearl millet.

Additional on-going research at UGA in collaboration with UT is focusing on the inclusion of crabgrass in alfalfa-bermudagrass mixtures when alfalfa is used as a pasture renovation tool, and how it contributes to the nutritive value and stand performance/persistence of the pasture. Annual grasses like crabgrass are one of the most common “weeds” occurring in alfalfa-grass mixtures throughout the Southeast and the ability to effectively control this “villain” via pre-emergent chemical applications may not be a viable option for many producers considering alfalfa inclusion in pastures for grazing. Additionally, while annual weed control is a key component in pure alfalfa and alfalfa mixed hay production systems, is it necessary to implement the same control practices in a pasture setting? Therefore, by allowing the crabgrass to remain in the mixture we can determine if it is in fact a villain or a superhero in relation to pasture performance and nutritional value.

As you begin thinking about your pastures and considering what you will graze this summer, be sure to take a minute to evaluate your stands and determine if you might have an opportunity for a common villain to become a pasture superhero! Consider crabgrass as the beneficial forage it is, improving the nutritional value of your pasture, and helping meet the needs of your cattle operation.

For more information or questions about crabgrass establishment and management contact your local University of Georgia Cooperative Extension office by dialing 1-800-ASK-UGA1.

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