

# Update on Some New Forages

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**N**ew forage plants always attract attention at Experiment Station Field Days. One of our tasks is to provide information on performance and adaptation of these forages with the dependable old timers that have been with us for a long time. High yield is desirable but other factors are often equally or more important such as seasonal production, forage quality, ease of getting stands, disease resistance, grazing tolerance, and need for special management to maintain stands. The results presented here are from trials still in progress, not yet complete, but may be useful to persons wishing to try these forages.

## Matua prairiegrass (brome)

This new cool season perennial grass that resembles rescuegrass was developed in New Zealand and is being widely promoted. Matua has excellent seedling vigor and gets established quickly. It is a very leafy, high-quality grass and animals like it. Winter production has been superior to tall fescue but not as good as wheat or rye. It makes most of its production in late winter and spring, declining in summer but generally better than tall fescue. However, autumn growth has been poorer than tall fescue. Drought tolerance is good. After two years in tests at three locations, stands of Matua have thinned while tall fescue stands continue to thicken under clipping. In south Georgia, Matua will definitely be an annual that should naturally reseed if grazed to permit some seed production in late spring. We have seen some leafspot disease on it. In Tennessee, they have observed serious infestations of mildew disease on this grass.

Seed are planted in September at 25-30 lb/acre not deeper than 1/4 inch. High fertility is required for this grass. It will not tolerate close continuous grazing and should be rotationally grazed to maintain stands. Seed are available.

## Colt timothy

Timothy is not recommended in

Georgia as it is a short lived cool season perennial grass. Requests come for information on planting timothy to be used for pasture and hay as many horse owners desire this grass. Our tests with the new variety 'Colt' indicate that it will not persist from Athens southward. Even at Calhoun and Blairsville, summer and autumn growth was poor and stands thinned after one year. Production was concentrated during late spring and early summer. It is a shallow-rooted grass and does not tolerate heat or close grazing.

## Lincoln smooth bromegrass

This cool season perennial grass is adapted to the northern USA and in our trials it performed well only at Blairsville in the mountains.

## Puna chicory

This perennial broadleafed plant is neither a grass or a legume but a forb. It does not fix nitrogen. It is a leafy, vigorous plant with a deep tap root which is very tolerant of drought and acid soils. It grows well in spring but also continues to grow during summer, producing more than tall fescue during hot weather. 'Puna' is a variety of chicory (similar to salad endive or the chicory used in New Orleans coffee) that was developed in New Zealand. The nutritive quality is high, with excellent digestibility, high protein, and high in minerals. Cattle like chicory. When planted on prepared land, the dense leafy growth generally shades out other weed and grass competition. In a new planting in bermudagrass sod, chicory has resulted in thinning of the bermudagrass by shading. Plant appearance of Puna chicory can fool you as dry forage yields are less than you think - water content is high; dry matter content of Puna was only 9% as compared to about 20-25% for grasses in our trials.

Planted in September, seedling vigor was excellent and it provided some forage by November. Information from other states indicate that Puna requires

high fertility, well drained soil, and should be rotationally grazed to maintain productivity and stands. Grazing at a height of 10-12 inches prevents development of stems and maintains leafiness. We do not know how long it will persist in Georgia. Plant Puna chicory at 4 lb/acre in September-October. Seed are available.

## Playing it safe

Many people like to try something new and that is fine as long as the base pastures and hay fields are made up of dependable forage plants. In south Georgia, this means bahiagrass, bermudagrass for summer, and rye, wheat, and annual ryegrass for winter. In northern Georgia, the basic grass will be tall fescue supplemented with some bermudagrass. In northern Georgia, endophyte-free tall fescue varieties such as Penngrazer, Stargrazer, and Martin will provide high-quality grazing for good animal performance. It is true that endophyte-free tall fescue will not tolerate close continuous grazing all summer but simply allowing a stubble height of 3 to 4 inches or resting the pasture during summer has been demonstrated to maintain stands and autumn productivity. Even the more erect-growing, winter-productive 'AU Triumph variety can be maintained with this type grazing management.

Our results indicate that good summer management of endophyte-free tall fescue can result in a dependable system in northern Georgia. It's also cheaper and safer than struggling with trying to grow some new plants that may offer new problems. In southern Georgia, it's going to be hard to beat rye, wheat, or annual ryegrass for high-quality cool season pasture. Another option for low-cost cow-calf pasture is no-till seeding GA-5 tall fescue into bermudagrass or bahiagrass sod. The endophyte-infected tall fescue is tough and will provide winter grazing with much of the toxicity in the diet being diluted by the warm season grass residue.