



Grazier

► by Sue Gordon

Consider crabgrass a forage

Most often considered a weed, crabgrass may deserve more respect as a valuable summer forage for cattle.

“Crabgrass is among the highest quality warm-season grasses we can produce in mid-to late summer,” says R.L. Dalrymple, who spent nearly 25 years researching this species as a forage specialist with the Samuel Roberts Noble Foundation in Ardmore, Okla.

Potential

“In a rotational grazing system, Southern producers can graze single-crop crabgrass from May to early fall,” Dalrymple says. That’s a critical grazing period because animal performance can often decrease in late summer due to a lack of forage quality provided by other grasses.

Crabgrass fills the niche because of its palatability, high quality and excellent digestibility. With fertilizer applied early in the season, crabgrass protein rates are typically 20%-30% in the spring, 12%-18% in the summer and 10%-12% by fall. Yields range from 3-5 tons per acre, making it a good hay crop as well. Digestibility is also high, ranging from 60% to more than 70%.

University of Missouri forage specialist Jim Gerrish says crabgrass is taking root in his region as a forage filler from July to September. “Many producers who practice management intensive grazing are using crabgrass and are enthusiastic about it,” he says.

He reports that several dairy operations also utilize the forage. “If it’s a good enough forage for a dairy cow, it’s definitely good forage for a beef cow,” he says.

Crabgrass can also be a popular forage in stocker operations where cattle weight gains can average from 1.5 to nearly 3 pounds (lb.) per day.

Popularity growing

Based on Dalrymple’s research, Red River crabgrass was introduced in 1988. Today it remains the only commercially available variety of crabgrass. When it was first developed, Dalrymple had hopes that it could fill the summer forage niche

throughout the Southeast, Texas and Oklahoma.

He admits producers were skeptical 10-15 years ago because of crabgrass’s reputation as a weed. But now, more producers are fitting it into their grazing programs, and its use is even moving north, he says.

“Initially, the range of use was thought to be the Oklahoma-Kansas line and over to the south and east,” Dalrymple says.

“But, we’ve found producers are utilizing Red River crabgrass in northeastern Colorado, Nebraska, Iowa and on over to Ohio, Indiana, Virginia and Pennsylvania.”

He reports that recent research in Virginia showed single-crop crabgrass production at 5,000-8,000 lb. per acre. In clipping trials in Missouri, crabgrass posted yields of 6,000 lb. per acre.

The primary difference in growing crabgrass in these Northern regions will be season of use, Dalrymple says. “Graziers need to keep in mind that in the North the grazing season on crabgrass may be July to early fall. Whereas a crabgrass pasture in Florida could potentially be grazed in rotation from late April through fall.”

“No matter the area, crabgrass still produces at a time when high-quality forage is needed,” he says. “The extra sunlight in the Northern region still gives very good production on crabgrass stands.” He reports that 3 tons per acre on good soil with proper management isn’t unusual.

Multiple uses

Crabgrass can be managed as a single

crop, it can be double-cropped with small grains or annual ryegrass, or it can be overseeded into established grass stands.

Dalrymple prefers to see crabgrass grown in a pure stand because it can be better managed and the quality of the forage can best be utilized. “Crabgrass will typically produce more forage over a longer period of time when grown as a single crop,” he says.

But he recognizes that it can work well in a double crop to carry grazing from winter through the following spring for stockers; or if added to established perennial pastures, it can boost available forage quality in those grass mixes.

Arkansas researchers also say they hope that overseeding crabgrass into endophyte-infected fescue mixes will help reduce the effects of endophyte toxicity, which can cause reduced fertility rates among cows and lower weaning weights in calves.

University of Arkansas animal scientist Ken Coffey is in the first year of a five-year study to test that theory, and says, “We believe including crabgrass in the pasture will help animal performance during the summertime because it gives the cows something else to eat and should reduce the intake of endophyte-infected fescue.”

When grazing crabgrass in a mixed pasture stand, Missouri’s Gerrish advises keeping the cool-season forages grazed down through April and May, so the crabgrass can pop out in July.

A final method for grazing crabgrass is as stockpiled forage during the fall and winter.

“It’s the one summer annual weedy grass [that] cattle will still eat well in the wintertime, because it maintains its nutritional quality,” Gerrish says. “It’s definitely adequate quality forage for a dry pregnant cow during that time.”

Gerrish adds that stockpiling crabgrass works best if it is in a mixture with a cool-season, perennial grass. “The perennial grass helps support the crabgrass and keeps it from matting under snow or ice,” he says. “The higher protein of the cool-season grass also helps the nutritional balance of the mixture.”

If using this option, Gerrish suggests stockpiling crabgrass stands from August to early November.

Other management tips

- The recommended seeding rate for crabgrass is 3 lb. of pure live seed per acre, and seed should not be planted more than ½-inch (in.) deep. Crabgrass produces best on well-drained sandy or silty loam soils.
- If seeding on a clean seedbed, crabgrass can be planted in April, May or June to produce a good stand for summer grazing. When overseeded into small grains or

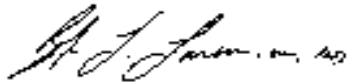
► Above: Crabgrass is a warm-season annual that reproduces easily with volunteer seed. Illustration courtesy Texas A&M University-Bioinformatics Working Group Web site.

CONTINUED ON PAGE 137

▣ VET CALL

mud or erosion will also result in reduced feed intake. To prevent this problem, tanks and waterers should be placed on concrete slabs that extend at least 10 ft. in each direction. Ponds should be well-maintained to allow adequate access, or they should be fenced off and serve as a reservoir for a float-controlled automatic water source with a concrete slab or rock base.

Poor accessibility to water, inadequate quantities of water available or poor water quality can all cause health problems, reduced feed intake and poor performance. Ensuring that all pens and pastures have adequate water supplies and delivery is an important first step when designing the herd's nutrition program.



E-MAIL: larsnr@missouri.edu

▣ GRAZIER

CONTINUED FROM PAGE 132

established pasture, seeding can be done in February, March or April.

- ▶ Grazing can begin when crabgrass is 4-6 in. tall. Dalrymple recommends that crabgrass be used in a rotational grazing system. This allows for more regrowth and more overall forage to be produced than under continuous grazing, he reports.
- ▶ Crabgrass won't grow in low-fertility soil, Dalrymple cautions. Thus, applications of nitrogen fertilizer or manure will need to be part of the overall management.
- ▶ Most important, crabgrass is an annual; but if managed properly it won't need to be reseeded every year.

To help generate repeated annual crabgrass growth, fields should be left ungrazed or unharvested long enough each year to produce volunteer seed for the following year. Hence, livestock should be removed from crabgrass pastures three to six weeks before the end of active growth to allow sufficient seed production for next year's crop.

Dalrymple advises light tillage in early winter or spring to promote a better volunteer stand being established each year. Doing so can double or triple forage yields the following grazing season.

For more information on Red River crabgrass, contact Dalrymple's private seed company, Elstel Farm & Seeds, Ardmore, Okla., at 1-800-858-7333.

