

## FORAGE

# Wheat alternatives expand winter pasture choices

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**The vast** majority of the winter pasture in the Southern Great Plains is wheat. There are many reasons for this, including culture, the opportunity

to harvest and sell grain, and government and insurance programs. However, there are numerous other cool-season annual species that can also be used, alone or in mixtures, for winter pasture forage grazing.

Rye is popular on sandy soils or for overseeding into bermudagrass. Rye germinates easily and can be drilled or broadcast-planted at seeding rates and dates similar to wheat. Rye produces forage earlier in the fall but also matures earlier in the spring compared to wheat. Rye will continue to grow at temperatures as low as 40 degrees Fahrenheit, while wheat growth typically ceases at 45 degrees Fahrenheit. Rye forage quality is similar to wheat, but palatability may be slightly lower. Rye tends to reseed if given the opportunity to set seed.

Oats will out-produce wheat on heavier, wetter soils. Oats can be broadcast but will do better if they are drilled. The bushel weight of oats is only 32 pounds per bushel. Planting rate is typically 2 bushels per acre. Oats

can be planted in the fall, like wheat, but can also be planted early in the spring. Oats have vigorous seedling growth so they can make high fall forage yields. However, oats are less tolerant than wheat to cold temperatures and can freeze out in winter. Oat forage quality is similar to wheat, but oats probably have the highest palatability of all the small grains.

Barley is often overlooked for forage, but it will perform similarly to wheat. Planting rates, dates, fertility needs, production and quality are all basically the same as wheat. The big advantage for barley is that it does better on salty soils than any other small grain.

Triticale is an interspecific cross of wheat (*Triticum aestivum*) and rye (*Secale cereale*). Its production timing is about midway between wheat and rye, and planting rates and dates are similar to wheat and rye, as would be expected. However, just like a mule is superior to its parents, triticale has superior forage production compared to wheat or rye. Triticale can easily produce 50 percent more forage than wheat or rye.

Annual ryegrass is not a small grain, but it is a cool-season annual grass. It does well on heavier, wetter soils. Annual ryegrass is planted at 5 to 20 pounds per acre, depending on

if it is mixed with other small grains or if it is planted as a pure stand. Annual ryegrass can be planted from early fall through late winter. Most of its forage production occurs late in the spring. The lateness of annual ryegrass forage production works well with the earliness of rye forage production to provide a long grazing season of fall, winter and spring grazing. However, when overseeded into bermudagrass, the lateness of annual ryegrass production is often at the expense of bermudagrass during its production season. Annual ryegrass tends to reseed if given the opportunity to set seed.

There are other forages that can be added to small grains to potentially increase diversity, forage production and forage quality; add nitrogen to the soil; break compaction; or increase soil health.

Hairy vetch is a legume that is often used on sandy soils. It can be planted in mixtures with other winter forages or overseeded into bermudagrass in the fall. Planting rates vary from 5 to 10 pounds per acre. Most of the production from hairy vetch will come in the spring. There are also other vetches, such as cahaba, chickling, common and woolly pod, but these are used much less than hairy vetch. Hairy vetch tends to reseed if ►

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given the opportunity to set seed.

Austrian winter pea is a legume that can be planted with winter pasture mixtures. Austrian winter pea does well on silty soils. Planting rates vary from 15 to 30 pounds per acre. Like vetch, most of the production will come in the spring.

Turnips and rape are members of the brassica family that can be added

to small grains for additional forage and diversity. Seeds of these are very small, so planting rates can be as little as 0.5 pounds per acre. Turnip and rape seed can be broadcast ahead of the drill or mixed with the small grain seed. Other brassicas that are sometimes used are Ethiopian cabbage, collards, kale, mustard and radishes.

There are many clovers, but I have not listed them in this article because their production is typically too late in the spring/summer to be a major component of a winter pasture system. In addition to the forages listed in this article, there are others, like safflower, which we are experimenting with and may find a place for in winter pastures in the future. ■