

# Forage Brassicas Make Quick Forage in the Fall

*Dennis Hancock, Ph.D., Associate Professor and Extension Forage Agronomist, The University of Georgia*

I am a strong proponent of grazing more and feeding less. Since sending four-legged harvesters out to graze usually costs 30-40% of what it costs to feed hay, extending the grazing season is almost always a financial win for the cattleman. But one of the biggest challenges in the Southeast is finding a crop that actually grows well from September through early December. Wouldn't it be nice if we had a crop that grows as well as our fall crop of turnip greens? Well, as it turns out, we do.

## **Grazing Greens**

Forage brassicas are like the purpletop turnip's big brother. In fact, most of the brassica varieties that are grown for forage in the Southeast are turnips, or turnips that have been hybridized with closely related species. While garden turnips have been selected to produce a larger and tasty taproot, forage brassicas have been selected for more foliage production.

These forage brassicas produce bushy tops and large taproots, though the taproot is not as big as a garden turnip. Normally, forage brassicas partition about 90% of their growth into tops, while garden turnips put about 80% of their growth into their bulbous root. Since the forage brassicas put so much energy into their top growth, they can often be grazed within 60-75 days of planting. For fall grazing, producers should plant forage brassicas between Aug. 15 and Sept. 15. As a result, grazing could start as early as late October (Fig. 1). The productivity of forage brassicas during the fall has caused some to refer to it as "the annual ryegrass of the fall." By November, standing forage may be more than 3000 lbs DM per acre (Fig. 2).

Regrowth is usually quite strong, but one should expect no more than two grazings of the foliage and one clean-up grazing. In that final grazing, the cows will often kick out and consume some of the bulbous taproot (Fig. 3). Brassicas are quite competitive and can be challenging for any other forage species that may be planted with them. One strategy that works well is to plant brassicas in August/September and then broadcast annual ryegrass (and winter annual legumes, if appropriate to the site) over the top of the brassicas just prior to an early December grazing. This can result in late winter grazing.

## **Good-Quality Greens**

The tops have high nutritive value. They are highly digestible (70% TDN or more) and high in protein (18% CP or more). This high nutritional value, combined with their high moisture concentration (85% moisture or more), means that the passage rate through the cow's digestive tract is fast. Very fast. Does the expression "green rainbow" mean anything to you? The turnip is also highly nutritious, as it is full of starch and has energy levels (i.e., TDN) that are similar to ground corn.

Because of the high passage rate of forage brassicas, it is usually wise to provide livestock with a roughage source such as average-quality bermudagrass hay, fall-stockpiled forage, or corn stalks. Cattle will generally self-select enough roughage to slow down the passage rate to ensure efficient utilization. Plus, animal performance on it is very high. In grazing trials, stocker cattle grazing brassica pastures with a little supplemental roughage have been shown to gain 2.5 lbs/head/day or more.



Figure 1. Even before the trees turn to demonstrate their fall colors, forage brassicas can provide a jump start on winter grazing.

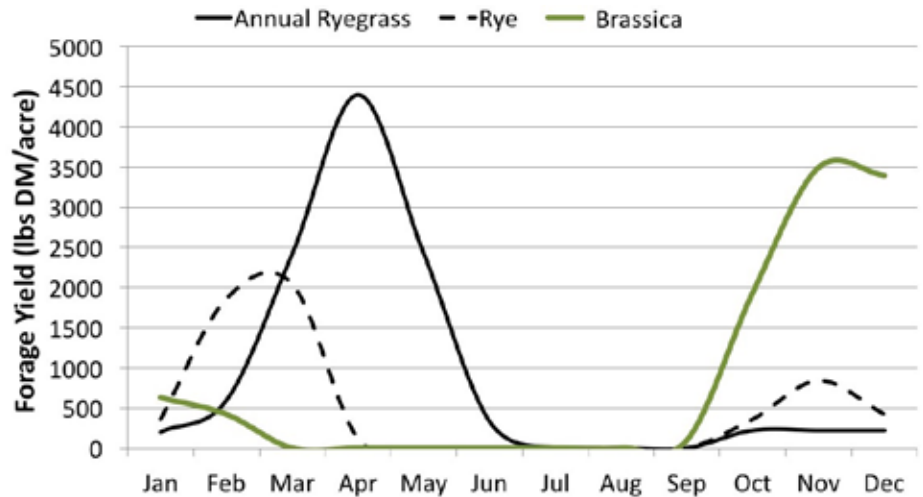


Figure 2. Distribution of forage brassica compared with annual ryegrass and rye.



Figure 3. At the final grazing, cattle will often kick the bulbous taproots out of the ground and eat them.

### Planting Recommendations

Brassicas are planted at a seeding rate of 1-3 lbs per acre. Though this is a low seeding rate, brassica seeds are small, and they establish rapidly if there is no residue or competing species shading out the seedlings. In general, it is best to plant brassicas into prepared ground or no-till drill them into pastures that are dedicated to annuals. **Brassicas do NOT establish well in established perennial pastures such as bermudagrass, bahiagrass, or tall fescue.** The small seed germinates quickly, if sunlight gets to the soil surface. However, growth will be poor if the young seedlings are shaded out either by leftover residue in a no-till planting or by plants that grow in competition with them

(e.g., perennial grasses or late growth by summer annuals). Refining establishment recommendations has been the objective of some Georgia Beef Commission-funded research that our team has been conducting at UGA.

### Next Time...

We'll dive a little deeper into the tricks and tips for quickly establishing forage brassicas. For more information on forage brassicas and other forage management recommendations, visit our website, [www.georgiaforages.com](http://www.georgiaforages.com). If you have additional forage management questions, visit or contact your local University of Georgia Cooperative Extension office by dialing 1-800-ASK-UGA1.