

Summer forage capabilities of tepary bean and guar in the southern great plains

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A field view of tepary bean at 55 days after planting at the USDA-ARS Grazinglands Research Laboratory, El Reno, Oklahoma. Credit: Dr. Gurjinder Baath, Oklahoma State University

Perennial warm-season grasses do not provide high-quality forage during mid to late-summer, which limits yearling stocker cattle from maintaining high rates of growth in the Southern Great Plains. This shortage has resulted in a continual search by researchers for annual legumes that can provide sufficient amounts of nutritious forage during August through September.

In a recently published article in the *Agronomy Journal*, researchers from USDA-ARS Grazinglands Research Laboratory and Oklahoma State University document the function of tepary bean and guar as potential summer forages under the growing conditions of Southern Great Plains. The two-year field experiment compared the productivity, leaf-to-stem ratios, and [chemical composition](#) of forage produced by three cultivars of each of tepary bean and guar with the soybean

used as a control.

Results showed that tepary bean consistently offered rapid and better forage yields with a higher leaf-to-stem ratio. In contrast, guar maintained a low leaf-to-stem ratio and soybean possessed the least digestible stems in forage biomass among the tested legumes.

The article suggests tepary bean as an alternate forage option to [soybean](#) for producers and encourages further research to define management strategies for growing tepary bean in extensive production settings.

More information: Gurjinder S. Baath et al, Summer forage capabilities of tepary bean and guar in the southern Great Plains, *Agronomy Journal* (2020). [DOI: 10.1002/agj2.20220](https://doi.org/10.1002/agj2.20220)

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