

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

May 28 2020



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)

Provided by American Society of Agronomy

Citation: Summer forage capabilities of tepary bean and guar in the southern great plains (2020,

May 28) retrieved 11 May 2024 from <https://phys.org/news/2020-05-summer-forage-capabilities-tepary-bean.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.