

The Potential of Forage Soybeans as a Grazing Source for Cattle

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Farmers across the nation feed their cattle some form of fibrous plant material such as alfalfa. Soybean prices are decreasing, so forage soybeans are being considered as an alternative grazing option for cattle if they can withstand grazing damage and regrow a crop. Soybeans' large leaf area and protein content maximizes the activity of ruminal microorganisms in a cow's digestive tract. Six varieties were planted an inch deep in rows in a three-acre field and clipped throughout the growing season to see how the plants would react to simulated grazing damage. It was hypothesized that the first five varieties of soybeans would be similar in regrowth after being snipped above the V1 stage except for the Variety 6 soybean which would grow forage faster because it has been genetically altered to grow three times the amount of leaves a normal forage soybean does. Four clippings were taken throughout the season: V1, V3, V5, and R1 stages. Treatments were carried out on sets of six feet of plants in their rows. Variety 6 led significantly in dry weight and fresh weight, but Variety 5 led in leaf area. By the R1 stage, Variety 6 had a fresh weight of 1656 kilograms per foot whereas Variety 5 had 1390 kilograms per foot. Clippings were also analyzed for protein percent and total digestible nutrients, and Variety 6 came in second. The results indicate that forage soybeans could be used as a nutritious grazing alternative for cattle although cattle testing should be conducted.