

Alfalfa IS for Beef Cattle

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This project was part of an Agricultural Research and Extension NIFA ASAFS project with combined efforts from three universities in the Eastern region (University of Georgia, Auburn University, and Clemson University). Alfalfa use in the southeastern US can provide a high-quality input for livestock production, while providing secondary ecosystem benefits to the longevity of forage-based systems through sustainable agricultural intensification (USDA Science Blueprint, 2021). Increased research and Extension efforts in the region have determined there is growing interest among producers in the utilization and management of alfalfa in the South, and opportunities exist to create a closed loop production system. Our work aims to add to the ongoing applied research regarding alfalfa management, production, and use in the South, specifically targeting forage and livestock producers. Using alfalfa baleage as a primary feed source for beef producers, focused on backgrounding steers and heifer development and the associated herd impacts, while quantifying the feeding value of alfalfa baleage in comparison to common commodities in the region from the plant and animal perspectives. The benefits of the use of legumes in forage systems and livestock diets are well established, however the opportunities of alfalfa use as a primary feed source in the beef industry have not been well-defined and are often underappreciated by producers. Ultimately, quantifying and better understanding the application of alfalfa in this manner may help expand alfalfa use in the Southern region. Specific objectives of this work are (1) to evaluate the use of alfalfa in beef cattle diets compared to “business as usual” drylot diets for backgrounding and heifer development in the South to improve management practices and expand alfalfa utilization in the region, (2) to develop an economic analysis of alfalfa-based feeding systems and alfalfa production in the South, and (3) to create awareness on management and use of alfalfa as a primary feed source for southern livestock producers and expand alfalfa-based training and knowledge beyond technical educators and producers to point-of-sale industry contacts.