

Nutritive Value and Forage Accumulation of Alfalfa and Alfalfa-Mixtures as Influenced by Forage Management

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The utilization of forage legumes such as alfalfa for ruminant production in grazing systems can provide satisfactory results for animal weight gain or milk production. In the Southeast U.S., the most commonly cultivated cool-season and warm-season grasses are tall fescue, respectively. Both grasses have prospective potential when grown in mixtures with alfalfa, but its success is highly depended on the forage management adopted. This experiment assessed the cumulative capacity of alfalfa in the Southeast U.S. when grown in monoculture and mixtures with tall fescue and bermudagrass, and its indirect improvements on the nutritive value of these grass–legume systems when different management strategies are applied. Three forage species and mixtures were utilized (alfalfa, alfalfa mixed with tall fescue and alfalfa mixed with bermudagrass) and subjected to four different harvesting frequencies (21, 28, 35 and 42 days) throughout the 2016 and 2017 growing seasons. Samples were collected during this period for analysis of forage nutritive value and forage mass. Our preliminary conclusions are that frequent harvesting intervals (T1) did not necessarily improve nutritive value of alfalfa mixtures and longer harvesting intervals (T4) showed a decrease in productivity. Also, high crude protein content is maintained on the alfalfa and alfalfa mixtures independently on the harvesting frequency.