Evaluation of Chicory Cultivars as a High Quality Forage Crop in Central Mississippi

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Objectives:
1. To evaluate the yield potential, qualitative aspects, and persistence of Puna Chicory, Oasis Chicory, and Choice Chicory.
2. Determine the potential of Chicory as a forage crop for Mississippi producers.

Results to Date:
Chicory (Cichorium intybus L.) shows great potential as a forage crop in Mississippi. The dry matter yield to date is 6 tons per acre, with a percent In Vitro Dry Matter Digestibility (% IVDMD) ranging from 95% to 79% on a dry matter basis and a crude protein (% CP) ranging from 29% to 20% on a dry matter basis. These numbers quantify the potential Chicory has as an excellent forage crop for Mississippi livestock producers.

Of the three cultivars evaluated, Puna and Oasis appear to be best adapted to Mississippi’s environment. Choice showed great potential for yield in the spring, but stands have started to weaken as the summer temperatures have increased. Puna and Oasis appear to be more adapted to the summer heat of Mississippi. There was no significant difference between cultivars in %IVDMD or %CP.
Chicory as High Quality Perennial Forage Crop For Stocker Cattle Grazing

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Objectives:
1. Determine the agronomic performance of Chicory (Cichorium intybus L.) under rotational grazing management with stocker cattle.
2. Measure animal performance in stocker cattle grazing pure swards of Chicory through the spring, summer, and autumn, and compare its performance with Annual Ryegrass and Alfalfa.

Results to Date:
• Chicory has a higher gain per acre and similar animal performance to Annual Ryegrass during the spring.
• Plant persistence and production under grazing has been very desirable.
• Chicory pastures have carried as many as nine steers per acre in the spring and two steers per acre during the summer.

(Charts and graphs showing spring and summer 2005 steer average daily gain and gain per acre for Chicory and other grasses.)