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10. Multistate Project No. W3177				11. Cooperating States sent via BITNET/INTERNET electronic mail systems Date: <u>7/3/12</u>	
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Goals/Objectives/Expected Outputs 1) Measure and improve beef quality, safety and value by assessing animal health, animal care, processing management/production strategies. 3) Determine factors influencing domestic and international consumer demand for US beef. The project will generate outputs in the form of oral presentations at Pasture Walks and Field Days (at the Iberia Research Station), abstracts at the Southern Section and Annual Meetings of the ASAS, as well as manuscripts in peer-reviewed journals of different disciplines (Agricultural Economics, Agronomy/Animal Science, Food Science). The major expected output of this project is to produce a framework for outreach activities in topics of interest for beef cattle and forage producers in Louisiana, Mississippi and Alabama.					
Methods OBJECTIVE 1 Even though consistent high quality and safe products are demanded by all beef consumers, an increasing group of the population has concerns about production practices including natural, organic or local beef production. Many consumers would rather purchase lean products to improve health. Commodity production in the beef industry supplies the vast majority of consumers although we propose to investigate other niche production/marketing opportunities. An increasing number of beef consumers are demanding alternative production techniques including housing, feed-additives, diet type, use of vaccines and antibiotics during production, and limitation of added ingredients during processing. A) For three consecutive years, 54 spring weaned steers will be assigned to one of three forage systems for harvest after 17 to 19 months. Grazing will start in June of each year. All pastures will be rotationally stocked and grazed to a pre-determined stubble height specific to the forage species. Carcass data will be collected by trained personnel. Inputs will be recorded and an economic evaluation will be conducted on an annual basis and at the end of the project. B) Based upon personal interviews with the producers to elicit detailed inputs, production cost and return data, cover all costs for forage-fed beef production will be estimated. Producers throughout the U.S. who are growing and finishing forage-fed beef will be identified. Producers answering the survey will provide an assessment of consumer demographics and demand. This project will utilize the existing Louisiana MarketMaker program. OBJECTIVE 3 Research will concentrate on demand determinants for US beef. Consumer willingness to pay for enhanced palatability, new products, and impact of cultural differences on preference will be completed. Consumer preference for grass-fed beef, locally grown, hormone-free, and other niche production schemes will be researched. Beef cuts (boneless ribeye steak) from the three forage systems and commercially available grain-fed beef will be selected for consumer evaluation. Raw and cooked beef products will be tested for aerobic bacteria, coliform and E. coli counts. The raw beef cuts will be analyzed for each of the three different forage					

systems for nutritive value. Two major ethnic groups (Latinos and Asians, 75-100 consumers each group) will be recruited for evaluation of the products, their own preferences, their willingness to pay for forage-fed beef, and specific cultural factors affecting cooking and eating experience, such as degree of doneness and condiments that will provide information on acceptance of forage-fed beef. The issue of a year-round supply of forage-fed beef will be addressed by freezing beef cuts using IQF (Individual Quick Freezing) to preserve meat quality.

23. Non-Technical Summary

Forage systems differ in complexity and inputs (fertilizer, seed, etc.). Steers will graze different forage systems from weaning (8-9 months of age) until they are 17-19 months of age. All steers will be 100% forage fed beef based on USDA's definition of the project. A representative ample of each of the systems will be harvested, carcass information collected, ribeyes sampled and chemical analyses obtained. Organoleptic characteristics will be determined and consumer preferences evaluated. Finally an economic evaluation of the systems will be conducted. A survey will provide information regarding consumer demographics and demand.

24. Keywords

beef carcass; beef quality; beef safety; beef steers; consumers preference; forage fed beef; forages; production costs

**** The Original signed document is on file at this institution. ****

Signature	Title	Date
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