

U.S. Department of Agriculture <b>Accomplishments Report AD-421</b> U.S. Dept. of Agriculture, State Agricultural Experiment Stations and Other Institutions			Date (Month, Day, Year) 03/22/2012
1. Accession 0216591	Agency Identification No. 2. SAES 3. LA.B	5. Work Unit/Project No. LAB03928	6. Status Annual Report
7. Title Utilization of Forage Resources by Beef Cattle Grazing in the Gulf Coastal Region of Louisiana			
12. Investigator Name(s) (Last Name and Initials) Scaglia, G.			
20. Termination Date 09/30/2013		40. Period Covered (mo/da/year): 01/01/2011 TO 12/31/2011	
Outputs: <p>The project generated outputs in the form of oral presentations at Pasture Walks and Field Day (at the Iberia Research Station), at the Louisiana Forage and Grassland Council (LFGC), and at the Agribusiness Council of Louisiana Quarterly Meeting. The significance of developing this project is that it serves not only as a framework for outreach activities in topics of interest for beef cattle and forage producers in Louisiana but also to develop projects that may attract extramural funding. In 2011, a new grant was secured (NIFA/AFRI funded it for 4 years) which deals with finishing steers on forages (production, evaluation of the product, economic and market analysis) on small beef cattle farms. One journal article, one abstract, one proceedings, three articles in an AgCenter report, and two contributions to Louisiana Farm &amp; Ranch were published.</p>			
Outcomes/Impacts: <p>Allowing the grazing animal to express free dietary choice between legumes and grasses during grazing might help achieve greater consistency of nutrient supply to the animal from pasture, greater control of intake, and production. In 2011, the second year of this experiment was conducted. A longer grazing period than the first year was possible because planting of pastures was done at the appropriate time due to good weather conditions. A consistent result in average daily gains was also observed this year. Heifers grazing pastures with access to clovers (clover pure stand, mixed, or adjacent monocultures of ryegrass and clovers) gained on average 0.25 kg more when compared to grass monoculture (ryegrass). Heifers on mixed swards walked more than those grazing adjacent monocultures, notably explaining the search for the legume component. In May 2011, steers from the forage-fed project were harvested, carcass data collected, and steaks obtained. Shear force values were determined from each of the steaks, and beef samples were analyzed for fat content and fatty acid profile. In June 2011, the third year (grazing season) began with a new group of steers. Steers grazed summer pastures until November, with conserved forages being fed thereafter until the end of the year. Performance has been as expected, with moderate gains during the months of direct grazing and limited gains during the hay-feeding period. Project resources were used to generate information and provided the structure that serves to pursue outreach activities and grants.</p>			
Publications: <p>Scaglia, G., and H. T. Boland. 2011. Impact of spatial arrangement of grass and legumes on performance and grazing behaviour of beef heifers. Proc. of the 8th Intl. Symp. on the Nutr. of Herbivores. Aberystwyth, Wales, UK.</p> <p>Scaglia, G., H. T. Boland, G. T. Gentry, C. C. Williams, and W. E. Wyatt. 2011. Effects of time of supplementation on beef stocker calves grazing ryegrass. I. Animal performance. LSU AgCenter Beef and Forage Report. Pages 35-38.</p> <p>Scaglia, G., H. T. Boland, G. T. Gentry, and C. C. Williams. 2011. Effects of time of supplementation on beef calves grazing ryegrass. II. Behavior and dry matter intake. LSU AgCenter Beef and Forage Report. Pages 39-42.</p> <p>Gillespie, J. M., G. Scaglia, H.T. Boland, and W. E. Wyatt. 2011. The economics of supplementing beef stocker calves grazing ryegrass. LSU AgCenter Beef and Forage Report. Pages 43-46</p> <p>Scaglia, G. 2011. Issues to consider in forage-fed beef production. Part 3. In Louisiana Farm and Ranch. Vol. 7, No. 11:34-35. November issue.</p> <p>Scaglia, G. 2011. Issues to consider in forage-fed beef production. Part 2. In Louisiana Farm and Ranch. Vol. 7, No. 8:28-29. August issue.</p>			

Scaglia, G. 2011. Issues to consider in forage-fed beef production. Part 1. In Louisiana Farm and Ranch. Vol. 7, No. 7:30-33. July issue.

Scaglia, G., J. Rodriguez, K. McMillin, G. T. Gentry, and H. T. Boland. 2011. Total fat and fatty acid composition of steaks from steers finished on three different forage systems in the Gulf Coast Region. J. Anim. Sci. Vol. 89, E-Suppl. 1: 317 (Abstr.).

Scaglia, G., J. Rodriguez, G. T. Gentry, K. McMillin, and J. Gillespie. 2011. Performance of beef steers finished on three forage systems in the deep south. Abstr. 64. So. Section ASAS Annual Meeting. February 6-8, Corpus Christi, TX.

Participants:

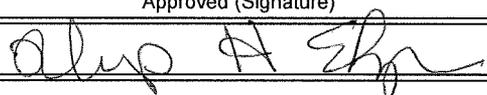
G. Scaglia (PI), J. Rodrigues, K. McMillin, M. Persica, W. Prinyawiwatkul, M. Janes, and J. Gillespie, LSU AgCenter; H.T. Boland, Mississippi State University; F. Malekian, Southern University.

Target Audiences:

Target audiences include beef cattle producers, forage producers, beef cattle specialists, county agents, and other professionals (businessmen, company representatives). These audiences were reached during the pasture walk, field day, LFGC, and Agribusiness Council of Louisiana's meetings.

Project Modifications:

Nothing significant to report during this reporting period.

Approved (Signature)	Title	Date
		3-23-12