season perennial grasses are big nutrient users.

- 2. Balance N with P, K, S, Mg, and other nutrients to optimize yield and quality and to maintain high nutrient use efficiency.
- 3. Apply secondary and micronutrients as needed, using soil testing and plant analyses.
- 4. Apply nutrients at short, uniform intervals (21 to 24 days) to keep management simple and to stabilize milk production.
- 5. Keep soil pH in the range best suited for optimum forage production (pH 6.0 to 7.0).

D. Forage Management for Maximum Leaf Production. Managing for maximum leaf production is the objective of this system. Power fencing with small grazing cells where cattle are mob-grazed and rotated on short intervals will work best. With larger pastures, mowing each half of the pasture on a 7 to 10 day interval will keep the pasture at a 3 inch height or less. This system may require 5 to 7 cows per acre stocking rate to maintain the grass at minimum heights. If "manure spots" develop, they should be mowed along with a drag attachment to help scatter existing manure. Frequent removal of stemmy and excess forage will provide a constant source of high percentage leaf material with minimal stem.

Advantage of BMPs

The BMPs outlined here are agronomically, economically, and environmentally responsible management techniques that dairymen can integrate into their ongoing dairy enterprises. In this case, BMPs serve the farmer, the fertilizer dealer, and the environment.

The dairyman not only benefits from yield, quality, and economics of forage and milk production with BMPs, but labor is utilized more efficiently as well. The fertilizer dealer benefits by having his work load spread over a longer season. The environment is protected by split applications of fertilizer, and enhanced nutrient use efficiency. ■

Louisiana



Effect of Sulphur Fertilization on Yield, Copper Concentration and Copper Uptake in Coastal Bermudagrass

RESEARCH at the Louisiana Hill Farm Research Station has reported forage yield responses to sulphur (S) applied to Coastal bermudagrass at two loca-

tions over a 5-year period. Yield increases have been measured from S applications up to 96 lb S/A. Sulphur fertilization reduced copper (Cu) concentrations from 5 to 4 parts per million (ppm), but Cu uptake was not significantly affected at either site. The table shows some effects of S fertilization. ■

Effects of S fertilization on Coastal bermudagrass yields, Cu and S concentrations and uptake.

	S		Cu		
Applied S	Conc.	Uptake	Conc.	Uptake	Yield
lb/A	%	lb/A	ppm	lb/A	lb/A
0	.13	16	5	.06	12,590
24	.16	22	4	.06	13,091
48	.20	28	4	.06	13,505
72	.24	34	4	.06	13,862
96	.28	42	4	.06	14,582
Mahan fine	e sandy	loam;			

Soil test (0-15 cm): S, 8 ppm; Cu, 0.2 ppm.

Source: Dr. Marcus Eichorn, Hill Farm Research Station, Louisiana State University.