

Marshall, S.P., Hayward, F.W. and Meagher, W.R. (Florida Agricultural Experiment Station, Gainesville): EFFECTS OF FEEDING ARSENIC AND LEAD UPON THEIR SECRETION IN MILK. Journal of Dairy Science 46:580-1 (June), 1963.

Eight lactating Jersey cows, weighing 820 - 1040 lb., were assigned to 4 groups of 2 animals each and either grazed on millet pasture or fed chopped millet forage; in both cases, a concentrate mixture was added. Arsenic (As) and lead (Pb) as Pb arsenate were incorporated into the concentrate and fed daily to the cows, for 126 days in mg. per 100 lb. body weight as follows: Group 1, 0.00; Group 2, 1.17 and 3.23; Group 3, 2.34 and 6.47; Group 4, 4.68 and 12.95, respectively. Milk samples were taken 5 days before and at the start of the experiment and 1,3,14 days and subsequently at 14-day intervals thereafter. In all milk samples analyzed, including those from control cows, concentrations of As and Pb were less than 0.05 mg. per liter.