K S U

Comparison of Biuret and Soybean Meal for Wintering Cows on Bluestem Pasture

II. Effect On Birth and Weaning Weight of Progeny (Project 253)

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During the winter of 1969-70, 48 five-year-old cows were divided into three groups to compare soybean meal with biuret as a winter supplement in combination with sorghum grain (Bulletin 536, 1970, p. 33). Soybean supplemented cows gained 31 lbs. each during 4 months while biuret-fed cows lost 15 lbs. each. Cows fed sorghum grain with biuret in a separate mineral mix (fed free choice) lost 62 lbs. each.

Birth weight and 205-day, adjusted, weaning weight (steer equivalent) of calves born during and after the winter-supplementation study are given in table 24. When the supplements were mixed with sorghum grain, soybean meal and biuret were equally good; but cows given biuret in a mineral mix gave birth to smaller calves ($P < .05$). Weaning weights were lower in the biuret-mineral group but not significantly different from those fed protein supplements mixed with sorghum grain.

Table 24. Birthweight And Adjusted Weaning Weight of Calves Born to Cows Receiving Soybean Meal or Biuret as Protein Supplements

Item	Sorghum grain-soybean meal	Sorghum grain-biuret	Mineral-mix biuret
Birth Wt., Lb.	67(55-60)[a]	67(50-80)	62(44-70)
Weaning Wt., Lb.	422(316-476)	423(329-481)	407(286-461)

[a] Average, with range

Biuret can be successfully added to complete wintering cow supplements but, in a separate mineral mix, biuret did not compare favorably with mixtures of either soybean meal and sorghum grain or biuret and sorghum grain.