
Crambe meal is a high protein (35% CP) residue from whole crambe seed (Crambe abyssinica) processed for recovery of high erucic acid vegetable oil. The objective of the research was to evaluate the usefulness of this by-product as a protein source for beef cattle. Eighty-one Charolais sired steers (303.4 kg BM) were allotted to one of four pelleted, isonitrogenous protein supplements. Sources of protein provided by these supplements were 100% soybean meal (SBM), 67%SBM:33% crambe meal (CM), 33%SBM:67%CM, and 100%CM. Treatment ingredients were dry-rolled corn, corn silage, and ground wheat straw. Dry matter intakes of CM were 34.3, 33.2, 33.3, and 33.1 kg/d per head for 100%SBM, 67%SBM:33%CM, 33%SBM:67%CM, and 100%CM, respectively. Six steers were allotted to each of 12 pens for three replicates per treatment. Initial and final weights were the averages of two consecutive weights at 24 h intervals. Weights were also taken at 28 d intervals. The duration of the trial was 84 d. Feed intake was similar among treatments. Body weights were similar at (P = .84), 28 (P = .66), 56 (P = .91), and 84 (P = .87) d. Average daily gains (s.e.05516) were 1.38, 1.41, 1.38, and 1.35 kg/d for 100%SBM, 67%SBM:33%CM, 33%SBM:67%CM, and 100%CM, respectively (P = .92). Feed efficiencies were also similar across treatments (P = .67). These were .156, .161, .153, and .154 (.0002560) for the four treatments, respectively. Crambe meal substituted equally for soybean meal and resulted in no adverse effects on intake or performance.

Key Words: Crambe Meal, Beef Steers, Protein Supplements

Kansas State University Lean Value Marketing Program: I. Influence of wholesale cuts and backfat thickness on carcass value.

The KSU lean value marketing program was an extension project conducted to help Kansas swine producers understand the value of their pigs when marketed on a wholesale cut basis. Thirty-four producers were asked to supply 25 pigs weighing 104 to 113 kg. Pigs were slaughtered at a packing plant in central Oklahoma whose grade and yield program is based on wholesale cut value. Carcasses were weighed individually and backfat measurements were taken at the 22, 11th, and last rib and last lumbar vertebrae at the midline on each loin. Wholesale cuts were weighed on a group basis. Based on the June 22, 1992 USDA Blue Sheet for wholesale cut prices, carcass values ranged from a high of $128.51 to a low of $122.35 with a mean carcass value of $125.79. The difference of $6.16 between the highest and lowest carcass values represented a difference in income of $24,640 for the average producer in the program who market 4,000 hogs per year. Loin only represented 21% of the carcass weight; however, loins were the wholesale cut most closely correlated (P < .0001; r = .64) with carcass value. Other wholesale cuts that positively influenced (P < .0001) carcass value included hams (r = .46) and Boston butts (r = .61). Increased backfat value was most closely associated (P < .001) with percent bellies (r = .62) and fat trim (r = .87). Mean tenth rib backfat for pigs from each farm ranged from 33 to 46 mm, with an average of 28 mm. Decreased tenth rib backfat was positively correlated (P < .001; r = .55) with carcass value, but explained less of the variability in carcass value than percent loin. The imperfect relationship between backfat thickness and carcass value was demonstrated by three groups that had a mean backfat at the tenth rib of 23 mm, yet ranked first, fifth, and ninth among the 34 groups in actual carcass value. Therefore, carcass programs based entirely on backfat measurement do not apply to very muscled pigs. Standard deviation for backfat within each farm ranged from 2.1 to 6.9 mm indicating that 50% of the pigs from these farms would have a range in backfat of 8.6 mm (4 mm above and below the mean) for the best load and 27.6 mm (13.8 mm above and below the mean) for the worst load. Standard deviation of backfat provided producers with important information on the uniformity of pigs marketed from their farm. This extension program demonstrated to producers the large economic incentive of producing uniform, lean, heavy muscled pigs.

Key Words: Carcass Composition, Pigs, Marketing