

**Effect of hide color and percentage Angus on feedlot performance and carcass traits in beef calves.** L.R. Corah<sup>2</sup>, G.D. Fike<sup>2</sup>, M.E. King<sup>2</sup> and W.D. Busby<sup>2</sup> <sup>1</sup>Certified Angus Beef LLC, Wooster, OH, <sup>2</sup>Iowa State University, Ames, IA

To determine the effect of hide color (n=47,747) and percentage Angus (n=30,743) on feedlot performance and carcass traits, data on calves from 19 states and fed at 18 Iowa feedlots in the Iowa Tri-County Steers Carcass Futurity (2002-2009) were analyzed. All calves received a common diet, similar implant and health program and were sorted and harvested when visually determined to have one cm of fat cover. Upon arrival, calves were classified as black-hided (B; n=35,387) or non-black-hided (NB; n=12,360). Percentage Angus, based on sire and dam information, was low (L; n=7,931), half (H; n=6,429), three-quarters (<sup>3</sup>/<sub>4</sub>; n=6,473) and straight (S; n=9,910). Percentage Angus, feedlot ADG (kg/d), mortality rate (%) and morbidity rate (%) were 72.1, 1.46, 1.18 and 16.95; and 23.4, 1.4, 2.31 and 20.74 for B and NB calves, respectively (P<0.05). Percentage Prime, Choice, Select and Standard quality grades were 1.17, 70.33, 26.65 and 1.85; and .4, 53.09, 41.59 and 4.92 for B and NB carcasses, respectively (P<.05). Percentage Angus, Feedlot ADG (kg/d) and morbidity rate (%) for L, H, <sup>3</sup>/<sub>4</sub> and S were 9.2, 1.42 and 21.69; 48.6, 1.45 and 15.49; 74.2, 1.45 and 17.29; and 99.4, 1.49 and 16.01, respectively (P<.05). Percentage Prime, Choice, Select and Standard for L, H, <sup>3</sup>/<sub>4</sub> and S carcasses were .31, 51.21, 43.07 and 5.4; .44, 66.15, 31.32 and 2.09; 1.03, 69.3, 28.11 and 1.56; and 2.16, 79.81, 17.25 and .77, respectively (P<.05). Acceptance rates for black-hided Angus-type calves eligible for the *Certified Angus Beef*<sup>®</sup> (CAB<sup>®</sup>) program were 8.9, 15.8, 16.7 and 27.3 for the L, H, <sup>3</sup>/<sub>4</sub> and S groups, respectively (P<.05). Calculated yield grade was 2.92 and 2.62 for B and NB carcasses, respectively (P<.05) and 2.56, 2.78, 2.93 and 3.03 for L, H, <sup>3</sup>/<sub>4</sub> and S carcasses, respectively (P<.05). Feedlot performance, health and carcass quality grade were positively influenced in the black-hided and higher percentage Angus calves, while average yield grade was negatively affected.

Key words: hide color and percentage Angus, health, feedlot and carcass performance