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Charolais Advantage Evident in CSU Research Study

A recent study incorporating Charolais genetics was conducted by Colorado State University at the Eastern Colorado Research Center (ECRC) located at Akron, CO. The ECRC 250-cow herd cowherd consists of Angus, Polled Hereford, Red Angus and Red Angus crossbred genetics. These British-based females were mated to one of three Charolais sires or one of five Angus or Red Angus composites. The females were divided by sire groups into terminal (Charolais) and maternal (British). Steer calves were sorted off and the

was a 20% difference in the number of YG-1 and YG-2 steers, with 52.5% of the Charolais steers grading YG-1 and YG-2.

As always, getting to the bottom line tells the real story. The study calculated the returns two ways: 1) returns if calves were sold at weaning and 2) returns for retained ownership through finishing. Net return for the calves sold at weaning was \$202.65 per head for the Charolais steers compared to \$163.13 per head for the British calves, yielding nearly a \$40 per head advantage for Charolais. Net return for the retained ownership Charolais calves was \$349.11 per head compared to \$265.45 per head for the British steers, resulting in an \$83.66 per head Charolais advantage.

There have been countless research projects and studies conducted throughout the history of the beef industry. Data compiled in the last half century that considers the impact of Continental genetics is compelling and constant regardless of the cycle of the industry or other uncontrollable economic factors. More recent data specifically analyzes Charolais' influence and the profit margin improves even more. The advantage of Charolais genetics shows up time and time again whether calves are sold at weaning or retained through the feedlot.

No doubt, the beef industry will never be a "one size fits all" business model. Folks get in the cattle business for a variety of reasons—some realistic, some, well not so much. For serious beef producers, the need to have access to objective, reliable genetic and economic information using a real world business model is crucial. It is equally important for those same beef

producers to have access to time-tested, proven genetics from seed-stock suppliers with their best interest in mind. When that happens we all save money, make money and produce a better product.

Table 1. Least squares means for growth performance traits.

Sire type	Charolais-Sired	British-Sired
Bull Calf Birth weight (lbs.)	92.8	84.1
Steer Calf Weaning Weight	584	498
Pre-weaning ADG	2.60	2.24
Weight at start of finishing period (lbs.)	733	648
Final weight (lbs.)	1,442	1,315
Finishing ADG (lbs.)	4.23	3.96
Feed consumed during finishing (lbs.)	3,631	3,348
Feed conversion during finishing (F:G, lbs.)	5.16	5.02
Cost of Gain during Finishing (\$/cwt.)	50	49

Source: Colorado State University

heifer mates were retained in the herd as replacements. The terminal vs. maternal study followed a total of 80 steer calves from birth to harvest to compare the effects of growth performance, carcass characteristics and net return per head.

The Charolais-sired steers weighed slightly more at birth, yet were still considered to be moderate birth weight calves.

The Charolais steers had 86 more pounds of growth at weaning. Finish weights of the Charolais steers were 127 pounds heavier than their British counterparts. Feed conversion for Charolais was slightly better while cost of gain was virtually the same among all steers.

Carcass data collected on the groups was equally as revealing. Quality grades did not differ significantly between the two sire groups. The Charolais steers had slightly better dressing percentages. Carcass weight on the Charolais steers posted a marked improvement of 80 pounds with .4 sq. in. larger ribeye areas. There

Table 2. Least squares means for carcass traits.

Sire type	Charolais-Sired	British-Sired
Adjusted Fat Thickness (inches)	0.53	0.6
Dressing Percentage	63.9	63.6
Hot carcass wt (lbs.)	893	813
Ribeye Area (square inches)	13.3	12.9
Percentage Kidney, Pelvic, & Heart Fat	2.2	2.24
Percentage QG of Choice or Higher	60.0	62.5
Percentage YG-1 and YG-2	52.5	32.5
Percentage YG-4 and YG-5	0	5.0

Source: Colorado State University