SOME MEAT QUALITY PARAMETERS FOR BEEF CATTLE AS DERIVED FROM STATE CARCASE COMPETITION DATASETS; ARE THEY OF INDUSTRY RELEVANCE?

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There is little argument to the assertion that the beef industry must continue to meet (and exceed) consumer expectations with respect to meat quality. Recent trends in the adoption of value based marketing systems have elucidated the linkages between meat quality attributes and price differentials, and hence the commercial imperative for beef producers to understand carcass description and the implications regarding both beef marketing and cattle production systems (Taylor 1994). It is within this context that continued industry and Government involvement in state carcass competitions is seen to be commercially relevant. This solicits the questions, do carcass competitions generate commercially relevant information, and in what context?

Judging of The Royal Agricultural & Horticultural Society of SA Inc. Led Steer carcass competition has been essentially undertaken within the established Australian Beef Carcase Appraisal Method (ABCAM) framework. All entries are purebreds and carcasses were assessed for a broad range of carcass criteria including P8 fat depth (P8) and rib eye muscle area (EMA). Domestic classes were generally less than 260 kg HSCW; export classes 261 to 400 kg HSCW. All carcass entries were judged within the participating meat processor market grid. A compiled dataset from show judging 1994 to 2001 comprising 733 British (Brit) purebred carcasses (av. 47 per year domestic; 45 export) and 218 European (Euro) purebred carcasses (av. 4 per year domestic; 23 export) was used to interpret P8 fat depth and EMA (cm²) for both domestic (Figure 1) and export (Figure 2) market specifications.

Carcase competition datasets are difficult to interpret given inherent variability in nutritional histories, breed factors, handling, different exhibitors each year, and variable meat processor destinations. Nevertheless observed annual differences in fat depth and EMA between British and European purebreds were not unexpected, be it no obvious trends between years. Generally European carcasses were heavier overall on an annual basis (domestic 237 v 228 kg HSCW; export 328 v 285), and while yearly trends were not evident for export carcase weight, domestic grade carcasses increased in weight from 1994 to 2001 for both British (y = 2.03x –3828.7, r² = 0.67) and European (y = 4.07x –7888.3, r² = 0.55) entries. The preliminary interpretation of the dataset suggests that carcass competitions can highlight known generic breed (Brit. v Euro) differences and the trends for heavier domestic market weights. Overall quantitative interpretation is generally questionable however; hence we speculate that the major role for carcass competitions to be both educational and demonstational in emphasising meat quality and yield factors to both exhibitors and industry as a whole. Recent initiatives to include new carcase assessment technologies and Meat Standards Australia criteria are encouraging in this regard.


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