

Characteristics & cutability of farmed rusa deer (*Cervus timorensis*) carcasses for marketing of venison.

ABSTRACT

Rusa deer are the only viable commercial tropical deer species for farming in the tropics because of their hardiness, adaptability and prolific characteristics. Twelve entirely rusa stags were slaughtered according to halal procedure and were used for carcass evaluation and cutability studies. Three carcass categories; large (46 to 55 kg), medium (36 to 45 kg) and small (25 to 35 kg) were developed for rusa stags. This study indicated that entire Moluccan rusa deer stags with mean live weight ranging from 50 to 80 kg and age groups of 15 to 29 months showed dressing percentage of 58 to 62%. Carcass conformation of rusa stags showed significantly ($p < 0.05$) higher forequarters portion than hindquarters for medium (mean weight, 40.8 kg) and large (mean weight, 50.0 kg) carcass categories. The large carcass category was significantly ($p < 0.05$) bigger in hindquarters portion (47.3% vs. 45.4%) than the medium carcass category. This study showed that medium and large carcass categories are more suitable for boneless cuts since the muscles were larger than small carcasses which makes them easy for deboning. Stag carcasses showed higher proportion of the musculature in the high-priced areas of the carcass such as in round cuts. Bone-in cuts are more suitable for small carcasses since the muscles were smaller and difficult to debone (mean weight, 30.5 kg). About 90% of total deer carcasses in the small carcass category were developed into retail bone-in cuts (excluding 9.9% of breast, shank and trimming). The carcass characteristics and cutability information derived from this study can be used as a basis for a venison marketing strategy for deer farming and production in the tropics.

Keyword: Rusa deer; Carcass characteristics; Cutability; Retail cuts; Venison.