

ABSTRACT

The potential of the water buffalo (Bubalus bubalis) as a meat producer was assessed by investigating certain reproductive, growth and carcass characteristics of the animal in Trinidad.

The seasonality of breeding was confirmed by 68 per cent of the births in the buffalo herd under investigation occurring in the months, August to November. The disadvantage of this characteristic in a beef breed was emphasised.

Analysis of liveweight gains of yearlings maintained on poor quality, unshaded pastures with an ad lib bagasse and molasses supplement showed an average daily gain of 1.07 lbs. per head over 277 days. Significantly greater liveweight gains were made in the dry season than in the wet season, probably due to an increase in dry matter intake.

A comparison of liveweight gains between steers, heifers and bulls showed no significant differences in growth rate between the groups; the within group variation was large.

Age - liveweight relationships were examined and found to compare favourably with reports for buffaloes from other countries.

Twelve steers ranging from 752 - 1246 lbs. in liveweight and 15 - 33 months in age were slaughtered and the average dressing percentage was found to be 48.0. No relation between dressing percentage and either age or liveweight was found, although variations in dressing percentage were least in those animals slaughtered between 19 and 24 months in age and 850 - 1000 lbs. in liveweight. This dressing percentage value compared most unfavourably with Bos taurus cattle and the implications were discussed.

The weights of the offal full, hide, head, feet and pluck expressed as percentages of the liveweight were compared with similar values reported for Bos taurus cattle. With the exception of the full offal, the relative weights of these parts were clearly heavier - particularly the head.

The proportions of bone, muscle and fat in the carcass were estimated to be 16.23 per cent, 64.81 per cent and 18.96 per cent respectively, using 10th rib sample joint dissections, and coefficients derived for Zebu cattle. These values compared favourably with cattle. The eye muscle areas and shapes were recorded but were not found to be related to either the lean or bone percentage of the ribs.

The forequarters represented an average 51.51 per cent of the carcass. A significant relationship between hot carcass weight and length was found and the regression coefficient derived.

It was concluded that the buffalo was admirably suited to meat production where extensive husbandry systems prevailed, concentrate feed costs were high, pastures were of low quality and capital scarce. Under more intensive systems, the seasonality of breeding and the poor yield of meat would not favour the adoption of the animal as a meat producer.