131. Cut-and-carry feeding of indigenous grass in Indonesian sheep production: effect of amounts of grass and rice bran offered on grass intake and on yield of compost made from refusals and excreta

J. C. Tanner[1], E. Owen[1], H. M. Winugroho[2] and M. Gill[3]

[1]*Department of Agriculture, University of Reading, Earley Gate, PO Box 236, Reading RG6 2AT;* [2]*Research Institute for Animal Production, PO Box 221, Ciawi-Bogor, Indonesia;* [3]*Natural Resources Institute, Chatham Maritime, Kent ME4 4TB*

West Java sheep are permanently housed and offered manually harvested grass at 50 to 60 g dry matter (DM) per kg live weight (M) daily. Flocks (*ca.* five head) are housed on slats, with excreta and refusals composted underneath. Collecting grass is expensive; substituting some of the grass with rice bran could reduce food costs. In a 3 × 2 factorial layout, with six replicates, rice bran (877 g DM per kg; 23·2 g nitrogen (N) per kg DM) was fed at 0, 15 or 30 g DM per kg $M^{0.75}$ per day, together with freshly cut indigenous grasses, dominated by *Axonus compressus* (182 g DM per kg, 18·3 g N per kg DM, 117 g ash per kg DM), offered at 30 or 60 g DM per kg M per day. The 36, 30-month-old Javanese Thin-Tailed rams used for measuring intake, were individually penned for 42 days and offered the foods, together with water and salt licks. Over three 10-day periods, faeces were collected from two rams per diet to measure digestible organic matter (DOM) intake. For each period, refusals, faeces and urine were collected from the two rams per diet and composted for 50 days. Intake of grass (g DM per kg M per day), at both offer-rates, decreased with increasing bran feeding-level; doubling the grass offer-rate, increased grass intake (offer rate 30: 24·3, 22·3, 21·3; offer rate 60: 31·6, 28·5, 27·0; s.e.d. 0·69). Compost yield increased with bran and grass offer-rates. DOM intake of diet 30 grass : 30 bran was similar to diet 60 grass : 0 bran; 30 grass : 30 bran was 0·15 cheaper, but yielded 0·61 less fresh-weight compost.