

88. Cut-and-carry feeding of indigenous grass in Indonesian sheep production: effect of amount of grass offered and wilting on intake and yield of compost

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On small holdings in West Java, indigenous grass, cut-and-carried from roadsides, is the main food for sheep and flocks (*ca.* five head) are permanently housed on slats over composting pits. Before offering at 50 to 60 g dry matter (DM) per kg live weight (M) daily, grass may be wilted for up to 24 h in baskets or hessian sacks. During this period the grass heats up. This could reduce

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palatability and intake. Changes in grass intake may also alter the quantities of compost produced from excreta and refusals. In a 2 × 2 factorial trial, with nine replicates, indigenous grasses, dominated by *Axonopus compressus*, were offered at 30 or 60 g DM per kg M per day either freshly cut (F) (175 g DM per kg; 19.1 g N per kg DM) or 24-h basket-wilted (W) (16.4 kg grass per basket; 185 g DM per kg; 19.1 g N per kg DM). The 34-month old, Javanese thin-tailed rams used for measuring intake, were individually penned for 48 days and offered the grass, together with water and salt licks. Over three 10-day periods, faeces, urine and food refusals were collected from three rams per diet and composted for 50 days. During the 24-h wilting period grass heated from 25.2 to 32.0°C. Raising grass offer rate significantly improved intake, but wilting, which had no influence at the lower offer rate, significantly reduced intake at the higher offer rate (offer rate 30: 22.3 (F), 21.6 (W); offer rate 60: 30.0 (F), 27.8 (W) (s.e.d. 0.87) g DM per kg M per day). Doubling the offer rate approximately doubled the compost yields (offer rate 30: 0.308 (F), 0.358 (W); offer rate 60: 0.704 (F), 0.662 (W) (kg DM per ram per day). It is concluded that 24 h wilting as in the present experiment reduces grass intake, but does not affect compost output. Increasing the amount of grass offered from 30 to 60 g DM per kg per day increases intake and almost doubles compost output.