19. THE EFFECT OF FEEDING HEIGHT ON SELECTION AND INTAKE OF RICE STRAW IN TROPICAL SHEEP AND GOATS FED THROUGH "TOMBSTONE" BARRIERS

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In a study to assess the effect of feeding height on selection and intake of rice straw in tropical sheep and goats fed through tombstone barriers, eight Black Head Persian (BHP) and eight Small East African (SEA) goats were used. Body weights of the animals ranged from 12.4 to 35.0 and 13.4 to 39.8 kg in sheep and goats respectively. Sheep had significantly ($P<0.05$) higher daily feed intake than goat (642 vs 273gDM) at all feeding heights studied. Feed intake in sheep and goats significantly ($P<0.001$) increased with increasing height up to 30 cm. Mean feed intake at 0, 15, 30 and 45 cm heights were 475 ±42, 490±42, 527±42 and 526±42 gDM in sheep and 391±42, 430±42, 443±42 and 419±42 gDM in goats respectively. Considering sheep and goats together, sex had no effect ($P>0.05$) on intakes. Considering individual species females were superior to males in sheep whereas it was the opposite in goats. Feeding height had a significant ($P<0.01$) effect on selection, with more selection at 30cm feeding height compared with the other heights. The two species had no significant ($P>0.05$) difference on selection. However, sheep ate more leaf fraction than goats. The mean values for leaf intake were 127±11 and 132±11 gDM leaf/kgDM in goats and sheep respectively. Sex had no effect ($P>0.05$) on straw selection. It is concluded from this study that sheep have superior intake and selection than goats. Therefore, under stall feeding systems feeders should be designed with consideration on species difference for sheep and goats. It is suggested that feed for sheep and goats be placed at around 30 cm height above the ground, for best intake and selection. There is no need for segregating females from males in designing feeding systems for either species.