

DIAGNOSIS OF PREGNANCY AND LITTER SIZE BY INGUINAL BARE-AREA
AND TRANS-RECTAL ULTRA-SONOGRAPHY OF SHEEP

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Sheep are normally scanned whilst lying on their back with some wool removed from the belly. The inguinal area of sheep is free of wool. Use of this bare area, without removal of belly wool and the use of a rectal transducer are possible cost saving alternatives to the present method. The influence of these scanning techniques on the accuracy of diagnosis of pregnancy and litter size was examined.

Ewes (22 to 122 days pregnant; N = 1286) were scanned without removing belly wool, rescanned after belly wool removal then scanned several times again or slaughtered to determine true pregnancy status. Where ewes were scanned without belly wool removal failure to detect pregnancy was zero or low provided ewes were 40 days pregnant or more. For multiple pregnancies at 41 to 97 days gestation, accuracy rates for unbelly-woolled ewes were generally low (0.67) and variable (0.27 to 0.94). A rectal transducer was also used on ewes 25 to 115 days pregnant (N = 460). Pregnancy detection was accurate when ewes were lying (0.99) but not when standing (0.84). Ewes 47 to 87 days pregnant could not be scanned accurately for litter size whether standing (0.51) or lying (0.65).

Use of the inguinal bare area and of the rectum for sonography in sheep are associated with high error rates. We used linear array transducers. Sector format transducers do offer many theoretical advantages for bare area scanning but we have not been able to realise these advantages in practice.

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PREFERENCES OF HORSES FOR LONG AND CHOPPED HAY

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Studies of feed preferences are useful in defining the most economical rations for horses and in promoting feed intake.

It was the object of this study to identify any preferences of horses for hay when fed in the long or the more expensive chopped form.

Preferences were assessed by determining intakes (g/hour) of both forms of hay which were offered simultaneously and separately to each horse. Both forms were from the same source and all eleven horses had histories of being fed both forms of wheaten hay.

The dry matter intakes of long hay exceeded ($P < 0.01$) that of chopped hay for both adults (1311 ± 288 v 1032 ± 560) and yearlings (743 ± 251 v 495 ± 346). Respective standard deviations are shown. The long form of hay was of similar chemical composition to the chopped hay in percentage of organic matter (95.1 v 94.7), acid detergent fibre (31.3 v 33.1) and nitrogen (0.72 v 0.71). It follows that equine feeders should consider feeding long wheaten hay to growing and adult horses rather than the more expensive chopped form.

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