

Experiment 10.

Brown, E., Tracey, S and Gowers, I. (2013) An investigation to determine the palatability of steamed hay, dry hay and haylage. *Proceedings of British Society of Animal Science Conference*, Nottingham April 2013. p 104

Introduction: In recent years, hay has been replaced by haylage in the diets of stabled horses. Haylage is reported to be highly palatable but can be too high in nutrients for some horses. Hay is more suitable fodder for many horses but can be dusty and induce respiratory disorders. Steamed hay is dust free and has been shown by Payne and Moore-Colyer (2011) to be more palatable than dry and soaked hay. The aim of this study was to determine which fodder, dry hay, steamed hay or haylage was the preferred fodder for stabled horses.

Method: Seven horses stabled at Writtle College Lordships Stud were simultaneously offered 3 hay nets containing either dry hay, haylage or hay that had been steamed for 50 minutes in the HG 600 steamer. Intake was determined by the weight difference in forage, before and after the one hour feeding period. Observations were taken for the first five minutes of each period to record the first, second and third choices of forage. Analysis of variance (ANOVA) followed by a Bonferroni post hoc test were used to determine differences in intake between the 3 forages and Chi squared test to determine differences in first choice of forage.

Results: The overall trial results demonstrated a significantly greater ($P=0.003$) consumption of steamed hay ($6.72\text{kg} \pm 1.17 \text{ s.e}$) compared to haylage ($2.04 \text{ kg} \pm 0.36 \text{ s.e.}$). However, there was no significant difference between steamed hay and dry hay or between haylage and dry hay. The Chi-squared goodness of fit test showed steamed hay to be chosen most often as the first forage to be consumed, followed by haylage and then dry hay ($P = 0.003$).

Conclusion: The results of this experiment demonstrate that steamed hay was the first fodder chosen by horses and they went on to consumed more steamed hay than either haylage or dry hay within the 1 hour feeding period. Steamed hay is therefore a hygienically clean and palatable fodder for stabled horses.