

粒狀型態芻料調製技術開發

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臺灣位處亞熱帶高溫多雨，種植以熱帶牧草為主，夏天生產乾草常因不易曬乾與保存，常因氣候多雨無法製作乾草，延遲收割田間草相老化與品質不佳，利用牧草半乾或地區性小雨將其收穫製作粒狀芻料保存，增加國產芻料多元利用。芻料製粒常引起很多問題，芻料製粒後纖維長度不足的虞慮，粒狀芻料必須保留纖維 1~2.5 長度，符合瘤胃反芻的生理需求。本試驗以打粒機製作不同直徑 6、8 與 10mm 纖維長度比較(圖 1)，10mm 粒徑仍可保留 50%纖維長度大於 10mm 長度，8mm 粒徑仍有 30%保留 7~10mm 纖維長度，6mm 粒徑纖維長度幾乎纖維長度小於 5mm 以下。本試驗以芻料青刈切細 1~2cm 後日曬一天含水率約 20~30% 製作粒狀芻料(圖 2)，冷卻後完成粒狀芻料水分約在 8~10%左右，保存約 3~6 月。

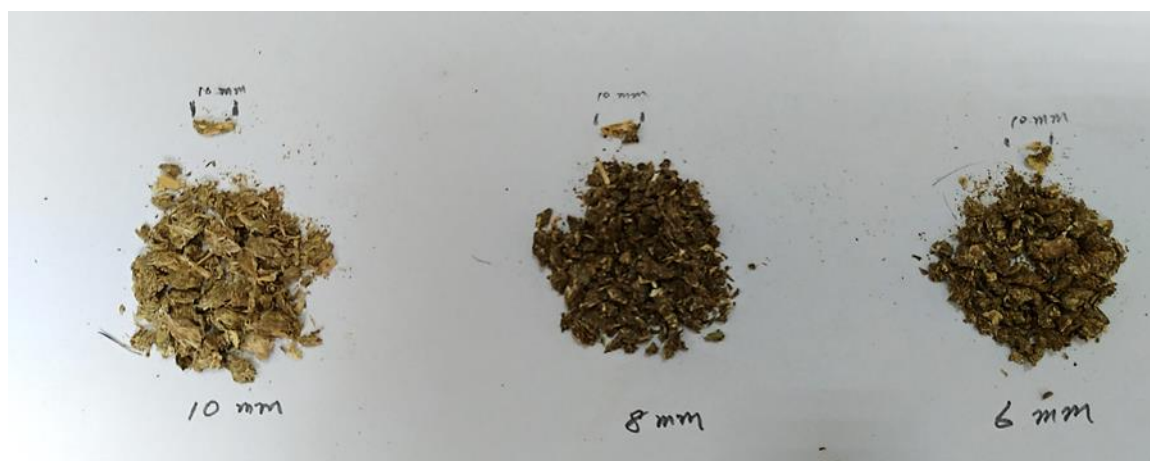


圖 1. 不同直徑 6、8 與 10mm 粒狀芻料纖維長度比較

Fig. 1. Comparison of fiber length of the pelletized forage with different diameters of 6, 8 and 10 mm



圖 2. 粒狀芻料

Fig. 2. The pelletized forage

The development of pelletized forage technology

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Taiwan was located in the subtropical zone with high temperature and rainy conditions. Tropical pastures are the main plantings. In summer, hay production was often difficult to dry and preserve. It is often impossible to produce hay due to the rainy climate. The semi-dry pasture or local rain was used to harvest it to make the pelletized forage for preservation, so as to increase the diversified utilization of domestic forage. The pelletized forage often causes many problems. The fear of insufficient fiber length after the production of pelletized forage and must retain the fiber length of 1~2.5 cm, which was meet with the physiological needs of rumen rumination. In this experiment, the fiber lengths of 6, 8 and 10mm with different diameters were made by a pelletizer (Figure 1). The 10mm particle size can still retain 50% of the fiber length greater than 10mm length, and the 8mm particle size still retains 30% of the 7~10mm fiber length. The fiber length of 6mm particle size is almost less than 5mm in fiber length. In this experiment, the forage was cut into 1~2cm, and the moisture content was about 20~30% for one day in the sun to make

pelletized forage (Figure 2) and was stored for about 3 to 6 months..