不同畜舍型態水電用量調查

<u>蕭庭訓</u>、程梅萍、蘇天明、李恆夫、蕭宗法 行政院農業委員會畜產試驗所

本試驗於分娩舍、肉豬舍、保育舍、乳牛舍等不同型態畜舍安裝水電錶,每月紀錄飼養頭數、水、電錶資料1~2次,計算隻日用電及用水量。結果顯示開放式與密閉式分娩舍用水、電量平均分別為164與270 L/litter/d、4.19與2.36 kwh/head/d,開放式與密閉式保育舍用水、電量平均分別為6.60與17.2 L/head/d、0.08與0.21 kwh/head/d,不同型態肉豬舍之用水量最多達35 L/head/d;用電量少,最高平均為0.05 kwh/head/d,開放式與密閉式乳牛舍用水、電量平均分別為24.9與109 L/head/d、0.04與0.35 kwh/head/d。改善策略分別為勸導降低用水量、以沼氣保溫燈替代原有保溫燈、更換節能照明設施與豬舍屋頂設置絕緣材質。

關鍵詞:調查、畜舍、水電用量

SURVEY OF THE WATER AND ELECTRICITY CONSUMPTION FOR DIFFERENT LIVESTOCK BUILDING.

T. H. Hsiao, M. P. Cheng, T. M. Su, H. F. Lee and T. F. Hsiao Livestock Research Institute, Council of Agriculture, Executive Yuan

The water and kilowatt hour meters were installed in the various types of farrowing houses, finishing houses, nursery houses and dairy barns. The monthly records were applied to calculate the daily water and electricity consumption per head of animal. The results showed the water and electricity consumption of open-type farrowing houses were 164 and 270 L/litter/day, respectively, and close-type were 4.19 and 2.36 kwh/litter/d, respectively. The water and electricity consumption of open-type nursery houses were 6.6 and 17.2 L/head/day, respectively, and close-type were 0.08 and 0.21 kwh/head/d, respectively. The average maximum water and electricity consumption of finishing houses were 35 L/head/d and 0.05 kwh/head/d, respectively. The water and electricity consumption of pen-type water and electricity consumption of pen-type water and electricity consumption of pen-type water and electricity consumption of finishing houses were 35 L/head/d and 0.05 kwh/head/d, respectively. The water and electricity consumption of pen-type water and electricity consumption of open-type dairy barns were 24.9 and 109 L/head/day, respectively, and close-type were 0.04 and 0.35 kwh/head/d, respectively. The strategies proposed by this study included strengthening promotion on reducing water consumption, using biogas as fuel of the piglets warmer, changing the energy saving lamps, and setting up the insulating materials under the roof of pig houses.

Key words: survey, livestock buildings, water and electricity consumption