

# Taro leaf silage and reproduction performances

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Effect of replacing soybean meal by a mixture of taro leaf silage and water spinach on reproduction and piglet performance in Mong Cai gilts

## Abstract

Fifteen Mong Cai gilts weighing  $46 \pm 3.9$  kg at service were used in a Randomized Complete Block Design (RCBD), with five replications of three treatments: TW0, 100% of supplementary protein supplied by soybean meal; TW50, 50% of supplementary protein supplied by soy bean meal and 50% by a mixture of ensiled taro leaves and water spinach, and TW100, 100% of supplementary protein supplied by a mixture of ensiled taro leaves and water spinach. In the pregnancy period the feed was restricted to 1.5% of live weight. In the lactation period the gilts were fed increasing amounts of the same diet up to five days after farrowing, and from then onwards feeds were offered *ad libitum*

Total dry matter (DM) intake decreased slightly with increased amounts of the mixture of taro leaf silage and water spinach. Live weights at farrowing and weaning declined as the amount of the mixture of taro leaf silage and water spinach increased. The feed conversion ratios (FCR) for treatments TW0, TW50 and TW100 were 3.09, 3.96 and 5.02 kg feed/kg gain, respectively. Live weight loss and percentage live weight loss in lactation were not affected by diet. The number of piglets born alive and at weaning did not differ among treatments ( $P > 0.05$ ). However, live weights of the litter at birth and weaning and weights of individual piglets declined as the foliages replaced soybean meal. Mortality to weaning ranged from 10.2 (TW0) to 7.5% (TW50) and was not affected by the treatments.

It is concluded that reproduction in the Mong Cai breed, measured as numbers of piglets born alive and weaned, and the interval from weaning to estrus was satisfactory when taro leaf silage and water spinach replaced soybean meal. However, weights of piglets at weaning decreased, with a linear trend from 35.9 to 25.1 kg as the soybean was replaced by the forages.

### Key words:

Mong Cai gilts, piglet performance, reproduction, taro leaf silage, water spinach



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