

## CROSSBREEDING AND UPGRADING LOCAL INDIGENOUS HORSES FOR SIZE AND PERFORMANCE

Bashir Ahmad and Rosnina Yusoff

*Faculty of Veterinary Medicine  
Universiti Putra Malaysia, 43400 UPM, Serdang, Selangor,  
Malaysia*

**Keywords:** thoroughbred, Kelantan ponies, Malaysian horse, thoroughbred cross

### Introduction

The local indigenous ponies or Kelantan ponies were considered as an indigenous breed which are mainly found in the state of Kelantan. These ponies were actively use for riding and racing and have become part of the state culture. They are strong animals with high disease resistant in spite of poor and traditional management systems. However their small size hinders breed development for international equestrian events.

### Materials and Methods

The management and disease status of Kelantan ponies was obtained through questionnaires, personal observation and communication. A group of 3 local ponies were selected for crossbreeding with Thoroughbred Stallion. The cross will be raised for future backcross with thoroughbred so as to reach

2 or 3 backcross to ensure bigger Kelantan pony crosses that have characteristic of adaptation and disease resistance as in local ponies but of size suitable for international equestrian events. The performance of the crosses and backcrosses will be studied in term of foal size and weight, growth rate, chromosome evaluation, reproductive performance, disease resistance and any other related criteria.

### Results and Discussion

Kelantan ponies were graded into 3 classes with adult height range of 44 inches to 52 inches. Their average weight range from 150 to 250kg.compared with Thoroughbred horses averaging a height of 59 to 63 inches and weight of 420 to 480 kg. Thoroughbred crossed with Kelantan ponies averaged at 300 kg and height of 56 inches. They were found to be relatively bigger but still small compared to pure Thoroughbred. Thoroughbred Kelantan Pony Crosses were also found to be 20 to 30% bigger in term of birth weight, daily weight gain and height compared with ponies. Currently, two recently born crossbred foals are being studied. The adult size of the crosses needs to be improved to the height of international size of horses by further back cross with Thoroughbred.

### Conclusions

Crossing the Kelantan Pony with the thoroughbred stallion has resulted in the birth of two foals. The Thoroughbred-Kelantan Pony crosses were 20 to 30% higher in birth weight, daily weight gain, and height than the pure Kelantan Ponies.