

A PRELIMINARY REPORT ON THE GROWTH OF JAVANESE THIN-TAIL SHEEP AND  
THEIR CROSSES WITH SUFFOLK, POLLED DORSET AND WILTSHIRE HORN RAMS

\*\*

\*\*\*

D.J.S. HETZEL , N.G. YATES\*, J.M. OBST , T. CHANIAGO\* AND B. BAKRIE\*

The exceptionally high reproductive rate of the native Indonesian sheep has been reported by Obst *et al.* (1980). Currently, exotic breeds of sheep from temperate countries are being introduced into Indonesia in an attempt to improve the growth rate of local animals by crossbreeding. An experiment was set up to evaluate the productivity of these crosses.

Eighty-one mixed age Javanese thin-tail ewes were mated with Suffolk, Polled Dorset and Wiltshire Horn rams. Six rams of each breed were used on a rotational basis. Contemporary JTT sheep were obtained from a breeding flock maintained on site. The housing and management of the sheep were similar to that outlined by Obst *et al.* (1980). All sheep were fed a pelleted diet containing 50% elephant grass (*Pennisetum purpureum*), 40% Beef Kwik concentrate (Cargill, Bogor) and 10% fishmeal *ad libitum*. Lambs were weaned at three months of age and placed in individual pens.

TABLE 1. Growth and survival of Javanese thin-tail sheep and their crosses with exotic rams

Trait <sup>(1)</sup>	J.T.T.	Suffolk x J.T.T.	Polled Dorset x J.T.T.	Wiltshire Horn x J.T.T.	S.D.
Number lambs weaned	26	17	38	29	-
Live weight - birth (lambs alive at weaning)	2.3	2.9	2.6	2.7	0.7
- 13 weeks (weaning)	16.0	18.6	18.4	18.9	4.7
- 22 weeks (n) <sup>(2)</sup>	24.6(18)	31.2(17)	30.8(28)	30.1(17)	4.1
% survival birth-weaning	68	51	70	81	

(1) Average for males and females

(2) Excludes lamb mortality due to death of ewe

Average number of lambs born per parturition for the JTT ewes ranged from 1.83 - 2.0 for each of the groups. Preweaning mortality was high in all groups, particularly within three days of birth. The three crossbred groups grew at similar rates and were significantly heavier than JTT sheep at all ages. On average they were heavier by 18% at birth, 17% at weaning and 25% at 22 weeks of age. Growth to weaning was possibly limited by milk production of the JTT ewes. Since the comparison will be based on yearly productivity, final conclusions regarding the desirability of crossbreeding cannot be made until data on reproductive performance and frequency of lambing for the JTT and F<sub>1</sub> ewes are collected.

OBST, J.M., BOYES, T. and CHANIAGO, T. (1980). *Proc. Aust. Soc. Anim. Prod.* 13:321.

\* Project for Animal Research and Development, P.O. Box 123, Bogor, West Java, Indonesia.

\*\* CSIRO, Division of Animal Production, University of New England, Armidale, NSW 2350, Australia.

\*\*\* Department of Agriculture Victoria, Pastoral Research Institute, Hamilton, Vic. 3300, Australia.