# Performance of Grade-1 Kids as A Result of Grading-Up Between Local Goats and Boer Goats

#### I. Harris, A. Dakhlan, and S. Suharyati

Department of Animal Science, Faculty of Agriculture, University of Lampung email: idalina@unila.ac.id or jptfp@unila.ac.id

## **ABSTRACT**

This research was conducted to get information on performances of grade-1 kid as a result of grading-up between Etawa Grade goat or Kacang Goat and Boer Goat. Some variables observed were litter size, sex, birth type, and birth weight. Does used in this research were 80 heads, consisted of Etawa grade does (40 heads) and Kacang does (40 heads). They were reared by the farmers intensively in Batu Kramat Village, Kotaagung Timur District, Tanggamus Regency. Artificial Insemination was applied for the mating. Twenty Etawa grade does and twenty Kacang does were mated to Boer buck (BP and BK), while twenty Etawa grade does and twenty Kacang does were mated to Etawa buck and Kacang buck respectively (PP and KK). The result showed that litter size in all mating (BP, BK, PP, and KK) was not significantly different (P>0.05). Sex of KK male kid was the highest (60%), while the lowest was BK grade 1 (33%). BK female kid was the highest (67%), while the lowest was KK kid; the birth type (twin and triplet) of PP was higher (70%) than BP (45%); birth weight of BP was higher (P<0.05) than PP, and birth weight of BK were also higher (P<0.05) than KK.

Key words: grading-up, grade 1, Boerawa and Boercang goat

#### INTRODUCTION

Lampung province has a potential chance in supporting the development of animal sector. Lampung province has the ability to hold ruminant 1.41 milion animal unit, but only 33.2% was used (Supriyono, 2005). So the chance for increasing animal production is still open. Beside of that, Handiman and Tawaf (2005) stated that Lampung province was the fourth rank in goat population (815,667=7%) in Indonesia after Central Java (22%), East Java (18%), and West Java (10%). The potency and chance were taken by Lampung Government by developing beef cattle and Boerawa goat. The efforts were supported by the Indonesia Government (General Directorate of Husbandry) that in 2004 decided "Lampung as centre of Boerawa development".

Productivity of local goat (Etawa grade and Kacang goat) is still low. Performance of Etawa grade goats that is also dairy type affected low productivity in meat. While productivity of Kacang goat performance is very low because of its small body, so meat production of Kacang goat is low. To improve local goat productivity, it is important to introduce temperate or tropical exotic breeds, for example Boer goats. Boerawa

goat (Filial 1 or Grade 1) is crossbreed between Boer buck and Etawa grade does. In Lampung Boerawa goat was crossed by Boer buck continuously, so the progeny was named grade-1, grade-2, etc.

Boerawa goat development in Lampung was pioneered since 2001 by importing two Boer buck from Australia and two Boerawa buck from South Sulawesi (Hadi, 2006). By nowdays there was no information on performance of this crossbreed (Boerawa grade-1 kid).

The objective of this study was to get information on performance of Boerawa kid (Boer buck x Etawa grade does) and Boercang kid (Boer buck x Kacang does).

## MATERIALS AND METHODS

Fourty Etawa grade does and fourty Kacang does were used in this study. Twenty Etawa grade does and twenty Kacang does were crossed by Boer buck, while twenty Etawa grade does and twenty Kacang does were crossed by Etawa grade Buck and Kacang Buck respectively. They were inseminated artficially using semen of Boer buck and Etawa grade buck, unless twenty Kacang does that were mated naturally. All does were reared intensively by farmers in Batu