

PENGARUH PERSILANGAN SAPI PERANAKAN ONGOLE DENGAN SAPI JAWA TERHADAP PERTUMBUHAN PEDET

Septian Dwi Raharja

21/480964/PT/09015

INTISARI

Penelitian ini bertujuan untuk mengetahui laju pertumbuhan ukuran tubuh dan penambahan bobot badan pedet hasil persilangan pejantan PO dengan induk Jawa (POXJawa) dari lahir sampai 12 bulan. Penelitian ini menggunakan 10 ekor pedet yang terdiri atas 5 ekor POXJawa dan 5 ekor Jawa. Pedet dipelihara bersama induk hingga disapih pada umur 6 bulan. Pemeliharaan dilanjutkan hingga pedet berusia 12 bulan. Variabel yang diukur meliputi penambahan ukuran tubuh dan bobot badan harian pedet POXJawa dan Jawa selama 12 bulan. Ukuran tubuh dan bobot badan dikoreksi ke jenis kelamin jantan. Data yang diperoleh dianalisis menggunakan *Independent sample T-Test*. Pertambahan panjang badan, tinggi gumba, lingkaran dada, dan bobot badan harian fase prasapih pedet POXJawa dan Jawa berturut-turut masing-masing adalah $0,19 \pm 0,02$ dan $0,17 \pm 0,01$ cm/hari, $0,11 \pm 0,01$ dan $0,08 \pm 0,01$ cm/hari, $0,21 \pm 0,04$ dan $0,16 \pm 0,02$ cm/hari, serta $0,47 \pm 0,02$ dan $0,36 \pm 0,01$ kg/hari. Pertambahan panjang badan, tinggi gumba, lingkaran dada dan bobot badan harian fase prasapih pedet POXJawa lebih tinggi ($p < 0,05$) dibandingkan dengan pedet Jawa. Pertambahan panjang badan, tinggi gumba, lingkaran dada, dan bobot badan harian fase pascasapih pedet POXJawa dan Jawa berturut-turut masing-masing adalah $0,16 \pm 0,01$ dan $0,15 \pm 0,01$ cm/hari, $0,11 \pm 0,00$ dan $0,12 \pm 0,00$ cm/hari, $0,18 \pm 0,00$ dan $0,18 \pm 0,01$ cm/hari, serta $0,42 \pm 0,01$ dan $0,36 \pm 0,02$ kg/hari. Pertambahan tinggi gumba dan lingkaran dada harian fase pascasapih pedet POXJawa dan Jawa berbeda tidak nyata, tetapi pertambahan panjang badan dan bobot badan harian fase pascasapih POXJawa lebih tinggi ($p < 0,001$) dibandingkan dengan pedet Jawa. Disimpulkan bahwa persilangan indukan Jawa dengan pejantan PO meningkatkan pertumbuhan ukuran tubuh dan bobot badan pedet pada fase prasapih dan pascasapih.

Kata kunci: Ukuran tubuh, Bobot badan, Sapi PO, Sapi Jawa

THE EFFECT OF CROSSBREEDING ONGOLE CATTLE WITH JAVANESE CATTLE ON CALF GROWTH

Septian Dwi Raharja

21/480964/PT/09015

ABSTRACT

This study aimed to determine the growth rate of body size and weight gain of calves resulting from crossing PO bulls with Jawa cows (POXJawa) from birth to 12 months. The study used 10 head of calves consisting of 5 head of POXJawa and 5 head of Javanese calves. The calves were kept with their mothers until weaning at 6 months of age. Raising continued until the calves reached 12 months old. The measured variables included the daily in body size and weight of POXJawa and Jawa calves over 12 months. Body size and weight were corrected for male calves. The obtained data were analyzed using an independent sample T-test. The daily in body length, wither height, heart girth, and body weight gain in the pre-weaning phase of POXJawa and Jawa calves were 0.19 ± 0.02 and 0.17 ± 0.01 cm/day, 0.11 ± 0.01 and 0.08 ± 0.01 cm/day, 0.21 ± 0.04 and 0.16 ± 0.02 cm/day, and 0.47 ± 0.02 and 0.36 ± 0.01 kg/day, respectively. The daily in body length, withers height, heart girth, and body weight gain of POXJawa calves during the pre-weaning phase was higher ($p < 0.05$) than those of Jawa calves. The daily in body length, withers height, heart girth, and body weight gain during the post-weaning phase of POXJawa and Jawa calves were 0.16 ± 0.01 and 0.15 ± 0.01 cm/day, 0.11 ± 0.00 and 0.12 ± 0.00 cm/day, 0.18 ± 0.00 and 0.18 ± 0.01 cm/day, and 0.42 ± 0.01 and 0.36 ± 0.02 kg/day, respectively. The daily in withers height and heart girth during the post-weaning phase for POXJawa and Jawa calves was not significantly different, but the daily body length and body weight gain in the post-weaning phase of POXJawa calves was higher ($p < 0.001$) than those of Jawa calves. It is concluded that crossing Jawa cow with PO bull enhances the growth in body size and body weight growth of calves during both the pre-weaning and post-weaning phases.

Keywords: Body size, Body weight, PO cattle, Jawa cattle