

ABSTRAK

KONSENTRASI HORMON TESTOSTERON PADA PEDET PERSILANGAN SAPI WAGYU DAN SAPI PERANAKAN ONGOLE (PO) DI DAERAH TEMANGGUNG JAWA TENGAH

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Program pemuliaan sapi melalui *cross breeding* merupakan upaya yang umum dilakukan dalam usaha meningkatkan produktivitas dan kualitas ternak, khususnya sapi potong. Pada pedet bangsa sapi baru (*new composite breed*) evaluasi penting dilakukan untuk menilai performa dari hasil persilangan tersebut. Penelitian ini bertujuan untuk mengevaluasi kadar hormon testosteron pada pedet jantan hasil persilangan sapi Wagyu jantan jenis Akaushi (Australian Red Wagyu) dan sapi betina lokal Peranakan Ongole (PO).

Pedet berusia 9 bulan berjumlah 5 ekor berasal dari Temanggung, Jawa Tengah. Sampel darah pedet diambil melalui vena coccygeal yang ditampung dalam tabung non-EDTA dan disentrifugasi. Serum yang didapat kemudian diuji menggunakan ELISA kit Testosteron (EIA-1559).

Pemeriksaan pada serum pedet jantan persilangan sapi Wagyu dan sapi PO menunjukkan rata-rata kadar testosteron 4,383 ng/ml dengan rentang 0.506 – 10.96 ng/ml. Hasil penelitian menunjukkan bahwa konsentrasi hormon testosteron tertinggi dimiliki oleh Sugi (10.96 ng/ml) dan konsentrasi hormon testosteron terendah dimiliki oleh Bima (0.506 ng/ml).

Kata kunci : serum, Wagyu, Peranakan Ongole (PO), testosteron, ELISA

ABSTRAC

CONCENTRATION OF TESTOSTERONE HORMONE IN CALVES OF WAGYU BULLS AND PERANAKAN ONGOLE (PO) COWS FROM TEMANGGUNG, CENTRAL JAVA

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Cattle breeding program through cross breeding is a common effort in improving the productivity and quality of livestock, especially beef cattle. In the calf of a new composite breed, an important evaluation is done to assess the performance of the cross breeding product. The aim of this study was to evaluate testosterone levels in male calves from male Wagyu bull Akaushi breed (Australian Red Wagyu) and local female Peranakan Ongole (PO) cows.

5 calves with the age of 9 months old from Temanggung, Jawa Tengah was used in this research. The blood sample from the calves was taken via coccygeal vein, was placed in a non-EDTA tube, and was centrifuged. The serum obtained was then tested with a testosterone ELISA kit (EIA-1559).

The examination of the serum obtained from the calves that were cross bred with Wagyu bulls and PO cows revealed that the average level of testosterone was 4.383 ng/ml with the range of 0.506 – 10.96 ng/ml. The results showed that the bull named Sugi had the highest concentration of testosterone hormones (10.96 ng/ml) and the lowest level of testosterone hormones were in the bull named Bima (0.506 ng/ml).

Key word : serum, Wagyu, Peranakan Ongole (PO), testosterone, ELISA