KARAKTERISTIK EKSTERIOR DAN MORFOMETRIK SAPI BALI DAN PERSILANGANNYA DENGAN SAPI ANGUS DI KECAMATAN PELEPAT ILIR, BUNGO, JAMBI

INTISARI

Novadhila Rahmi
16/407588/PPT/00969

Penelitian ini bertujuan untuk mengetahui karakteristik eksterior dan morfometrik sapi Bali dan persilangannya dengan sapi Angus (AngusxBali). Penelitian dilakukan di Kecamatan Pelepat Ilir, Bungo, Jambi pada Desember 2017 sampai September 2018. Materi yang diamati sebanyak 142 ekor terdiri atas 68 ekor sapi Bali dan 74 ekor keturunan F1 AngusxBali yang diamati karakteristik eksteriornya, 50 ekor di antaranya diukur morfometrik pada 2 kelompok umur 7-12 dan 13-18 bulan. Morfometrik diukur dengan metode citra digital menggunakan aplikasi *ImageJ* dan secara manual menggunakan mistar dan pita ukur. Data karakteristik eksterior diolah secara deskriptif kuantitatif dan kualitatif sedangkan data morfometrik dianalisis variansi menggunakan rancangan acak kelompok pola faktorial 2x2. Sapi AngusxBali memiliki karakteristik warna hitam dan coklat kehitaman pada tubuh dan kaki bawah, coklat muda pada pantat serta sapi betina tidak memiliki tanduk sedangkan sapi jantan umur 13-18 bulan memiliki tanduk. Sapi Bali memiliki karakteristik warna merah bata dan kekuningan pada tubuh dan putih pada pantat dan kaki bawah serta sapi jantan maupun betina mempunyai tanduk pada umur kurang dari satu tahun. Pada umur 7-12 bulan panjang badan, tinggi gumba, dalam dada, lingkar dada, tinggi pinggul, lebar dada sapi AngusxBali dan Bali masing-masing berturut-turut adalah 101,69±4,89 dan 86,27±6,15 cm, 105,70±4,87 dan 95,33±5,66 cm, 52,19±3,57 dan 45,48±3,65 cm, 135,34±10,08 dan 117,05±10,50 cm, 108,80±5,11 dan 96,53±6,25 cm, 28,60±3,55 dan 25,29±4,12 cm. Pada umur 7-12 bulan morfometrik vital tubuh sapi AngusxBali lebih besar (P<0,05) dari pada sapi Bali. Pada umur 13-18 bulan panjang badan, tinggi gumba, dalam dada, lingkar dada, tinggi pinggul, lebar dada, lebar pinggul sapi AngusxBali dan Bali masing-masing berturut-turut adalah 93,68±5,66 dan 108,61±7,55 cm, 112,68±4,62 dan102,04±3,73 cm,57,14±3,56 dan 50,34±3,17 cm, 145,35±13,14 dan 127,20±5,57 cm, 115,31±3,71 dan 103,57±2,73 cm, 31,61±4,83 dan 24,32±1,50 cm, 37,01±6,67 dan 30,61±2,73cm. Pada umur 13-18 bulan morfometrik vital tubuh sapi AngusxBali lebih besar (P<0,05) dari pada sapi Bali. Disimpulkan bahwa perkawinan silang sapi Bali dengan sapi Angus merubah karakteristik eksterior dan meningkatkan morfometrik keturunannya.

Kata kunci: Karakteristik eksterior, Morfometrik, Sapi Bali, Sapi AngusxBali

THE EXTERIOR CHARACTERISTICS AND MORPHOMETRICS OF BALI CATTLE AND THE CROSSING WITH ANGUS IN PELEPAT ILIR SUB-DISTRICT, BUNGO, JAMBI

ABSTRACT

Novadhila Rahmi
16/407588/PPT/00969

This study was aimed to determine the exterior characteristics and morphometrics of Bali cattle and their crossing with Angus cattle (AngusxBali). The study was conducted in Pelepat Ilir, Bungo Subdistrict, Jambi in December 2017 to September 2018. The materials were 142 cattle consisting of 68 Bali and 74 F1 AngusxBali cattle observed exterior characteristics, 50 of which were measured morphometrics in two groups 7-12 and 13-18 months of age. Exterior characteristics were identified by directly observation at the cattle's exterior. Morphometrics were measured by the digital image method using ImageJ application and manually using a stick and tape measuring. Exterior characteristics data were analyzed in descriptive quantitative and qualitative while the morphometric data were analyzed by analysis of variance in completely randomized block design by 2x2 factorial. AngusxBali cattle had black and blackish brown characteristics on the body and leg, light brown on the buttock and female cattle was polled while male was horned at the 13-18 months of age. Bali cattle had brick and yellow red characteristics on the body and white on the buttock and leg as well as male and female were horned at less than one year of age. At 7-12 months of age the result showed that body length, wither height, heart depth, heart girth, hip height, heart width of AngusxBali and Bali cattle were 101.69±4.89 and 86.27±6.15 cm, 105.70±4.87 and 95.33±5.66 cm, 52.19±3.57 and 45.48±3.65 cm, 135.34±10.08 and 117.05±10.50 cm, 108.80±5.11 and 96.53±6.25 cm, 28.60±3.55 and 25.29±4.12 cm respectively. The vital morphometrics of AngusxBali at 7-12 month of age were greater ($P<0.05$) than those of Bali cattle. At 13-18 months of age showed that body length, wither height, heart depth, heart girth, hip height, heart width, hip width of AngusxBali and Bali cattle were 93,68±5,66 and 108.61±7.55 cm,112.68±4.62 and 102.04±3.73 cm, 57.14±3.56 and 50.34±3.17 cm, 145.35±13.14 and 127.20±5.57 cm, 115.31±3.71 and 103.57±2.73 cm, 31.61±4.83 and 24.32±1.50 cm, 37.01±6.67 and 30.61±2.73 cm respectively. The vital morphometrics of AngusxBali at 13-18 month of age were greater ($P<0.05$) than those of Bali cattle. It is concluded that crossing Bali with Angus cattle change exterior characteristics and enhance morphometrics of the offspring.

Keywords: Exterior characteristics, Morphometrics, Bali cattle, AngusxBali cattle