

INTISARI

STATUS FISILOGIS DAN MAKROMINERAL SAPI BALI DAN SAPI PERANAKAN ONGOLE DI KEBUN PENDIDIKAN PENELITIAN DAN PENGEMBANGAN PERTANIAN UNIVERSITAS GADJAH MADA

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Makromineral esensial merupakan unsur yang sangat dibutuhkan untuk fisiologis ternak. Penelitian ini bertujuan untuk mengetahui hubungan data fisiologis sapi dan status makromineral dalam darah pada sapi bali dan sapi peranakan ongole di Kebun Pendidikan Penelitian dan Pengembangan Pertanian UGM. Delapan ekor sapi bali dan 21 ekor sapi peranakan ongole digunakan dalam penelitian ini. Setiap sapi didata status fisiologisnya meliputi frekuensi nafas, pulsus dan suhu tubuh. Setiap sapi diambil sampel darah sebanyak 5 mL melalui vena jugularis atau vena coccygea, kemudian diujikan kadar makromineralnya.

Hasil pemeriksaan makromineral pada penelitian ini, diketahui bahwa 4 ekor sapi bali dan 5 ekor sapi peranakan ongole mengalami defisiensi kalsium. Seekor sapi bali dan 5 ekor sapi PO mengalami defisiensi magnesium, 7 ekor sapi bali dan 7 ekor sapi PO mengalami defisiensi natrium, seekor sapi bali dan seekor sapi PO mengalami defisiensi klorida serta seekor sapi bali dan 3 ekor sapi PO mempunyai kadar fosfor diatas normal. Sapi-sapi dengan penurunan 2-13% dan peningkatan kadar makromineral tersebut masih menunjukkan status fisiologis yang normal.

Berdasarkan hasil penelitian ini disimpulkan bahwa sapi di KP4-UGM dengan penurunan kadar makromineral sampai 13% masih mempunyai status fisiologis normal.

Kata kunci: makromineral, sapi bali, sapi peranakan ongole, status fisiologis

ABSTRACT

PHYSIOLOGY AND MACROMINERALS STATUS OF BALI CATTLE AND ONGOLE CROSSBRED CATTLE AT KEBUN PENDIDIKAN PENELITIAN DAN PENGEMBANGAN PERTANIAN UNIVERSITAS GADJAH MADA

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Essential macrominerlas is an elemen that needed for the livestock physiology. This study aimed to determine the relationship between the physiological status and macrominerals levels in the blood of bali cattles and ongole crossbred cattles in Kebun Pendidikan Penelitian dan Pengembangan Pertanian Universitas Gadjah Mada (KP4-UGM). A lot of 8 bali cattles and 21 ongole crossbred cattles used in this study. The physiological status of cattle including breathing frequency, pulse and body temperature were recorded. About 5 ml blood samples from every cow is taken through the jugular vein or coccygea veins, then its macrominerals level was tested.

Macrominerals examination results in this study, showed that 4 bali cattles and 4 ongole crossbred cattles had calcium deficiency. One bali cattle and 5 ongole crossbred cattles had magnesium deficiency, 7 bali cattles and 7 ongole crossbred cattles had sodium deficiency, 1 bali cattle and 1 ongole crossbred cattle had chloride deficiency and 1 bali cattle and 3 ongole crossbred cattle have phosphorus levels above of normal. Cattles with 2-13% reduction macrominerals and increased phosphorus level still in this study showed normal physiological status.

Based on the results of this study it is concluded that the cattle in KP4-UGM with decreased levels of macrominerals up to 13% still have physiological status.

Keyword: macrominerals, bali cattle, ongole crossbred cattle, physiology status.