

## **INTISARI**

### **KADAR KALIUM DAN NATRIUM DALAM DARAH PADA KEJADIAN SAPI AMBRUK DI DAERAH SLEMAN, GROBOGAN DAN GUNUNGKIDUL**

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Unsur mineral sangat dibutuhkan untuk proses fisiologis hewan. Mineral esensial makro dan mikro terdapat dalam tanaman hijau atau rumput pakan ternak dan konsentrat. Kekurangan unsur mineral dalam pakan yang diberikan pada ternak dapat menyebabkan defisiensi mineral. Penelitian ini bertujuan untuk mengevaluasi kadar kalium dan natrium pada sapi potong ambruk yang berasal dari Sleman (6 ekor), Grobogan (12 ekor) dan Gunungkidul (6 ekor). Setiap sapi diambil sampel darah sebanyak 5 ml melalui vena jugularis. Sampel darah yang diperoleh disentrifugasi selama 10 menit dengan kecepatan 8000rpm, kemudian analisis kalium menggunakan Cobas 6000 analyzer series module c 501.

Hasil pemeriksaan kadar kalium dan natrium dalam serum sapi potong ambruk menunjukkan 92% (22 ekor) memiliki kadar kalium normal, di bawah normal 4% (1 ekor) dan di atas normal 4% (1 ekor), kadar natrium normal sebanyak 79 % (19 ekor) di bawah normal 13% (3 ekor) dan di atas normal 8 % (2 ekor). Penurunan maupun kenaikan kadar kalium dan natrium bersifat relatif dan absolut.

Berdasarkan hasil penelitian disimpulkan bahwa sapi potong ambruk dari Sleman, Grobogan dan Gunungkidul tidak pasti disebabkan oleh penurunan kadar kalium dan natrium. Kadar kalium berhubungan dengan kadar natrium. Perbedaan kadar kalium dan natrium pada tiap individu sapi kemungkinan disebabkan beberapa faktor antara lain, pakan, lingkungan, cara pemeliharaan, kondisi fisiologis dan unsur mineral lain.

**Kata kunci:** *sapi potong, ambruk, sampel darah, kalium, natrium*

## ABSTRACT

### THE LEVEL OF BLOOD POTASSIUM AND SODIUM OF COLLAPSE BEFF CATTLE FROM SLEMAN, GROBOGAN AND GUNUNGKIDUL

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Essential elements such as micro and macrominerals have an important role in physiological processes in animals. Essential macro and micro minerals contained in forage crops or fodder grasses and concentrate. Deficiencies of minerals in the feed given can cause mineral deficiency. This study was conducted to evaluate potassium and sodium of collapse beef cattle in Sleman (6 cattle), Grobogan (12 cattle) and Gunungkidul (6 cattle). Five ml blood samples were taken from jugular vein. Blood samples were centrifuged 8000 rpm for 10 minutes, then the potassium levels were analyzed using Cobas 6000 analyzer series c 501 module.

The results of the examination of serum potassium and sodium levels in beef cattle shows the percentage normal blood potassium levels 92% (22 cattle), under normal 4% (1 cattle) and above the normal 4% (1 cattle), normal blood sodium levels 79% (19 cattle), under normal 13% (3 cattle) and above the normal 8% (2 cattle). The decrease or increase potassium and sodium levels are relative and absolute.

Based on this study, it can be concluded that, collapse beef cattle in Sleman, Grobogan and Gunungkidul are not necessarily caused by potassium and sodium deficiency. Potassium levels associated with high levels of sodium. Differences levels of potassium and sodium was caused by some factors such as feed, environment and husbandry management, physiological condition and other mineral elements.

**Keywords:** *beff cattle, collapse, blood sample, potassium, sodium*