

## Metabolite Status of Bali Cows during the Last Trimester of Pregnancy

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**Abstract.** The objective of this study was to present the metabolite status especially glucose, blood urea nitrogen (BUN), and creatinine of Bali cows during the last trimester of pregnancy. The study was conducted in smallholder farms in Bantaeng. A total of 21 Bali cows in the late gestation period were enrolled in the present study. Blood samples were collected twice at two months interval from all cows in the morning via jugularis vein into evacuated vacuum tubes. After collection, a drop of sample were taken for glucose test, then the samples were kept at 4°C and were centrifuged within 4 h at 1500 x g for 15 min to collect plasma. The plasma was then stored frozen at -20°C until analyzed for BUN and creatinine. The results of this study showed that there was no significant different ( $P=0.5944$ ) concentration of glucose ( $56.95\pm 18.41$  mg/dL vs  $53.73\pm 9.32$  mg/dL) between two months interval blood collections. Similarly, concentrations of BUN and creatinine did not showing significant different ( $13.85\pm 4.23$  mg/dL vs  $11.69 \pm 6.14$  mg/dL;  $P=0.3495$ ), and ( $1.61\pm 0.32$  mg/dL vs  $1.51\pm 0.17$  mg/dL;  $P=0.3920$ ), respectively. In conclusion, metabolite status of Bali cows in late pregnancy was in normal line.

**Keywords:** Bali cows, Glucose, Blood urea nitrogen, Creatinine, Late pregnancy

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# Status Metabolit Ternak Sapi Bali pada Kebuntingan Trimester Terakhir

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**Abstrak.** Tujuan penelitian ini adalah untuk mengetahui status metabolit khususnya glukosa, blood urea nitrogen (BUN), dan kreatinin induk sapi Bali pada kebuntingan trimester terakhir. Penelitian ini dilakukan di Kabupaten Bantaeng dengan menggunakan ternak-ternak sapi milik petani-peternak. Sebanyak 21 ekor induk sapi Bali pada periode kebuntingan akhir digunakan pada penelitian ini. Sampel darah dikoleksi dengan interval dua bulan pada semua ternak pada pagi hari melalui vena jugularis ke dalam tabung vakum. Setelah dikoleksi, setetes darah diambil untuk uji glukosa, kemudian sampel disimpan pada suhu 4°C dan kemudian disentrifugasi dalam waktu 4 jam pada 1500 x g selama 15 menit untuk diambil plasma darahnya. Plasma kemudian disimpan pada suhu -20°C sampai dilakukan analisa BUN dan kreatinin. Hasil penelitian menunjukkan bahwa tidak terdapat perbedaan yang nyata ( $P=0,5944$ ) terhadap konsentrasi glukosa ( $56,95\pm 18,41$  mg/dL vs  $53,73\pm 9,32$  mg/dL) antara dua bulan interval pengambilan sampel darah. Demikian halnya dengan konsentrasi BUN dan kreatinin tidak menunjukkan perbedaan yang nyata ( $13,85\pm 4,23$  mg/dL vs  $11,69 \pm 6,14$  mg/dL;  $P=0,3495$ ), dan ( $1,61\pm 0,32$  mg/dL vs  $1,51\pm 0,17$  mg/dL;  $P=0,3920$ ). Dapat disimpulkan bahwa status metabolit induk sapi Bali pada kebuntingan akhir pada penelitian ini masih pada kondisi yang normal.

**Keywords:** Induk sapi Bali, Glukosa, Blood urea nitrogen, Kreatinin, Kebuntingan Akhir

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