

INTISARI

PENGARUH RUMPUT LAUT (*Sargassum sp.*) TERHADAP KADAR GLUKOSA KAMBING YANG DITRANSPORTASIKAN SELAMA 12 JAM

Hanif Abdul Hakim

16/398199/KH/08970

Transportasi ternak adalah hal yang penting dalam proses pemenuhan kebutuhan daging beberapa daerah di Indonesia. Proses transportasi yang tidak baik akan menyebabkan stress pada hewan. Rumput laut (*Sargassum sp.*) adalah bahan alami yang diduga dapat mengurangi tingkat stres karena mengandung komposisi dan nutrisi yang dibutuhkan tubuh. Tujuan penelitian ini adalah untuk mengetahui pengaruh ekstrak *Sargassum sp.* terhadap kadar glukosa darah kambing saat ditransportasikan selama 12 jam. Pada penelitian ini menggunakan kambing Jawa Randu yang ditransportasikan selama 12 jam yang terbagi menjadi 3 perlakuan yaitu: pemberian ekstrak rumput laut (*Sargassum sp.*), pemberian Vitamin B1, dan pemberian aquadest. Pengambilan sampel darah dilakukan saat awal dan akhir transportasi. Hasil penelitian menunjukkan bahwa kambing dengan perlakuan pemberian ekstrak *Sargassum sp.* mengalami kenaikan kadar glukosa yang paling rendah yaitu $11,4 \pm 13,3$ ng/dl dibandingkan pemberian *Vet B-1* ($18 \pm 16,01$ ng/dl) dan aquadest ($24 \pm 21,2$ ng/dl). Hasil analisis statistik menunjukkan tidak ditemukan adanya perbedaan yang signifikan pada kenaikan kadar glukosa setiap kelompok perlakuan. Berdasarkan hasil penelitian dapat disimpulkan bahwa pemberian ekstrak rumput laut (*Sargassum sp.*) berpotensi mencegah kenaikan kadar glukosa pada kambing yang ditransportasikan selama 12 jam.

Kata kunci: transportasi ternak, stres, *Sargassum sp.*, kadar glukosa darah

ABSTRACT

THE EFFECT OF SEAWEED (*Sargassum Sp.*) ON GLUCOSE LEVELS OF GOATS BEING TRANSPORTED FOR 12 HOURS

Hanif Abdul Hakim

16/398199/KH/08970

Livestock transportation is important in the process of fulfilling the meat needs for some regions in Indonesia. An inappropriate process of transportation will cause stress on animals. Seaweed (*Sargassum sp.*) is a natural ingredient believed to reduce stress levels because it contains the compositions and nutrients that the body needs. The purpose of the research is to identify the effects of *Sargassum sp.* on blood glucose levels of goats which were transported for 12 hours. The research objects were Jawa Randu goats which were transported for 12 hours and divided into 3 groups of treatment: treating with Seaweed Extract (*Sargassum sp.*), treating with Vitamin B1, and treating with aquadest. Blood sampling was taken at the beginning and at the end of the transportation. The results showed that the goats with the treatment of the extract of *Sargassum sp.* experienced the lowest increase in glucose levels (11.4 ± 13.3 ng/dl) compared with the treatment of Vet B-1 (18 ± 16.01 ng/dl) and aquadest ($24 \pm 21,2$ ng/dl). The results of statistical analysis indicated that there was no significant differences in the glucose levels of all groups of treatment. Based on the results of the research, it could be concluded that the treating with seaweed extract (*Sargassum sp.*) potentially prevents the increase of glucose levels in goats which are transported for 12 hours.

Keywords : livestock transportation, Stress, *Sargassum sp.*, blood glucose levels