



Potensi nutrisi berbagai bahan pakan hijauan yang mengandung tanin dan efektivitasnya sebagai anti

parasit dalam mendukung kinerja ternak kambing bligon
Jumlah oosista per gram fekal pada perlakuan masing-masing untuk T₁ dan T₂ sebesar 89,56% dan 90,92%, sedangkan pada K meningkat 213,89%.

Kata kunci: Hijauan, Anthelmintik, *Haemonchus contortus*, Kambing bligon



ABSTRACT

This research was conducted to investigate nutrition potential of several tropical forages usually given by farmers as goats feeds, that contain tannin and their effectiveness as anti parasite on supporting performance of goats in tropical country especially Indonesia. Fresh, freeze-dried and oven-dried samples of the leaves from 19 plants species taken from Yogyakarta, Indonesia (experiment I) were used to evaluate *in vitro* gas production in the absence or presence of polyethylene glycol (PEG). Experiment II were to assess the *in vitro* anthelmintic potential of fifteen tropical forages usually given by farmers as goat feeds, that contain active compound, in exerting their anthelmintic effects against *Haemonchus contortus*. The *in vitro* anthelmintic potential of the 15 tropical forages was assessed using aqueous infusions of the plant material. In experiment III, cassava and papaya leaf were tested as sources of feed and as anthelmintics for goats. Eighteen goats were divided randomly into 3 groups; one group (Control) was fed 100% grass *ad lib*. The second group (T.1) was fed 70% grass and 30% cassava leaf, and the third group (T.2) fed 70% grass and 30% papaya leaf. Data measured were feed intake, apparent coefficient digestibility of nutrient and number of worm eggs and coccidian oocysts counts in faeces (experiment III). The result showed that the mean value of gas production from fresh samples blends in 1 minute and 2 minutes both higher than from freeze-dried and oven-dried samples. Freeze-dried samples produced a higher volume of gas than oven-dried samples. The mean value of gas production from samples that added with PEG was higher than without PEG (experiment I). Papaya (*Carica papaya*), cassava (*Manihot esculenta* Crantz) and Sesbania (*Sesbania grandiflora*) were recorded to have higher *in vitro* digestibility compared to the other species in this research, due to has a higher rate of gas production potential and a relatively higher gas production with or without the addition of PEG. The results of stage II; on screening *in vitro* on adult worms, on the concentration increased, the number of dead worms significantly more ($P < 0.05$). Percentage of mean value of mortality of worm were highest on scarlet leaf aqueous infusions of 80% and worm die fastest (after 1h post exposure) in papaya leaf aqueous infusions of 80%. Results of research on screening using worm eggs, cassava leaves, jackfruit, mahogany, turi, banyan and sengon is ranked top. Distribution of adult worms and egg worm, scarlet, cassava, jackfruit, banyan, mahogany, papaya leaves was potentially good, while the banana, kapok and Leucaena leaves, their anthelmintics potential that has not been seen in adult worms, it can be seen in the eggs of worms, namely with the ability to inhibit worm eggs to hatch. The result showed (experiment III) that the supplementation of grass with the leaf of cassava or *Carica papaya* both increased intakes (g/kg LW/day) of dry matter (1.71; 1.72), organic matter (1.79; 1.41), crude protein (1.06; 0.86), ether extract (0.38; 0.73) and digestible nutrients (%) of organic matter (2.93; 3.8), crude protein (1.84; 1.78), ether extract (0.24; 0.97) and also higher average daily gain (g/day) (11.49; 12.07) compared to Control. The supplementation with the leaf of cassava (T.1) and papaya (T.2) had an anti parasitic



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effect by decreasing the occurrence of *Haemonchus contortus* in bligon goats, while in control increase 406.67%. The oocidian oocysts counts per gram of faeces decreased for T.1 and T.2 89.56% dan 90.92% respectively, while Control increase 213.89%.

Key words: Forages, Anthelmintic, *Haemonchus contortus*, Bligon goats