ABSTRAK

Penyakit cacing nematoda merupakan salah satu penyakit yang sering menyerang saluran pencernaan ternak domba. Penggunaan obat kimia yang berlebihan dapat menyebabkan resistensi, sehingga perlu obat alternatif herbal seperti temulawak dan bratawali. Penelitian bertujuan untuk mengetahui pemberian kombinasi temulawak (*Curcuma xanthorrhiza*) dan bratawali (*Tinospora crispa*) terhadap nematodiasis dan bobot badan harian domba. Sasaran penelitian adalah peternak domba sebanyak 9 orang di Kelompok Tani Ternak Lembu Sari, Desa Purwosari, Kecamatan Baturaden, Kabupaten Banyumas, Provinsi Jawa Tengah. Penelitian ini menggunakan metode survei dengan melakukan pengamatan serta wawancara dengan responden (peternak).

Domba yang digunakan sebanyak 18 ekor, memiliki umur 4-8 bulan dengan bobot 12-43 kg dengan jenis kelamin jantan. Analisis yang digunakan yaitu analisis deskriptif dan analisis *Repetaed Measure*s ANOVA. Penelitian dilaksanakan selama 30 hari bertempat di Kelompok Tani Ternak Lembu Sari Desa Purwosari, Kecamatan Baturaden, Kabupaten Banyumas. Pemeriksaan sampel akan dilaksanakan di Laboratorium Kesehatan Hewan Tipe B Purwokerto dengan pengukuran jumlah telur dan jenis cacing nematoda menggunakan uji apung dan uji *Whitlock.*

Karakteristik peternak didominasi usia 44-60 tahun (100%), pendidikan SD (55,56%), pengalaman beternak 1-2 tahun (55,56%), dan skala kepemilikan 5-10 ekor (55,56%). Prevalensi nematodiasis awal 100% (infeksi ringan 83,3%) menurun menjadi 88,89% setelah pemberian herbal, namun muncul infeksi berat 11,1% pada hari ke-30. Teridentifikasi beberapa jenis telur cacing saluran pencernaan yaitu *Cooperia, Ostertagia, Haemonchus, Bunostomum, Trichostrongylus, Strongyle, Trichuris, Strongyloides, dan Oesophagostomum*.

Uji normalitas tidak berdistribusi normal sehingga dilanjut dengan Uji Friedman.Uji Friedman menunjukkan tidak ada perbedaan signifikan jumlah telur nematoda antar waktu pengukuran (X^2=0,783; p=0,676). Sebaliknya, Uji normalitas berdistribusi normal sehingga dilanjut uji *Repeated Measures* ANOVA. Uji *Repeated Measures* ANOVA menunjukkan peningkatan bobot badan sangat signifikan (F=15,911; p<0,001) dengan effect size 48,3%. Rata-rata bobot meningkat dari 28,23 kg (M0) menjadi 29,94 kg (M4). PBBH tertinggi terjadi pada minggu ke-2 (65,17 g/ekor/hari). Uji Bonferroni menunjukkan rerata bobot awal (28,23) lebih rendah dari minggu 3 (29,51; p=0,005) dan 4 (29,94; p<0,001). Minggu 1 (28,43) lebih rendah dari minggu 3 dan 4 (p<0,001). Minggu 2 (29,14) lebih rendah dari minggu 4 (p=0,020).

Kombinasi temulawak dan bratawali efektif meningkatkan pertumbuhan bobot badan domba namun belum terbukti efektif sebagai antihelmintik dalam periode 30 hari. Perbaikan sanitasi kandang dan durasi pemberian yang lebih panjang diperlukan untuk mengoptimalkan efektivitas herbal.

Kata kunci: temulawak, bratawali, nematodiasis, PBBH, domba

ABSTRACT

Nematode worm infection is one of the diseases that frequently attacks the digestive tract of sheep. Excessive use of chemical drugs can lead to resistance, thus requiring alternative herbal remedies such as temulawak and bratawali. This study aimed to determine the effect of administering a combination of temulawak (*Curcuma xanthorrhiza*) and bratawali (*Tinospora crispa*) on nematodiasis and daily body weight gain in sheep. The research targets were 9 sheep farmers in the Lembu Sari Livestock Farmer Group, Purwosari Village, Baturaden District, Banyumas Regency, Central Java Province. This study used a survey method by conducting observations and interviews with respondents (farmers).

A total of 18 sheep aged 4-8 months with body weights ranging from 12-43 kg, all male, were used in this study. The analysis employed descriptive analysis and *Repeated Measures* ANOVA. The research was conducted for 30 days at the Lembu Sari Livestock Farmer Group, Purwosari Village, Baturaden District, Banyumas Regency. Sample examination was carried out at the Purwokerto Type B Animal Health Laboratory by measuring the number of eggs and types of nematode worms using the flotation test and Whitlock test.

Farmer characteristics were dominated by ages 44-60 years (100%), elementary school education (55.56%), farming experience of 1-2 years (55.56%), and ownership scale of 5-10 sheep (55.56%). Initial nematodiasis prevalence was 100% (mild infection 83.3%) decreasing to 88.89% after herbal administration, however severe infection appeared in 11.1% on day 30. Several types of digestive tract worm eggs were identified, namely *Cooperia, Ostertagia, Haemonchus, Bunostomum, Trichostrongylus, Strongyle, Trichuris, Strongyloides, and Oesophagostomum.*

The normality test showed that the data were not normally distributed, so the analysis was continued with the Friedman Test. The Friedman Test indicated no significant difference in the number of nematode eggs between measurement times (X^2=0.783; p=0.676). Conversely, the normality test for body weight data showed a normal distribution, so the analysis was continued with *Repeated Measures* ANOVA. The *Repeated Measures* ANOVA revealed a highly significant increase in body weight (F=15.911; p<0.001) with an effect size of 48.3%. The average body weight increased from 28.23 kg (M0) to 29.94 kg (M4). The highest Average Daily Gain (ADG) occurred in the second week (65.17 g/head/day). The Bonferroni post-hoc test showed that the mean body weight at the start (28.23) was significantly lower than in week 3 (29.51; p=0.005) and week 4 (29.94; p<0.001). Week 1 (28.43) was significantly lower than weeks 3 and 4 (p<0.001). Week 2 (29.14) was significantly lower than week 4 (p=0.020).

The combination of temulawak and bratawali effectively increased sheep body weight growth but has not been proven effective as an anthelmintic within the 30-day period. Improvement of cage sanitation and longer administration duration are needed to optimize the effectiveness of the herbal treatment.

Keywords: temulawak, bratawali, nematodiasis, ADG, sheep