

Antiparasitic effect of a tansy (*Tanacetum vulgare* L.) extract containing intraruminal bolus and pallets against gastrointestinal nematodes (*Trichostrongylidae*) in sheep *in-vivo*.



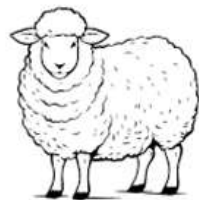
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Small ruminants, especially sheep and goats are sensitive to various parasitic infections. Since antiparasitic resistance to synthetic deworming agents is relevant nowadays, it is essential to evaluate the use of natural remedies - traditional medicinal herb in the prevention of parasitic infections in animals.

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"Production of medication form of extract from tansy leaves, Latvian traditional medicinal herb, and its impact on microbiot of sheep digestive tract and antiparasitic control".



30 Latvian dark head breed sheep of age 4-5 months was randomly divided in 5 groups

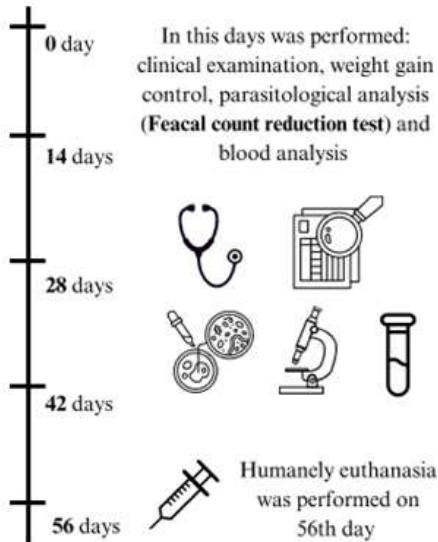


A, B - 3D printed intraruminal bolus filled with tansy extract lyophilizate in different composition

C - tansy pellets for 40 days

D - negative control group

E - positive control group (dewormed with Levamisole 5 mg/kg)



The research was conducted under the approval of the Committee for the Protection of Animals Used for Scientific Purposes of the Food and Veterinary Service of Republic of Latvia (No. 143/2023, 08.06.2023).

- The highest efficiency was observed in the E group – FECRT - 90%, in A, B, C groups efficiency was 74%, 71% and 78%, respectively. In clinical examination, blood hematological and biochemical examination no significant differences were observed.

In this study tansy extract showed positive influence to decrease parasitic infection in sheep, especially in the form of pellets.

Tansy extract can be used as an alternative to control parasitic infection in sheep, but more studies in naturally infected sheep in field conditions is needed.