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THE EFFECTS OF *ARTEMISIA ABSINTHIUM* AND *ALLIUM SATIVUM* ON *TRICHINELLA SPIRALIS* AND *TRICHINELLA BRITOVI* LARVAE DURING AN EXPERIMENTAL (*IN VITRO*) STUDY

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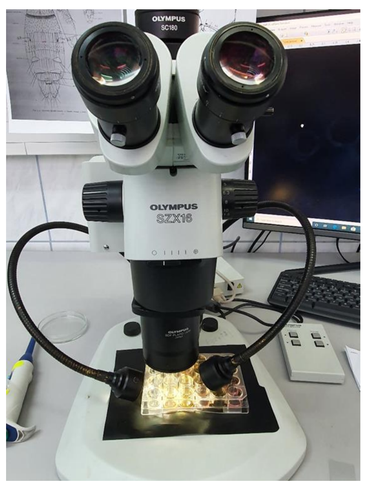
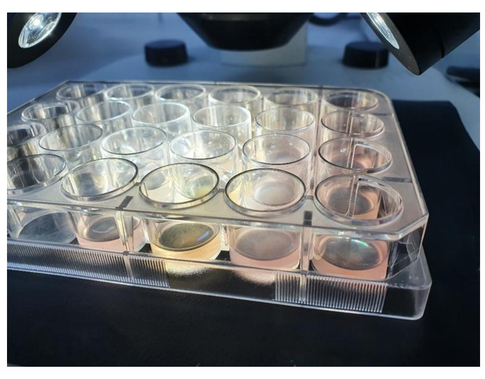
• Introduction

Trichinella spp. are zoonotic parasites
T. spiralis can be encountered in wild omnivores (badgers), and several wild canids (wolves, foxes, jackals) and in domestic animals such as pigs.
Trichinella britovi is encountered in wild omnivores and wild candid's.
Both species are present in Romania.
The study aimed to observe and compare the antiparasitic effects of *Artemisia absinthium* (wormwood) and *Allium sativum* (garlic) against *T. spiralis* and *T. britovi* larvae through an experiment performed *in vitro*.

• Material and method

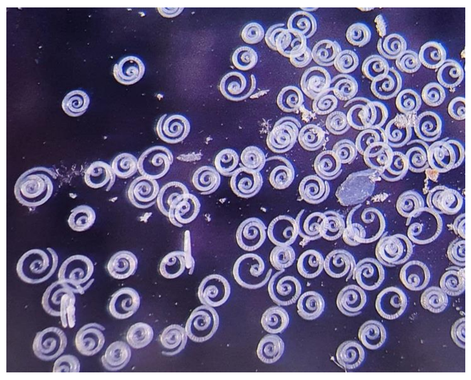
Control groups -100 larvae *T. spiralis* (9 groups) and *T. britovi* (9 groups) =>placed in cell culture plates of 3 ml + 1ml of ethyl alcohol (70%, 35%, and 17.5%).
Six additional control groups -100 larvae *T. spiralis* (3 groups) and *T. britovi* (3 groups) on a RPDI 1640 medium.
The experimental groups - 100 larvae of *T. spiralis* and *T. britovi* + 1 ml 1640 medium + 1 ml alcoholic extract from garlic and wormwood (10%, 5%, 2.5%)
All groups were incubated at 37 °C
The study lasted 48 hours, *T. spiralis* and *T. britovi* larvae were examined under a stereomicroscope at 1, 2, 16, 24, and 48 hours.





• Results and discussions

Alcoholic extracts of *A. sativum* and *A. absinthium* (conc 10%; 5%) like the alcoholic solutions, inhibited the mobility of *T. spiralis* and *T. britovi* larvae.
Alcoholic extracts of *A. sativum* and *A. absinthium* of 2.5% had a lower efficiency in inhibiting the mobility of *T. britovi* (7% and 10% mobility at 48 h).
A.sativum alcoholic extracts induced lesions in the larvae at concentrations of 10% (*T. britovi* with lesions 6%), 5% (*T. spiralis* with lesions 3%), and 2.5% (*T. spiralis* with lesions 6%) after 48 hours.



• Conclusions

More studies with different concentrations are necessary to determine the effects of these plants against *Trichinella* spp.

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