

***Moringa Oleifera* Water Extract Inhibit *In Vitro* Egg Hatch Of Small Ruminant Nematodes**

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Nematode parasites are responsible for the greatest disease problem in livestock system of small ruminants worldwide. Most of the animals has already obtained resistance to the synthetic drugs. So, it's necessary to find alternatives to brake the nematode cycle. This work was done aiming to find an active protein extract from *Moringa oleifera* seeds able to inhibit nematode egg hatch. Three diluents, water, 150 mM NaCl and 25 mM Tris-HCl, 7.5 pH, were used to obtain proteins from *M. oleifera* seeds, in proportion of 1:10 (w/v). It was done three extractions with each diluent and it was obtained a mean of 3.1, 7.0 and 6.6 mg of protein/mL in water, 150 mM NaCl and 25 mM Tris-HCl 7.5 pH extracts, respectively, showing significant difference between them ($p < 0.5$, t-test). But only water extract showed inhibition activity on egg hatch when it was compared to the water control group and to the others diluent groups. The egg hatch rates were 0.85%, 78.85% and 94.62% to water, 150 mM NaCl and 25 mM Tris-HCl 7.5 pH extracts, respectively, and in this same order, the egg hatch rate to the control groups were 70.62%, 87.87% and 91.53%. To find out if the activity could be inhibited by heat, the water extract was heated to 100°C for 10 min. No activity was observed after this. These finds suggest that the molecule active in water extract of *M. oleifera* seeds can be from protein origin.

Word Keys: *Moringa oleifera*, nematodes, protein, small ruminants
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