

Prevalence of Bovine Cysticercosis in Egypt and the Cysticidal Effect of Two Extracts Obtained from *Balanites Aegyptiaca* and *Moringa Oleifera* on Mice Model Affected with *T. Saginata* Cysticerci

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Abstract : The aim of the present study was to determine the prevalence of bovine cysticercosis in both cattle and buffaloes in Egypt and to assess the cysticidal efficacy of *Balanites aegyptiaca* fruits (*B. aegyptiaca*) and *Moringa oleifera* seeds (*M. oleifera*) extracts in experimentally infected mice. The study detected the level of tumor necrosis factor (TNF- α) to monitor the immune and inflammatory responses of experimentally infected mice. Through meat inspection, a total number of 2125 male bovines, 2 to 5 years old (1125 cattle and 1000 buffaloes) were examined at official abattoirs in Cairo Governorate. The prevalence of the disease among bovine was 7.8%, (6.31% of cattle and 9.5% of buffaloes). A decrease in the number of cysticerci was found in all treated mice groups, and up to 88% reduction was achieved in the *B. aegyptiaca*-treated group; higher than that was recorded in both *M. oleifera* (72.23%) and albendazole-treated ones (80.56%). Postmortem findings proved that *M. oleifera* and *B. aegyptiaca* reduced cysticerci numbers comparable to a commercial anthelmintic. The study showed a significant decrease ($P < 0.001$) in TNF- α levels after treatment with *Balanites* and *Moringa* extracts, compared with the untreated control and the albendazole-treated groups.

Keywords : prevalence, bovine cysticercosis, extracts, mice

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