IN VITRO ANTI-*TOXOPLASMA GONDII* ACTIVITY OF *OCOTEA DAPHNIFOLIA* EXTRACT

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Toxoplasmosis, caused by the protozoan *Toxoplasma gondii*, is a global public health and animal health issue. Current treatments have limited efficacy and can cause adverse effects, highlighting the critical need for new antiprotozoal agents. This study evaluated the effects of the ethanolic extract of *Ocotea daphnifolia* (EEOD) on the *in vitro* multiplication of *T*. *gondii*. The MTT assay was used to determine the cytotoxic effects of ethanol (as the solvent) and EEOD on VERO cells. VERO cells were infected with the RH strain of *T*. *gondii* tachyzoites for antiparasitic testing, followed by treatment with EEOD concentrations ranging from 0.49 to 500 µg/mL for 24 hours. The antiparasitic activity was assessed by counting the number of intracellular tachyzoites among 200 viable cells using optical microscopy. Ethanol exhibited toxicity to VERO cells at concentrations above 2.5%, with an IC50 value of 5.49%. EEOD was safe for VERO cells, with viability above 78% even at the highest concentrations tested. The concentrations that resulted in the highest inhibition of parasite replication were 500 µg/mL (53.63% inhibition), 31.25 µg/mL (28.59% inhibition), and 125 µg/mL (22.68% inhibition), respectively. Notably, no significant difference was observed between the positive control (200 µg/mL sulfadiazine) and the negative control (0.5% ethanol). In conclusion, EEOD showed low toxicity to host cells and may contain bioactive compounds with potential antiparasitic activity. However, further studies are necessary to explore its therapeutic potential against toxoplasmosis.

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