



بیست و یکمین کنگره بین المللی فیزیولوژی و فارماکولوژی ایران

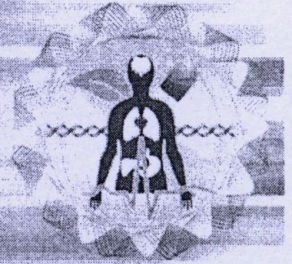
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Themes :	گیاهان دارویی و طب سنتی
Title :	The effect of <i>Artemisia sieberi</i> and Artemisinin on <i>Leishmania major</i> (MRHO/IR/75/ER) promastigotes
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Abstract :	necessary to develop novel, affordable, and accessible drugs with few side effects as alternatives of the currently available chemical agents for leishmaniasis. Drugs of plant origin seem to be appropriate alternatives. In the current study, 5, 10, 25, 50, and 100 $\mu\text{g/ml}$ concentrations of aqueous extract of <i>Artemisia sieberi</i> and chemical artemisinin were tested on promastigotes of <i>Leishmania major</i> (<i>L. major</i>), uninfected macrophages, and infected macrophages with intracellular amastigotes of <i>L. major</i> by direct counting and MTT methods. The results obtained for each drug were compared with other drugs and also with the results of the control groups. The results related to promastigote and amastigote assays showed as the dose of both drugs increased, the parasite number reduced in comparison with the control groups. Moreover, the parasitic burden in the test cultures decreased significantly. Macrophage assay results showed that the effects of both drugs on uninfected and healthy macrophages were very low. These results indicate that both drugs have anti- <i>Leishmania</i> effects, which was higher in <i>Artemisia sieberi</i> compared with artemisinin. Thus, carrying out further studies on the effects of <i>Artemisia sieberi</i> in infected animal with <i>L. major</i> is recommended.
Keywords :	<i>Artemisia sieberi</i> ; Artemisinin; <i>Leishmania major</i> ; Aqueous extract; In vitro.