**Abstract**

The beneficial interaction between individuals of two species, commonly referred as mutualism, is recognized as a common and important ecological interaction. Ant-hemipteran mutualisms are wide spread in nature in which homopterans produce honeydew collected by ants, and ants provide protection or other services. Hence the present investigation has been conducted to assess the life cycle of thorn mimic treehopper and to determine the effects of mutualistic strength between Thorn Mimic Treehopper, Leptocentrus taurus (Hemiptera: Membracidae) and the Godzilla ant(Camponotus compressus). It was observed that the secretion of honey dew occurred by tree hopper during evening hours of the day when compared to morning hours. The more the numbers of tickling by the ant, the more honey dew was secreted. There was a significant reduction in the nitrogen and phosphorous level in the host plant after the attack of the host plant by the tree hopper.