

Application of the Biotechnological Plant Nim (*Azadirachta indica*) in the Combat of the Parasites of Plants and Animals

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Azadirachta indica known as Nim, is a natural species from Asia and the Indian subcontinent, it belongs to the family Meliaceae, it is used as pesticide. The objective of this study was to investigate the agriculture in our city, through interviews with the farmers, the frequent pests in the plantations and to ease the damage caused by these pests, through the natural insecticide of *A. indica*. It was identified that the pests *Brevicorynesp*, *Bemisiasp*, and *Dermatophagoides sp.* and after that, it was produced an insecticide with aqueous and ethanol extracts from the leaves of *A. indica*. Consequently the tests of mortality were conducted to the pests, showing that the extracts are efficient, and the aqueous extract less efficient within time. Toxicological tests were also conducted for *Brevicoryne sp.* and *Tenebriomolitor*, the results showed that there was a 100% of mortality of these ones, attraction and repulsion tests also caused 100% of repugnance in the *T. molitor*. On the vegetables there was also a repulsion of the pests with the applicability of the ethanol extracts, where was applied the *A. indica* pie as a fertilizer, that in high concentrations generated the inhibition of the growth of these ones. On the test on *Boophilusmicroplus* it was found 100% of mortality on the parthenogenesis; and on the engorged female occurred until the sixth day of incubation. It is concluded, therefore, that the *A. indica* has a potential to be biotechnologically used in the agriculture and in the livestock as insecticide and acaricide