



RESEARCH
ARTICLE

The combined medicinal plants extracts as alternative for control external parasites of cattle in Vellore district of Tamil Nadu

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Abstract : An aqueous extract of medicinal herbs was prepared from leaves of *Azadirachta indica*, *Acalipa indica*, *Leucas aspera*, *Ocimum sanctum*, *Thespesia populea*, *Datura metel*, *Cynodon dactylon*, *Phyllanthus niruri*, *Morinda pubescens*, *Aegle marmelos*, *Cordia oblique*, *Polygala chinensis*, *Abutilon indicum*, *Sesbania grandiflora*, *Jatropha curcas*, *Pongamia pinnata*, *Kalanchoe pinnata*, *Anona squamosa*, *Vitex negundo*, *Lantana camara*, *Acorus calamus* and *Curcuma domestica* and *Nicotina tabacum* to control the *Hippobosca maculata*, the external parasites of cattle. Trials on the aqueous medicinal plants extract with dilution of 25 per cent, 50 per cent and 100 per cent were conducted for 60 cattle on their external skin surface to assess the insecticidal efficacy on the *Hippobosca maculata*. The chemical insecticide Cypermethrin was tested as a control with a dilution of 1:1000. The *in vivo* and *in vitro* trials using both aqueous medicinal plants extract and Cypermethrin were carried out to compare the insecticidal and repellent effects on external parasites in cattle. The test results of 50 per cent medicinal plants extract shows that the insecticidal effects on *Hippobosca maculata*, the external parasites in cattle are same as that of recommended dose of chemical insecticide. By this study it was concluded that the aqueous extract of medicinal plants can be effectively used as alternative to chemical insecticide for treating the control of *Hippobosca maculata* in cattle for insecticidal and repellent effects and improve the behaviour of cattle towards docile so as to quicker the milking operation in cross bred cattle.

Key words : Extract of medicinal herbs, Medicinal plants extract, Insecticidal, Repellent effects on external parasites in cattle, Milking behaviour, Milking temperament score, *Hippobosca maculata*

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