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Efficacy of selected plant extracts in the tobacco cutworm, *Spodoptera litura* (Fab.)

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The pesticidal activity of five plant extracts like *Azadirachta indica* (L.), *Ocimum sanctum* (L.), *Cynodon dactylon* (L.), *C. gigantea* and *Acalphya indica* (L.) on blister beetle *Z. pustulata* were studied. The mortality of *S. litura varied* with varied concentration of plant extract. For instance, high pesticidal activity was recorded from the crude extracts of *A. indica*, *O. sanctum, C. dactylon, C. gigantea* and *A. indica*. During *A. indica* treatment, the highest mortality was occurs during 48 hours and the lowest mortality was occurs during 72 hours. The percentage of mortality was different and it depended upon time to time from 24 hours to 72 hours. The plant extract of *C. gigantea* has high insecticidal activity than other plant products. The highest percentage of mortality was occurred when the blister beetle was treated with *C. gigantea*. The plant extract of *A. indica* has the lowest pesticidal activity than other plant products. The lowest percentage of mortality occurred, when the blister beetle was treated with *A. indica*. After 24 hours, 48 hours, and 72 hours, the highest mortality occurs in *S. litura*. The percentage of death occurred during *O. sanctum* treatment was after 24 hours treatment. The anti-feedant activity of *C. gigantea* leaf extract was better than that of leaf extract 24 hours after treatment; however, 48 hours later the effect was *vice versa* and the leaf extract was more effective as an anti-feedant. The botanical treatments also showed mortality as observed 72 hours after treatment until ten days. In conclusion, the three botanical pesticides were effective in the control of *Z. pustulata*, though they do not match the effectiveness of the synthetic pesticide. These botanical pesticides are affordable to low-income farmers. These natural pesticides have the potential for use in agriculture. In this paper, it has been suggested that botanical insecticides should prove most beneficial for farmers in developing countries.

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