EFFECT Of CERTAIN INSECTICIDES ON THE PIOTIC POTENTIAL OF THE COTTON LEAFWORM, *SPODOPTERA LITTORALIS* (BOISD.)

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Abstract

Treated leaves of Castor bean oil with Lc50 and Lc25 of Diflubenzuron were offered to 4th instar larvae of cotton leafworm, *Spodoptera littoralis* (Boisd.) for 48 hours . The percentage of mortality showed 60.71 % and 33.92 % respectively . The larval period was increased with 60.01 % and 37.5 % - The increase of pupal period showed 55.5 % and 42.67 % - Data gave an increase of the pre- oviposition period with 200.54 % , 81.96 % and decrease of pupal weight with 27.84 % , 14.76 % . The abnormal percentage of pupl stage reached 55.23 % and 32.14 % , while the abnormal percentage of moths stage increased with 41.67 % and 19.04 % . The number of eggs / female reduced by 86.27 % , 79.48 % ,while sterility percentage reached 90.32 % , 82.37 % compared with control . While, treated leaves of castor bean oil with Lc50 and Lc 25 of *Bacillus thuringiensis* against 2nd instar larvae after feeding 48 hours proved the following : The percentage of mortality 72.41 % and 51.72 % . The larval period increased with 24.74 % , 13.31 % . Increase the pupal period with 38.5 % and 10.80 % . Increase the pre- oviposition period with 237.91 % and 115.16 % . Decrease pupal weight with 21.23 % , 14.60 % - Increase the abnormal percentage of pupa stage with 72.08 % and 26.57 % - Increase the abnormal percentage of moths stage with 70.83 % and 39.60 % - Reduce the number of eggs / female by 92.42 % and 84.79 % . Sterility percentage with 93.80 % , 86.74 % compared with control . Data revealed that Lc50 and Lc25 of Lettuce oil extract after 48 hours of feeding 2nd instar larvae on treated castor bean oil leaves increased the following : The percentage of mortality reached 67.24 % and 62.06 % . The larval period was decreased to 27.34 % , 12.57 % . The pupal period showed an decrease with 33.93 % , 14.91 % - decrease the pre- oviposition period with 57.97 % , 31.59 % - Increase pupal weight with 35.39 % , 30.97 % - Increase the abnormal percentage of pupa stage with 51.25 % , 12.39 % - Reduce the number of eggs / female by 85.93 % , 80.47 % - and didn't effect on moths , hatchability and sterility . compared with control .