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RESEARCH ARTICLE :

Shelf-life study of *Dp* NPV (Nuclear Polyhedrosis Virus) suspension and formulation against larval mortality of *Diaphania pulverulentalis* Hampson

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SUMMARY : Bioassay was conducted at six regular intervals (monthly once for six months) against *D. pulverulentalis*, viral suspension stored at three different temperature levels *viz.*, refrigerated condition (0±1^{0}C), room temperature (25±1^{0}C) and high temperature (35±1^{0}C)revealed that the virus stored at high temperature (35^{0}C) readily lost its virulence with decreasing mortality from 77.92 per cent to 60.36 per cent on 5th day, Larval mortality decreased from 78.44 per cent to 55.18 per cent on 7th day and larval mortality decreases from 93.80 per cent to 57.92 per cent on 10th day. The larval mortality slightly decreased at 0^{0}C from 78.42 per cent to 76.95 per cent on 5th day, 80.21 per cent to 78.45 per cent on 7th day and 93.80 per cent to 92.23 per cent on 10th day. The suspension which is formulated with Starch 10% + Tinopal 0.2% + Tween 80 1% + *Dp*NPV@1x10^9 POB/ml stored at three different temperature like above mentioned levels, revealed that the virus stored at high temperature (35^{0}C) readily lost its virulence with decreasing mortality from 78.44 per cent to 55.18 per cent at 5th day. Larval mortality decreased from 89.76 per cent to 61.67 per cent at 7th day and 93.60 per cent to 62.65 per cent on 10th day. The larval mortality slightly decreased at 0^{0}C from 80.21 per cent to 78.45 per cent on 5th day, 89.81 per cent to 88.21 per cent on 7th day and 97.80 per cent to 89.88 per cent on 10th day.

KEY WORDS :
*Dp*NPV, Nuclear Polyhedrosis virus, Shelf life

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