

The insecticidal efficacy of entomogenous microorganisms depends in part on their pathogenicity in target insects> Determination of percentage kill and speed of kill is a prerequisite to their use as microbial control agents and can be measured only through bioassay using the target insect. Age and weight of insect larvae are important factors that determine their response to pathogens. A number of studies have shown that susceptibility of many insects to pathogens decreases with increasing larval weight and age (Entwistle and Evans, 1985).

The present study was carried out to investigate the relative susceptibility of all larval instars of the laboratory reared *Helicoverpa armigera* to a constant dose of nuclear

polyhydrosis virus (NPV). Originally the NPV was isolated from infected *H. armigera* larvae collected from vegetable fields in the southern Sri Lanka.

Body weight and head capsule width of each test insect was measured as an indicator of their instar stage. Each larva was fed on semi synthetic diet, Surface treated with 0.1 mL of NPV preparation containing  $8 \times 10^5$  polyhedral inclusion bodies (PIBs)/ mL. An inverse relationship between mortality and increasing larval age was found while an approximate time to death and larval age were positively correlated.