

## ABSTRACT

- (1) Mortality of the egg and larval stages of Trialeurodes vaporariorum (on leaves of P.vulgaris) due to application of Pynosect 30 ULV as 100µm droplets, is insignificant up to deposit levels of  $27.6 \times 10^{-7}$  ml./cm.<sup>2</sup> of Pynosect 30 ULV.
- (2) The adult T.vaporariorum is susceptible to low levels of Pynosect 30 applied as 100 µm droplets and has an LD<sub>50</sub> of  $26.94 \times 10^{-7}$  ml./cm.<sup>2</sup>
- (3) Spray applications of Pynosect 30 at 100 µm droplet diameter and a deposit level of  $38.64 \times 10^{-7}$  ml./cm.<sup>2</sup> have no significant lethal effects on Encarsia formosa when tested on leaves of Phaseolus vulgaris, but were found to be significantly toxic on leaves of Lyco-persicon esculentum.
- (4) The functional response curve for E.formosa and T.vaporariorum takes the form of a type II functional response.
- (5) Overall coverage sprays of Pynosect 30 at 100 µm droplet diameter are clearly detrimental to parasite activity (no functional response), whereas spray applications as deposit patterns, produce a delayed sigmoid type functional response, and permit parasite activity at deposit levels where an overall coverage spray would not.