Dissipation and Risk Assessment of Chlorantraniliprole Residues in Vegetable Cowpea

Banka Kanda Kishore Reddy, Ambily Paul and Thomas George
Department of Agricultural Entomology, Tamil Nadu Agricultural University, Coimbatore.

ABSTRACT

A field experiment was conducted to study the rate of dissipation of insecticide chlorantraniliprole 18.5 % SC in vegetable cowpea. Chlorantraniliprole 18.5 % SC @ 0.30 mL L^{-1} was sprayed at pod formation stage in vegetable cowpea and samples of cowpea pods were harvested at 0 (2hrs after spraying), 1,3,5,7,10,15 days after spraying and residues were estimated by using liquid chromatography tandem mass spectrometer (LC-MS/MS) at All India Network Project on Pesticides Residues, College of Agriculture, Vellayani, Kerala. The mean initial residue of chlorantraniliprole was found to be 0.42 µg g^{-1}. Residues of chlorantraniliprole were persisted up to five days.

Keywords: *Dissipation, Chlorantraniliprole, Cowpea, Food safety, LC-MS/MS, Linearity and Recovery.*