

Determination of Carbofuran Residue in Brinjal (*Solanum melongena* L.) and Soil of Brinjal Field

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Abstract : A supervised trail was set with brinjal at research field, Entomology Division, Bangladesh Agricultural Research Institute, Joydebpur, Gazipur to determine the residue of Carbofuran in soil and fruit samples at different days after application (DAA) of Furadan 5 G @ 2 kg AI/ ha. Field collected samples were analyzed by GCMS-EI. Results of the experiment indicated the presence of Carbofuran residue up to 60 DAA in soil samples and 25 DAA in brinjal fruit samples. In case of soil samples, the detected residues were 7.04, 2.78, 0.79, 0.43, 0.12, 0.06 and 0.05 ppm at 0, 2, 5, 10, 20, 30 and 60 DAA respectively. On the other hand, in brinjal fruit samples Carbofuran residues were 0.005 ppm, 0.095 ppm, 0.084 ppm, 0.065 ppm, 0.063 ppm, 0.056 ppm, 0.050 ppm, 0.030 ppm and 0.016 ppm at 0, 2, 4, 6, 8, 10, 12, 15 and 25-DAA, respectively. None of this amount was above the recommended MRL (0.1 mg / kg crop) of Carborufan for agricultural crops.

Keywords : brinjal, carbofuran, MRL, residue

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