Genetic Engineering and Biosafety Journal
Vol1, Number2, Fall 2012 and Winter 2013, Bi-seasonal

Pesticides residues (Endosulfan and Diazinon) in cucumber and tomato fields of Kohgiloyeh and Boyerahmad Province

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A B S T R A C T

Insistence on opposing transgenic plants and genetic engenearing by some individuals and/or organizations, hasresulted high levels of application of dangerous chemical pesticides in Iran. Samples of cucumber and tomato fruits were collected from various fields of Kohgiloyeh and Boyerahmad province and the residue of Endosulfan and Diazinon were determined in them. The highest amount of residue was of Diazinon in cucumber. The average residues of Diazinon in cucumber were 0.462, 0.669, and 0.205 mg/kg in Gachsaran, Boyerahmad and Kohgiloyeh respectively. However the internationally accepted maximum residue level of Diazinon in cucumber is 0.1 mg/kg. The residues of Diazinon in tomato were 0.504 and 0.534 mg/kg in Gachsaran and Dena respectively which are higher than the international levels. According to this research, the average residue of Diazinon in cucumber in the whole province was 0.355 to 3.5 times more than the maximum residue level. The residue of Endosulfan in tomato fields of Boyerahmad regions like Tangari, Keveshk, Tang Tamoradi and Sepidar. It was also higher than the international limits in Khairabad region at Gachsaran country. The residue of Endosulfan on cucumber was higher than the international levels in Tangari and Dornkore regions of Boyerahmad country and also Dehre, Dehkhalife and Shain brakan regions of Gachsaran, Delirech region of Dena country and in Zarghamabad of Kohgiloye country. The results showed not only the presence of high levels of Diazinon and Endosulfan residues in tomato and cucumber, but also showed that the period between pesticide use and marketing was also very short. It also shows that number of spraying, recommended dose and the interval between the spraying, were not taken into consideration. Continued restrictions on the application of transgenic plants is therefore considered as acceptance of the continued application of Endosulfan and Diazinon and their presence in food basket in Iran.

Key Words

Cucumber, Diazinon, Endosulfan, Pesticide Residue, Tomato, Transgenic

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[DOR: 20.1001.1.25885073.1391.1.2.6.5]