



Journal

J. Biol. Chem.
Environ. Sci., 2017,
Vol.12(4): 493-505
<http://biochemv.blogspot.com.eg/>

DISSIPATION OF THIOPHANATE-METHYL IN MANGO FRUITS UNDER THE EGYPTIAN FIELD CONDITIONS

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ABSTRACT

The dissipation behavior of thiophanate-methyl in mango fruits was studied in this work, using the QuEChERS method and HPLC-DAD. The method is valide to extract and to determine thiophanate-methyl residues in mango fruits. The mean recoveries ranged from 93.07 to 98.46 % with RSD ranged from 1.00 to 2.23. The results indicated that half-lives of thiophanate methyl in mango in both seasons i.e. 2015 and 2016 were 2.33 and 2.54 days, respectively. According to the maximum residue limit (1 mg/kg), the pre-harvest interval for mango fruits was 10 days after treatment with thipphanate methyl.

Key words: thiophanate-methyl – QuEChERS - HPLC-DAD - thipphanate methyl.