



TURJOEM

The Turkish Journal of Occupational / Environmental
Medicine and Safety

The Turkish Journal of Occupational / Environmental Medicine and Safety

Vol:1, Issue Supplement 2

Web: <http://www.turjoem.com>

ISSN : 2149-4711

Oral Presentation

P87: NEW APPROACHES FOR HERBICIDE ANALYSIS IN WATERS

İstem Türkteemel, Nilgün Arıkan

Ministry of Food, Agriculture and Livestock, General Directorate of Agricultural Research and Policies,
Yenimahalle/Ankara

Herbicide usage gets increase in every year and corresponding to this increase, herbicide residues in water are more frequently encountered. While a lot of analysis methods are used for the determination of residues, chromatographic methods are preferred due to the fact that they give more rapid, reliable and sensitive results. Since it is needed to have qualified human resources to use chromatographic methods, high investment and consequent operational cost, it is impossible to perform in low capacity laboratories. Instead of chromatographic methods, some alternatives regarding to produce methods giving sensitive results, having low investment and operational cost for the determination the residues of herbicides in water are available. Of the main ones of these analysis methods are voltametric methods, spectrophotometric methods, capillary electrophoresis methods, bioassay and electrochemical sensors.

The purpose of this compilation is to evaluate the methods that would be used in determining the herbicide residues in water and would be alternatives of chromatographic methods and to introduce to the concerned parties.

Keywords: Bioassay, capillary electrophoresis, electrochemical sensor, spectrophotometry, voltametry