

## عنوان مقاله:

Simultaneous identification and determination of three different classes of pesticides in Tehran drinking water by HPLC/UV technique

## محل انتشار:

نشریه پیشرفته شیمی، دوره 1، شماره 1 (سال: 1397)

تعداد صفحات اصل مقاله: 7

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## خلاصه مقاله:

An efficient sample extraction using solid-phase extraction coupled with liquid-chromatography was studied for the analyses of three different types and chemical group pesticides from drinking water. The extraction was performed using a Waters Sep-Pak C-18 cartridge. A validation of the method was performed. Linearity (0.005-1000, 0.01-1000, 4-1000, 10.5-1000 and 9.48-1000  $\mu\text{g.L}^{-1}$  for Simazine, Atrazine, Isoproturon, Metolachlor and Chlorotoluron respectively range), within-day precisions ranged from 4.8 to 6.7% and the between day precisions ranged of 7.8-13.3 % based on the peak areas for five replicates, limits of detection (0.001-2.846  $\mu\text{g.L}^{-1}$ ) were calculated. The preconcentration factors (PFs) were obtained under the optimum conditions (15.04-22.53). The information obtained from the method validation has been used to estimate for the determination of pesticides at trace levels in water samples which collected from water treatment plants of Tehran, the capital of Iran.

## کلمات کلیدی:

Solid Phase Extraction (SPE), Pesticides, HPLC, Drinking Water

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/941831>

