

Voltammetric determination of Phosalone and Carbophos pesticides using a modified carbon-paste electrode

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Abstract

A procedure for the selective determination of Phosalone and Carbophos in their alkaline hydrolyzates using a carbon-paste electrode modified with cobalt(II) 2,2'-dipyridylate was developed. The preconcentration of pesticides is based on their adsorption on the surface of the above electrode with the resulting formation of electroactive mixed-ligand Co(II) complexes. The oxidation current of the resulting mixed-ligand chelate allows 1.2×10^{-9} M Carbophos and 5.5×10^{-9} M Phosalone to be detected. Dithiocarbamates, which form no mixed complexes with the modifier under the experimental conditions, cause no interference. © 1998 MAEe cyrillic signK Hayka/Interperiodica Publishing.
