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## **New approach to selective detection of 2,4-dichlorophenoxyacetic acid with a cholinesterase amperometric biosensor**

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### **Abstract**

A new method of detection of 2,4-dichlorophenoxyacetic acid by means of immobilized monoclonal antibodies and an amperometric cholinesterase biosensor is proposed. A combination of monoclonal antibodies to 2,4-dichlorophenoxyacetic acid with an enzyme electrode provides high selectivity of measurements and allows trace amounts of this pesticide to be detected within a concentration range of  $1 \times 10^{-1}$  to  $5 \times 10^{-7}$  M with a sensitivity threshold of  $5 \times 10^{-12}$  M.

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