

## BIOSENSORS FOR DETECTION OF ALKALOIDS AND OTHER NATURAL TOXINS



Appearance of biosensor system

### Advantages

There are no commercial counterparts. The proposed system does not require presampling; is notable for a short time of analysis (rapid analysis), low labor intensity and cost of analysis, a high sensitivity and selectivity of determination; can be used for real-time field measurements

### IPR Protection

IPR3

### Areas of Application

The system is designed for detection of alkaloids and other natural toxins in agriculture and for monitoring of toxic substances

### Specification

Bioselective element	Butyryl cholinesterase	Acetyl cholinesterase
Analyte	Glyco-alkaloids	Aflatoxins
Detection limit, $\mu\text{g/ml}$	0.2	0.1
Linear range of detection, $\mu\text{g/ml}$	0.4–100	0.2–40
Operational stability, hours	12	12
Storage stability, months	2	2
Time of analysis, min	20	20
Measurement error, %	$\leq 10$	$\leq 10$

### Stage of Development.

#### Suggestions for Commercialization

IRL6, TRL5

The system is manufactured upon request. Seeking partners for commercial production

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