Biologically Active Substances from the Pond Plants of the Genus Potamogeton

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Having made a wide screening of the plants of the European North-East of Russia we have found ecdysteroids (compounds structurally identical or closely related to moulting hormones of Insects and Crustaceans) in crude extract of some *Potamogeton* plants. The extracts showed positive reaction in BII bioassay and had immunoreactivity in two ecdysteroid specific RIAs. Individual ecdysteroids were isolated by chromatographic methods. The fact that ecdysteroids were found in the pond plants is very important from the position of biochemical ecology and establishing hormonal and trophic connections between plants and animals.

The chemical and fatty acid composition of hexane extracts of 5 species of *Potamogeton* are studied. It was discovered that all extracts have high toxicity in relation to 17 micro-organism test-cultures of different physiological group.