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**Detoxification and antioxidant function of liver of the marsh frog *(Rana ridibunda)* intoxicated with oil from Kenkiyak oilfield**

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Detoxification and antioxidant functions of liver of marsh frog *(Rana ridibunda)* exposed to water-soluble fraction of oil from Kenkiyak oilfield in concentrations of 0.05, 0.5 and 1% during 30 days were studied. Dose-dependent increase of cytochrome P450 content (1.5-2 times) in comparison to intact animals (control), indicating the activation of detoxification processes in liver of intoxicated frogs was observed. It was shown that the growth of monooxigenases was accompained by enchancement of lipid peroxidation processes: the content of MDA in liver of intoxicated marsh frogs also rose dose-dependently 1.5-2 times (Р≤0,05) compared with control. Herewith, the content of reduced glutathione, one of the key substances of antioxidant and detoxification systems of the body, decreased 1.3-2 times (Р≤0,05) as a result of almost the same induction of glutathione-S-transferase (1.3-2.1 times, Р≤0,05). It was found that activation of lipid peroxidation in liver of intoxicated marsh frogs was caused by supression of activity of catalase (1.2-1.5 times) and superoxide dismutase (1.1-1.4 times). On the basis of obtained results a conclusion about activation of detoxification functions and inhibition of antioxidant defence in liver of frogs, leading to strengthening of oxidative stress in studied animals as a result of oil intoxication, was made. Accumulation of lipid peroxides in liver led to disruption of adaptive reactions of intoxicated animals and development of destructive and necrobiotic changes of hepatocytes.

**Key words:**marsh frog, liver, oil, cytochrome P450, malondialdehyde, reduced glutathione, glutathione-S-transferase, catalase, superoxide dismutase