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The use of fuel ethanol will allow to decrease dependence of Ukraine on import of petroleum fuel, reduce environment pollution and preserve jobs at alcohol factories.

BIOLOGICAL TEST OF THE WATER QUALITY OF THE RIVER BYCK FROM THE AREA OF THE MUNICIPALITY OF CHISINAU

Ludmila Prunici,

Lyceum "P. Zadnipru", Chisinau, Moldova

Petru Prunici, Elena Harabaci,

Tiraspol State University, Chisinau, Moldova

In the Republic of Moldova the river Byck is considered one of the most polluted, because the hydrographical basin is more dens populated and the river Byck crosses the main industrial centers of Moldova – Calarasi, Straseni, Chisinau etc., from where flow many toxic substances in it. The facts from literature prove that the river Byck polluted with different chemical substances and the municipality of Chisinau devolves the most important role in this process. In the sector of the river in the area of the city, the concentration of some of them more than 50 times /3/. The biodiversity in this sector of the river is changing essentially in diminution from 38 species upstream the city, to 5 species downstream the city/4/.

Through the agency of the biological test of the river is established its toxicity and it is possible to determine the sources of pollution and the most critic sectors where it is really necessary to orientate primordial measure for removing them.

For the fulfillment of this studies served the result of the biological test of 12 tests on water from the river Byck which were collected from 4 stations placed on the stream of the river from the area of the municipality of Chisinau. As a test-object there were taken gamarids (*gammarus gammarus*). These organisms can exist only in clean waters, especially in springs. The gamarids were adapted at the room conditions during a week, being kept up with leaves and enriching, recurrently the water with oxygen. For the witness tests (of control) was used water from tap dischlorated during 7 days. The samples were collected on weekdays (on Wednesday, on Friday) and on a weekend (on Sunday).

From the results of the collected samples it comes out that all organisms from the control test survived during the experiment. But in the test with water of the river from different stations, the organisms began to die after 24 hours.

Biological test of the water from river Byck

<i>Points of drawing of the test</i>	<i>Wednesd ay (%)</i>	<i>Friday (%)</i>	<i>Sund ay (%)</i>
<i>Control</i>	0	0	0
<i>At the entrance of the city</i>	6,66	3,33	3,33
<i>Mihai Viteazul street</i>	20,0	16,6	10,0
<i>Ismail street</i>	30,0	36,6	20,0
<i>Upper to the combing out station</i>	36,6	46,6	26,6

Comparing the tested water samples that were collected in different days of the week, we can find out that the water from the river is not acute toxic, because there didn't die more than 50 % of the organisms, but the received results from the last station (downstream the city) are very closed to this index. On the weekend (on Sunday) when less factories are in function, the death rate of organisms in the tested water is lower, but the maxim death rate was registered on Friday in the samples collected from the stream of the river downstream the city.

The results of this investigation permits to make the following conclusions:

1. It was proved that the river Byck doesn't manifest any acute toxicity on gamarids. But in the samples drawing from the stream of the river downstream the city, the death rate of the organisms during 96 hours approaches more to the critic amount (50 % death rate) that characterize the acute toxic water. Downstream the city was registered a death rate of 46,6 % gamarids introduced in the water samples.

2. Comparing the biological test results of the water of Byck with modification of the chemical composition of the water and of the biodiversity on this sector of the river is distinguished a direct correlation.

3. The biological test of the river with the help of gamarids is a kind of operative method, it reflects the objective reality and it's not expensive.

4. I suggests this method to be used widely in school programs in order to trace out the main sources of pollution of the lakes rivers and springs.

SEWAGE WATER BIOMONITORING USING INVERTEBRATES AS BIOINDICATORS

*Daria Safronova,
St. Petersburg, Russia*

In connection with constantly growing anthropogenous load on the water objects it is more sharply felt the necessity of development and creation the system, including continuous monitoring of the water environment. Dumping of sewage