UDK 58.072

A.A. Kuzheleva, student of group HT-203 (BSTU named after V.G. Shukhov)

Scientific adviser: assistant professor I.B. Svezhentseva (BSTU named after V.G. Shukhov)

Belgorod State Technical University named after V.G.Shukhov, Belgorod, Russia.

RESPONSIBILITY FOR ENVIRONMENTAL SAFETY IS CARRIED OUT BY THESE ALGAE

An ecological problem is a change in the natural environment, as a result (of anthropogenic influences or natural disasters), leading to a violation of the structure and functioning of nature.

Global problems are generated by the contradictions of social development, the sharply increased scale of the impact of human activities on the world around them and are also associated with the uneven socio-economic and scientific-technical development of countries and regions. Solving global problems requires the development of international cooperation.

Man and nature are one. The health of people and animals is closely related to the health of the environment and the entire biosphere. In the last four decades, it began to deteriorate sharply, mainly from the barbaric and predatory activities of the person himself. He cuts down forests, plunders the bowels of the earth, builds "dirty" enterprises, the industrial emissions of which pollute and destroy the soil, air, and water. Man made the oceans huge repositories for virtually all of their waste products. Together with the ocean, its numerous inhabitants perish - fish, crustaceans, molluses, etc. Every week one species of plants and animals disappears on Earth. In such a situation, we risk losing most of the species of living organisms in a couple of centuries. A person must urgently change his attitude to nature - otherwise he will destroy both himself and her. Man destroyed the rainforests - the lungs of the planet. Already, many species living in them are on the verge of complete destruction. If this continues, then the air on Earth will become so dirty that it will be impossible for them to breathe.

Environmental problems cause enormous damage to the environment. Among the most urgent are the ozone layer, acid rain, global warming, toxic air pollution, deforestation, groundwater pollution with chemicals, soil destruction in some areas and the threat to flora and fauna.

The earth is home to a million living creatures that make up the complex natural world. Today, people are trying to change their habitat to meet their needs - to create agricultural land or build cities. They pollute and destroy

wildlife habitats by digging land for coal mining or building roads. It is known that a quarter of all plants are endangered. There are different types of pollution: water, air, land and radioactive pollution.

And now we will consider one small plan to solve some environmental problems.

A million seagrass seeds are being planted as part of Britain's largest project to save the "wonder plant".

Experts say seagrass helps tackle the effects of climate change by absorbing carbon dioxide faster than trees.

But up to 92% of the plant may have disappeared from the UK's coast over the last century, research has found.

Work has now started on lowering the seeds onto the seabed off Pembrokeshire to create a new 20,000 sq m (215,280 sq ft) meadow.

Scientists hope it will also help boost fish numbers and support marine wildlife.

Seagrass, which is found in shallow waters of coastal regions, has been declining globally at a rate of about 7% a year since 1990.

That is a result of long-term development of our coastlines and pollution of the sea, according to project leader Dr Richard Unsworth, of Swansea University.

"It is not that we can blame one person, industry or organisation, it's the growth of a population around the coast," he said.

"Planting seagrass is an opportunity to reverse that loss and start to kick into action a recovery for our seas around the UK."

World Wildlife Fund (WWF), Sky Ocean Rescue and Swansea University say the underwater plant is key to reducing carbon dioxide - a gas which contributes to global warming.

They hope the 4.9-acre (2 hectare) project at Dale Bay will also provide a nursery for young fish and a habitat for invertebrates.

- · Seagrass 'supports 20% of fisheries'
- · App to aid seagrass meadow research
- · Seagrass meadows in 'perilous state'

"It's incredibly productive and just sucks carbon into the sediments, traps particles that are locked there for millennia," said Dr Unsworth.

"That means that carbon dioxide is not in the atmosphere."

Last summer, 750,000 seeds were gathered from sites around the British coast and stored at the laboratories in Swansea University.

The seeds have been transferred into small hessian sandbags and lowered onto the seabed.

Another 250,000 seeds will be gathered later this year and added to the meadow in November.

"We see seagrass as this wonder plant because of its ability to fight climate change, to help fish stocks, coastal communities and livelihoods," said Alec Taylor of WWF.

"We need to expand hundreds of thousands of hectares of seagrasses, saltmarshes and other coastal ecosystems to avoid some of the damages from climate change."

Why is seagrass important?

- It takes carbon from the atmosphere up to 35 times faster than tropical rainforests
- It accounts for 10% of annual ocean carbon storage globally, despite only taking up 0.2% of the seafloor
 - It protects coasts from coastal erosion
 - It is a habitat for many types of fish like cod, plaice and pollock
 - It produces oxygen
 - It cleans the ocean by absorbing polluting nutrients

Ecological problems have no borders. However, environment disasters can be avoided if people broaden ecological education and every person understands that the beauty of nature is extremely fragile. Governments must take serious actions against pollution.

If nothing is changed, the days of our planet are numbered. The biosphere is the most defenseless shell of the Earth against pollution. This is a very fragile system, the destruction of one species entails a chain reaction and the death of entire ecosystems. Thus, the greatest miracle on Earth - Life, due to human actions, is under the threat of complete destruction. But it is still not too late to change your mind and switch to more environmentally friendly methods of production and cleaning of city sewers.

References:

- 1. Кочуров Б. И. География экологических ситуаций (экодиагностика территорий). М.: ИГ РАН, 1997. 156 с.
- 2.Охрана окружающей среды/ Справочник. Составитель Л. П. Шариков.
- 3.А.Е. Чижевский «Я познаю мир. Экология», 1998г. изд. АСТ,
- 4. Бернард Небел «Наука об окружающей среде» (В 2-ух томах), «МИР» М. 1993
- 5.Г.В.Стадницкий, А.И.Родионов. «Экология».

6.http://www.saveplanet.su/7.http://www.wwf.ru/

Информация об авторе:

• Кужелева Анна Алексеевна, студентка группы ХТ-203, БГТУ им. В. Г. Шухова, 308012, г. Белгород, ул. Костюкова 46, БГТУ им. В. Г. Шухова, akujeleva@yandex.ru