The results of using the serological method for diagnosing trichinosis have made it possible to conclude that this method is the main one, as the most effective, especially in the case of mass study of the material. So, the initial stage for any diagnosis of trichinosis is the collection and transfer of material for the study, so there is no difference at the initial stage , as for the rest all methods have differences, as well as their positive and negative sides.

The results of using the serological method of diagnostics of trichinosis made it possible to draw a conclusion about the isolation of this method as the basic as most effective, especially with mass materials research.

Compressor trichinoscopy is the simplest well-known microscopic examination. The reliability of trichinelloscopy largely depends on both the choice of muscle groups for sample preparation and the correctness of the production of point cuts. In spite of the relatively low diagnostic effectiveness of compressor trichinoscopy, it remains one of the leading methods of trichinoscopy control. Moreover, this method is convenient for the individual study of corpse or small batches of meat raw materials or meat products.

A biochemical study is the method of the group for study of pork. Method is recommended to use also with the inspection control of the meat products, prepared from the pork: sausages, meat semifinished products, hams, since in these cases trichinoscopy by compressor method isn't so effective. This method uses as rechecking of compressor trichinoscopy, since with the weak invasion by trichinae of pig flourish can give sometimes negative results.

Biochemical research is a method of group research of pork for trichinosis. The method is recommended for use in the inspection control of meat products made from pork: a sausage, meat semi-finished products, hams, as in these cases trichinoscopy by the compressor method is ineffective. That is, this method is used as a check of compressor trichinoscopy, since with a weak trichinella invasion of pigs, carcases can sometimes give negative results.

Express test is the most commonly used method, which has spread in the private sector and during hunting for wild animals. It is worrying that almost all those who participate in the distribution of these kits emphasize that these kits are sensitive enough and reveal the presence of trichinella from the 12th day after infection In addition, as an argument, distributors use the fact that this method allows you to abandon expensive equipment, reagents and does not require special skills. However, they forget that specially trained veterinarians, in the process of carrying out studies on trichinosis, constantly pay attention to other factors, namely, epizootic well-being of the terrain, the degree of animal damage, morphological changes, and much more. And, nevertheless, the anonymity of using test strips is fundamental.

This fact can be formulated as a study of trichinosis corpses during poaching of animals. In the analysis of the results of corpses research for three years from 2013–2015 at the veterinary station of the city of Gomel the following regularity was observed: the peaks of delivery of corpses of domestic pigs and the carrying out of studies depended on the slaughter season animals and this is usually an autumn-winter period.

Reducing the number of studies conducted on trichinosis in 2013 is associated with measures to reduce the number of wild boars throughout Belarus.

In spite of the reduction in the number of block in the hunting land both the Gomel region, and as a whole in Belarus the cases of the appearance of trichinosis among the people are recorded.

THE DESTRUCTION OF THE OZONE LAYER AND THE PROBLEMS OF ECOLOGY

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Ozone absorbs part of the ultraviolet radiation from the sun. The concentration of ozone in the atmosphere is very small, and small changes in the amount of ozone lead to sudden changes in the intensity of ultraviolet reaching the earth's surface.

Keywords: ozone hole, Freon and halocarbon, photochemical processes, catalytic cycle, polar vortex, solar radiation, ultraviolet, stratosphere, turbulence.

The Earth's atmosphere is known to contain 21 % oxygen in the form of one-and diatomic molecules O2 and trihydric O3, called ozone. This an allotropic modification of oxygen was discovered in the middle of the last century, and scientists had long drawn the attention to its unique chemical and physical properties. Interest in gaseous ozone has increased significantly, following the determination of its prevalence in the Earth's atmosphere and

the special role it plays in protecting all living organisms from the effects of the dangerous ultraviolet (UV) radiation from the sun. In the same way, its wide absorption range also includes the lethal radiation of 240–280 nanometers for all life on Earth. Atmospheric ozone has been particularly active in recent decades.

For the first time, a rupture in the ozone layer of the Earth's atmosphere (more than 1000 km) emerged in the 1980s over Antarctica, where a slow but steady decline in stratospheric ozone from year to year is occurring. In this context, this phenomenon has been called the "ozone hole".

The main mechanism for ozone depletion that results in ozone holes is expected to be a catalytic cycle involving nitrogen oxides.

There are two main types of nitrogen oxide sources in the stratosphere: natural and man-made. The first is caused by bacteria (in nature, nitrogen oxides are formed in the form of N2O oxide during the bacteria living), and the second source, various kinds of man-made gases, as well as gases generated by nuclear explosions.

Ozone are also represented by Freon and halocarbon (saturated fluorocarbons or polytherapeutic, often containing chlorine or bromine atoms). These substances are not formed naturally, not toxic, not volatile, and, in small doses, even harmless for humans. But at the expense of turbulence in the atmosphere, they end up in the stratosphere, where the ultraviolet sun is disrupted by the formation of chlorine, which can interact with ozone to obtain chlorine monoxide and, in turn, with an atomic Oxygen, resulting in atomic chlorine and diatomic oxygen. As a result, atomic chlorine is regenerated and acts as a catalyst for the basic reaction of ozone depletion. In this case, one chlorine atom can participate up to 105 times in reaction of the dissimilation of the ozone molecule. This catalytic cycle is expected to include not two as previously thought, but about 40 reactions involving CL, SLO, HCL, NOSL, Hclno2, and many other chlorine compounds.

In Antarctica, this process takes place in special conditions, the isolated polar vortex, where there is no air mass exchange during the entire polar winter and spring. When sunlight is appearing in the stratosphere, photochemical processes of impurities are beginning to occur and, as a result, ozone molecules are being destroyed in response to the reactions discussed above. By the middle of spring, the polar vortex is crumbling and the hole begins to "tighten".

The thing is that the weakening of the ozone layer increases the flow of solar radiation to the earth and causes the risks of cancer, as well as the loss of plants and animals.

While mankind has taken measures to limit the emission of chlorine and bromine-containing CFCs by switching to other substances, such as fluorinated Freon (Vienna Convention on the Protection of the Ozone Layer, adopted on 22 March 1985), the process of recovery of the ozone layer will take several decades. But science never knows what processes are exactly destroying the ozone layer, so where the ozone hole will lead to, the further research will show it.

Science has not yet fully established what the main processes that violating the ozone layer are. Searching for an accurate response to a given nature the issue gave rise to a wide range of views on the mechanism for the creation of the ozone hole and its impact on our planet, from full complacency to the prediction of the ozone catastrophe. What is true between these extreme points of view: the truth or a new issue – will be shown by further research.

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LACCASE INDUCED WATER PURIFICATION TO REMOVE 3,3’- DIMETHYLBENZIDINE (O-TOLUIDINE)

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The object of the study was enzyme laccase from the mycelium Pleurotus ostreatus. At the first stage of the study, the optimal conditions for the oxidation of 3,3'-dimethylbenzidine by the enzyme laccase were determined. At the second stage, the removal of the products of the enzymatic reaction from water was carried out.

Keywords: benzidine, carcinogenic, toxic, laccases, enzymes destruction.