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**THE SIGNIFICANCE OF THE PROBLEM OF BIODAMAGE AS AN
IMPORTANT SCIENTIFIC AND PRACTICAL PROBLEM IN THE
SCOPE OF HUMAN ACTIVITY**

***Abstract:** In this article, the environment is formed by humans for various purposes: the development of new territories, the construction of roads and irrigation networks, various economic facilities, the formation of biodegradation activities, the creatures that actively participate in the process of biodegradation in the conditions of Uzbekistan: birds, rodents, various insects, including plant lice, accelerate this process. It is described that the wide use of large quantities of synthetic materials in the national economy also has an effect on the activation of damage.*

***Key words:** Biodamage, biodamage agents, harmful organisms, biodamage situation.*

Biodegradation is a reaction of the environment to innovations introduced by humans. Man-made materials and products enter the natural processes occurring in the biosphere and become part of natural biocenoses. In all cases related to biodamage, organisms and the environment, on the one hand, and things created by human hands, on the other, affect each other. Complex approaches take into account the interaction of biodetrimental agents - living organisms, especially in such cases when they belong to different systematics, groups, species and populations or are ecologically distant from each other. The relationship of biopests with landscape-geographical and regional factors is of particular importance. The nature of the biodamaging effect and the effectiveness of the protective measures used depend on the environment in which the process takes place.

Ecological-technological approaches include prediction that allows for effective protection against biodamaging effects. For example, introducing elements with biocidal properties into the structure of melting polymers, or impregnating them into wood and products. The tasks of national economy on

the problem of biodamages, which are assigned to scientists today, and especially those that will be assigned to them tomorrow, require the clarity of research topics, areas of interest, and basic concepts. These should be used in the consideration of separate issues. It is not easy to do this not only because the official history of the problem is too short and not enough to talk about traditionally formed concepts, but also because this problem today consists of a large number of individual issues that reflect the interests of many participants. Each participant has their own approach, goals and understanding. Uniting participants with common terms and concepts makes the problem whole, defines its boundaries and interactions with interested partners.

The concept of “biodeterioration” corresponds to the English word “Biodeterioration”. This concept arose to define international coordinating organizations, such as The Biodeterioration Society. Initially, this term was used to define the negative impact of organisms on the functional and structural properties of materials, products or technical raw materials. Later, this expression changed several times, i.e. it was narrowed and expanded in accordance with the wishes of experts in various fields and sciences. disposal. This trend was especially evident at the 3rd International Symposium on Biodegradation held in Kingston (USA) in 1975.

Several times opinions have been expressed about the issue of damage caused to agricultural and horticultural crops, food products, etc. by organizations. In a number of publications, especially in the 70s of the last century, these objects were considered from the point of view of material science along with traditional views. At the same time, other fields of economy and science have been dealing with these issues for a long time, so it is doubtful to expand the problem of biodegradation at the expense of objects. The famous scientist Van der Kerk defines biodegradation as follows: biodegradation is inappropriate changes in material properties caused by living organisms. The Russian scientist G. I. Karavayko expanded this concept and suggested that the

term "biodamage" refers to the necessary and unnecessary changes that occur in the properties of materials due to the activity of organisms. Both concepts cannot fully cover the variety of objects that organisms damage. Taking this into account, we apply the concept of biodamage to the situations in which the activity and participation of living organisms causes changes in the structural and functional characteristics of natural objects of anthropogenic origin or used as raw materials. These relationships can strengthen or weaken the influence of organisms on objects, or even destroy them completely. There is no way that such a situation could not be considered by an expert on biodamages.

The most important components that create the situation of biodamage are living organisms, which are the source of the impact of biodamage on the object and are protected or not protected by special means. Thus, the process of biodegradation is not a unidirectional process. It is characterized by the active interaction of objects and organisms. The biodegradation process is two-way, and one or another process prevails in certain periods and certain stages. A biodegradable condition indicates that biodegradation is possible given the presence of all necessary components and factors. It indicates the potential for biodamage to occur and calls for the development of terminological schemes related to biodamage prediction. The participation of these components at a distance within the space, allowing their interaction, determines the possibility of biodegradation effect, thus creating a biodegradation situation, but it does not create a biodegradation process.

Organisms that attack materials, objects, structures, natural raw materials and make their properties unacceptable for humans are called sources of biodamages. Such organisms are also referred to as biodeterioration agents or pest organisms. Structures, objects, materials lose their useful properties when the products are damaged by organisms. They are called biodegradable objects or biodegradable objects. The concept of biodegradation objects requires not only preventive, but also active measures, when the introduction of protective

means in the form of biocides into their composition by humans, or later, when the effect of biodegradation on the object creates a real danger.

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