

The collection of the herbarium of the Department of Zoology and Botany contains species of protected plants listed in the Red Book of the Republic of Belarus from all four categories of protection. The total number of protected species in the herbarium is 45 species.

All herbarium specimens were systematized according to protection categories, and thus it was found that in the herbarium of the Vitebsk State University named after P.M. Masherov, 6 species of plants belonging to the Ist category of protection, 11 species to the IInd category, 14 species to the IIIrd category and 14 species to the IVth category are stored.

The general condition of herbarium specimens of protected plant species in the herbarium collection can be assessed as good, which is explained by the quality of herbarization and storage conditions. In general, the plants are in satisfactory condition, almost all mounted on sheets of thick paper or thin cardboard of standard size. Plants are attached to the leaves, usually one at a time, but there may be several copies of small plants of the same species. Each herbarium is provided with a printed or handwritten label. The labels indicate: the scientific name of the family and plant species in Russian and Latin, adopted at the time of collection; gathering place; growing conditions; date of collection and the name of the collector who collected and identified the given plant species.

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DYNAMICS OF A COLLECTION OF PLANTS OF THE *ERICACEAE* FAMILY IN THE BOTANICAL GARDEN OF VSU NAMED AFTER P.M. MASHEROV

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Keywords. Collection, family of Ericaceae, introduction test, botanical garden, catalog.

Botanical Garden of VSU named after P.M. Masherov is one of the main centers of introduction in the north of Belarus. The collection of woody plants of the botanical garden is the 4-th largest in the republic. A rather interesting group

of this collection is the representatives of the heather family (*Ericaceae*), which are rare decorative, medicinal and resource species.

In the landscaping of settlements, the species of this family are practically absent, despite the fact that the climatic regions are more or less favorable for their cultivation. Based on this, the task of studying and promoting among the population the use of species of this family in landscaping is urgent. To do this, it is necessary to summarize the results of the introduction of this group of species and, first, to trace the history of the formation of this collection.

The purpose of this work is to trace the growth dynamics of the collection of living plants of the *Ericaceae* family of the Botanical Garden of VSU named after P.M. Masherov for the period 1991 – 2021.

Material and methods. The material of our research is the plant species of the *Ericaceae* family that grew in the botanical garden of the VSU named after P.M. Masherov in the last 30 years.

The research was carried out in 2021. We analyzed the lists and catalogs of the collection of living plants for the period 1991 – 2021. [1; 2; 3; 4].

Statistical data processing was performed using the Microsoft Excel software package.

Findings and their discussion. Collection of woody plants of the Botanical Garden of VSU named after P.M. Masherov and, in particular, representatives of the *Ericaceae* family, in its current state, has been formed over the last 40 years, when, by the decision of the Council of Ministers of the BSSR in 1979, the status of a botanical garden was renewed. Data on earlier periods of development of the collection of the botanical garden are not available due to the loss of archives.

We have analyzed the lists of the collection of woody plants and published catalogs for the period 1991 – 2021. The analysis results are presented in the table for each year.

Table – The dynamics of the collection of representatives of the family *Ericaceae* in the botanical garden of VSU named after P.M. Masherov for the period 1991 – 2021

Year	Number of species in the corresponding year, pcs.	Number of plant genera in the corresponding year, pcs.
1991	16	2
1992	18	3
1993	20	6
1994	23	6
1995	23	6
1996	23	6
1997	23	6
1998	23	6
1999	23	6

2000	23	6
2001	16	6
2002	16	6
2003	14	7
2004	15	8
2005	11	6
2006	14	7
2007	14	7
2008	14	7
2009	14	7
2010	12	5
2011	10	5
2012	10	5
2013	10	5
2014	9	5
2015	9	5
2016	9	5
2017	9	5
2018	9	5
2019	9	5
2020	9	6
2021	9	6

After analyzing the lists of collections of living plants of the Botanical Garden of VSU named after P.M. Masherov, we noted a steady decrease in the number of species of representatives of the *Ericaceae* family from 23 to 9 (2.5 times). In terms of the number of plant genera presented, no significant changes have occurred over the past 30 years. In our opinion, the reason for this lies in the special demands of the representatives of this group of plants to care and growing conditions.

In just 30 years, representatives of 12 genera of the *Ericaceae* family have undergone introduction testing: *Vaccinium* (*Vaccinium*), Heather (*Calluna*), Galteria (*Gaultheria*), Wintergreen (*Pyrola*), Winter-lover (*Chimaphila*), Calmia (*Kalmia*), Pieris (*Pieris*), White (*Andromeda*), Rhododendron (*Rhododendron*), Bearberry (*Arctostaphylos*), Erica (*Erica*).

Conclusion. Based on the data obtained, we can draw conclusions: the number of species of the family *Ericaceae* in the collection of living plants of the Botanical Garden of VSU named after P.M. Masherov over the past 30 years has had a steady downward trend from 23 to 9 species (2.5 times). In our opinion, 30 years ago, at the time of the beginning of the restoration of collections after the restoration of the status of a botanical garden, a large number of species, including those of southern origin (Kiev), were involved in the introduction

test. Over time, the most demanding species dropped out of the collection, while the resistant ones remained. Of course, this process was superimposed on other objective and subjective reasons, but this is a matter of further research and analysis.

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STRUCTURAL CHANGES IN TOXIC LIVER DYSTROPHY IN THE FOREST MARTEN (*MARTES MARTES*, 1758)

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Keywords: pine marten, liver, nutrition, pathomorphological changes, ecology.

A number of complex processes take place in the liver of animals: metabolic products are rendered harmless, glycogen and bile are formed, blood plasma proteins are synthesized, iron is metabolized, blood is detoxified, etc. Such numerous and important functions of the liver determine its importance for the body. With toxicosis of various origins (fodder, including mycotoxin, embryonic, medicinal, etc.), one or more functions of the organ fall out and toxic substances accumulate in the blood, leading to the development of dystrophic and / or necrotic processes [1; 2].

The purpose of this work is to describe the pathomorphological changes in the body during toxic liver dystrophy in the forest marten (*Martes martes*, 1758).

Material and methods. The work was carried out in the conditions of one of the zoos of the Republic of Belarus and is a special case. The corpse of a 3-year-old brown pine marten served as the material for the study. For the extraction of organs during autopsy of the corpse, we used the method of complete evisceration according to G.V. Shore. When describing organs and cavities, we used generally accepted schemes. Pieces of the liver, kidneys, and myocardium were taken for histological examination, which were fixed in 10% formalin [3]. The stages of the preparation of histosections (fixation, washing, dehydration and compaction) were carried out according to the proven methodology of the