RESULTS OF INTRODUCTION OF SOME PLANTS OF SEEM. PETERS IN THE BOTANICAL GARDEN OF VITEBSK STATE UNIVERSITY MASHEROVA

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An important role in preserving plant wealth belongs to the botanical gardens. Botanical gardens are research institutions that cultivate and study plants that promote botanical knowledge. The basis of botanical gardens are collections of living plants.

The aim of the work is to analyze the results of introduction of the seeds of this family. Legumes in the botanical garden of the VSU named after P.M. Masherov, to assess the introductory stability and the prospects of introducing them into the culture.

Material and methods. The material of our research is a collection of plants of this family. Legumes of the Botanical Garden of the Vitebsk State University named after P.M. Masherov.

We studied the features of growth, development of plants of this family. Legumes, using the "Methodology of phenological observations in the botanical gardens of the USSR" [1, p. 13–29]. The capacity for generative and vegetative reproduction was determined according to the scale developed by the Main Botanical Garden (HBS).

Results and their discussion. In the collection of the botanical garden, the seeds of this family. Legumes are represented by species and varieties, of which 31 are representatives of the Belarusian flora, 4 species: *Lathyrus laevigatus*, *Trifolium rubens*, *Trifolium spryginii*, *Vicia pisiformis* are protected and listed in the Red Book of the Republic of Belarus. Representatives of the family. Bean collections of the botanical garden have the following life forms according to Serebryakov: perennial grasses – 33, annual – 7, trees – 3, shrubs – 8 species. According to the economic groups, the plants were distributed as follows: medicinal plants – 7, vegetable – 6, fodder – 8, decorative – 10 species.

Long-term observations have shown that the arboreal plants of the family. Legumes in the Botanical Garden of VSU are characterized by different indicators of growth, winter hardiness, drought resistance, shade tolerance, ability to seed and vegetative reproduction (table).

To assess the results of the introduction of herbaceous perennials, a 3-point scale developed by the HBS was used [2, p. 72–77].

By the capacity for generative reproduction, 3 points were obtained for those species in which regular fruiting is observed, samosev; 2 points – fruiting irregular, samosev; 1 point – no fruiting.

By the capacity for vegetative propagation, 3 points were obtained in species with 3 or more new vegetative buds; 2 points – species that give no more than 1–2 new vegetative buds; 1 point – species that do not have vegetative reproduction.

The cold resistance was assessed as follows: 3 points – species that are not damaged by frost and frost; 2 points – partially damaged by severe frosts; 1 point received species that are damaged by frosts almost annually.

Table

Analysis of the behavior of certain tree species sem. Legumes in the Botanical Garden of the VSU

Amorpha fruticosa	In winter, the growths of this year are frozen, but they easily recover, blossom, bind viable seeds, and do not give self-seed.
Caragana arborescens	It is frost-proof, blooms, binds viable seeds, does not give self-seed.
Caragana frutex	It is frost-proof, blooms, binds viable seeds, does not give self-seed.
Caragana fruticosa	Frost-proof, blossoms, fructifies, does not give self-seed.
Cytisus nigricans	Cold weather, but not frozen in the harsh winters, unglazed wood, blossoms, binds seeds, does not give self-seed.
Genista tinctoria	The neodrevesnevshaya part of the shoots freezes, easily regenerates, blossoms, fructifies, self-seeded rather abundant, competes with natural vegetation.
Laburnum anagyroides	Frost-proof, blooms, fruiting, without self-seeding.
Robinia pseudoacacia	Frost-proof, blooms, binds viable seeds, fructifies, gives single sowing on the treated or disturbed soil, a vegetatively mobile species.
Sarothamnus scoparius	Frost-proof, blooms and binds seeds irregularly, no samosev was observed.

Based on the sum of the points, the stability of the species in culture was determined and, accordingly, the prospects of growing in culture.

Summarized results of observations have shown for the above species the prospects of their introduction into the culture in the northern region of Belarus.

Conclusion. As a result of the studies, we recommended the following four very promising species for introduction into culture (not used earlier in the region): *Lathyrus laevigatus*, *Lathyrus niger*, *Trifolium fragiferum*, *Coronilla varia*.

In the conditions of culture for many species of the family. Legumes (*Lathyrus vernus*, *Lathyrus laevigatus* etc.) show an increase in overall productivity, an increase in the flowering period, and often an increase in decorativeness, which makes them promising for use as highly decorative plants in the practice of green construction. The introduction of protected plants into botanical gardens and introduction into culture prevents their

complete extinction and irreversible loss of valuable genetic material for plant growing and agricultural production.

Reference list:

1. Methods of phenological observations in the botanical gardens of the USSR. – M., 1975. – 87 p.
2. Bylov, V.N. Principles for the creation and study of a collection of little-spread decorative perennials / VN. Bylov, R.A. Karpisonov // Bul. Ch. bot. garden of the Academy of Sciences of the USSR, 1978, Vol. 107. P. 72 – 77.

THE AUKASA PROTECTED AREA IS NOT SPOT OF BIODIVERSITY IN GHANA

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Biodiversity loss and conservation have been a global focus for at least two decades, mainly addressing issues of prioritization for efficient fund allocation. At the national and local levels where all biodiversity driving forces converge, and where conservation needs to be implemented, prioritization is often biased by parochialism due to poor data availability [2]. Over the past century, different human activities especially in agriculture have degraded Ghana's biological resources significantly. Exactly 80 years ago, 63% of the country's forests were in pristine or near-pristine condition in the forest zone [1]. Today, the landscape is mostly human-dominated with forest patches covering 15% of the country's land area. This is mainly due to land conversion to agriculture, a phenomenon which may continue to biodiversity losses until the economy grows and becomes less dependent on agriculture [4]. This trend can however be reversed, or at least stabilized, under land-use management regimes in which crop production is maximized with no significant losses to 682. Essentially, every efficient management plan is driven by quality agro-ecological data, and should gravitate towards increasing ecological complexity through the cultivation of multiple resource-efficient crop varieties under enhanced fertilization while allowing some less-competitive native flora. Like other African countries, Ghana lacks location and landscape-scale ecological data, a setback to biodiversity conservation [3].

The purpose of this work – analysis of the biodiversity in the Aukasa protected area

Material and methods. In the course of our work, the analysis and generalization of biodiversity in the Aukasa protected area. The comparative-comparative method, methods of generalization and analysis of flora and fauna in protected areas in the case of Ghana.

Results and their discussion. I would like to narrow my study to, the few protected areas in Ghana and how it should be managed.