

EUROPEAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND MANAGEMENT STUDIES ISSN: 2750-8587

DOI: https://doi.org/10.55640/eijmrms-02-12-56

https://eipublication.com/index.php/eijmrms Volume: 02 Issue: 12 December 2022 Published Date: - 22-12-2022



Page No.-264-267

INTRODUCTORY EVLUATION OF THE PLANTS ATROPA BELLADONNA L., ECHINOPS RITRO L. INTRODUCED IN THE CONDITIONS OF KARAKALPAKSTAN

Kutlimuratova G.A.

Nukus, Nukus State Pedagogical Institute Uzbekistan.

Baynyyazova G.S.

Nukus, Nukus State Pedagogical Institute Uzbekistan.

Tajimuratova Sh.A.

Nukus, Nukus State Pedagogical Institute Uzbekistan.

ABSTRACT: - Introductory evaluation of adaptation process and results of introduced plants, introductory conditions of plants which are growing, growth and development characteristics, their life form is evaluated with points on scales or to be used different methods.

KEYWORDS: Introduction, scale, subarctic, score, evaluation, gradation, adaptation, introducer.

INTRODUCTION

The process of introduction has been completed with a comprehensive (growth and development, productivity and resistance to certain conditions) introduction evaluation of the plants is being introduced. [1].

An introductive assessment of the adaptation process and results of introduced plants is

carried out using a variety of methods, based on the conditions of growing introduction of plants, the features of growth and development, their vital form, assessed by points on scales or carried out using various methods.

Initially, the assessment of the results of introduction in subarctic conditions is carried out in annual plants G.N.Andreev (1972) and perennial herbaceous plants are proposed by B.A.Golovkin (1973) [2].

N.A.Bazilevskaya (1964) assessed the results of the introduction and acclimatization of herbaceous plants on a 6-point scale. P.I.Lapin, S.V.Sidneva (1975) evaluated the results of the introduction of tree plants in a visual way, based on a scale of 100 points, taking into account the habitus of the plant, the growth of the stems, their preservation in winter and their reproduction. N.A.Karpisonova (1978), on the other hand, in assessing the results of introduction the of grass plants, recommended a score scale based on the increase of the plant from seed, the effects of high and low temperatures, damage from diseases and insects.

METHODS AND MATERIALS

In the conditions of our Republic, evaluation of the results of plant introductions recommended by I.V.Belolipov (1971-1983) the eco-introduction scale is from 0 to 5 points: 5 points the predominance of plant species over foreign plants and good growth from them, 4 points without the application of agro technical measures, passing the entire period of development and self-reproduction by seed shedding, 3 points plant species do not reproduce annually and do not grow, does not reproduce naturally from seed, is propagated vegetatively, 1 point species of plants grow 2-3 years under conditions of introduction, but

does not reproduce naturally, 0 points species of plants do not grow under conditions of introduction, and in some cases, during or after the 1st growing season, they dry out. Later Y.M. Murdakhaev (1992), studied the growth and development characteristics of medicinal plants in the conditions of their introduction, the adaptation process by linking their Floristic areals, their vital form and the characteristics of eco geographic distribution [3].

And we, in the course of our scientific work, for the introductive assessment of plants. R.A.Karpisonova (1978), I.V.Belalipov (1976) and Y.M. Murdakhaev (1992) We have summarized the introversion assessment scales and figures of [3,6].

Also, B.Y.Tokhtaev (2009), Based on the principle of gradation of medicinal plants on saline soils of Uzbekistan and assessment of its results, substantiation of environmental indicators in the process of introduction of medicinal plants, the degree of salt resistance, seedable, seedling bruising and storage, we evaluated introduced plants in our scientific experiments.

This scale was worked by B.Y.Tokhtayev consists of 5 indicators, divided into three levels (multiple, average, less or low). Indicators and levels are assessed differently, and the overall grade was 100 points. On saline soils, the introduction of medicinal plants was regulated according to Table 1 under the assessment.

Table 1
Introduction of medicinal plants in saline soils evaluation scale of results

Nº	Indicators		high cost
		1	2

1	Salinity resistance	Strong	medium	low	30
П	Humidity requirement	Less	medium	much	15
III	Condition compared to high temperature	resistant	medium	not stable	15
IV	Condition compared to low temperature	resistant	medium	not stable	15
V	Reproduction in a natural way	Rapid	medium	non- reproducing	25

Explanation I. Resistance to salinity: 30strong; 20-medium; 10-low. Evaluated on the basis of growth, development and yield of plant species. II. Demand for moisture: 15-less; 10-average; 5-more. It was assessed based on the amount of watering given during the growing season of the plant species. III. Position in relation to high temperatures: 15resistant; 10-medium; 5-fragile. The state of plant species in hot periods of the year was mainly assessed. IV. Condition in relation to low temperatures: 15-resistant; 10-medium; 5-fragile. The condition of plant species in cold periods of the year is mainly assessed. V. Reproduction in natural form: 25-intensive; 15-less; 5-non-reproducing. The seeds of plant species are evaluated on the basis of ripening

shedding, reproduction of the rhizome and tuberous rhizome.

The author assessed plants in the introversion assessment in the range of 20-39 as not promising plants, in the range of 40-59 as less promising, in the range of 60-79 as promising, in the range of 80-100 as extremely promising plants.

It is based on this principle that in our scientific research carried out in two regions of Karakalpakstan (Ellikkala and Kegeyli districts), the introverts are two types of medicinal plants — the common beladonna (Atropa belladonna L.) and white Beaver (Echinops ritro L.) we evaluated the introduction aspect (Table 2).

Table 2
Simple beladonna on salty soils (Atropa belladonna L.) and white Beaver (Echinops ritro L.)
evaluation of introduction results (%%)

		Indicators					
Nº	Plant names	resistance to salinity	demand for moisture	condition compared to high	position relative to low temperature	reproduction in a natural way	General introversi on assessme nt
moderately saline soils							
1	Atropa belladonna L.	20	10	15	15	25	85

So, according to the results of the introduction of medicinal introduced plants in saline soils:

It is very difficult to grow an ordinary Belladonna on saline soils. When plants were planted from seed, the germination averaged 47.7% and the preservation did not exceed 33.3%, or when planted from a seedling, the bruise averaged 54.2% and the conservation was 4.0%. During the growing season, plant growth is infected, and the condition has improved. It is prone to growing development in the ecological conditions and moderately saline soils of Karakalpakstan. This plant can be found prosperous in the case of impeccable implementation of agro technological measures, in which the introduction and organization of large-scale plantations in this area is noted.

CONCLUSION

The white Beaver was included in the group of prosperous plants in the salty soils of Karakalpakstan. The reason why this introvert is included in this group is that the plant is mainly propagated both from seed and by the vegetative method. The germination of seeds was 13.8-62.1% and storage was 62.7-100%, the bruising of seedlings was 87.5 to 100%, and storage was 72.4-80.0%. In salty lands, these species grow well from the beginning to the end of vegetation, have rapid adaptation and go through all stages in ontogenesis from the first year.

REFERENCES

 Belolipov I.V. Brief results of the primary introduction of plants of the natural flora of Central Asia in the Botanical Garden of the Uz SSR //Introduction and

- acclimatization of plants. Tashkent: Fan, 1980. 13. pp. 9-58.
- **2.** Beideman I.N. Methodology of phenological observations in geobotanical studies. M., 1954. 128 p.
- **3.** Kutlimuratova G.A. Introduction and bioecological characteristics of promising medicinal plants in the conditions of Karakalpakstan: abstract. b.f.f.D (PhD).-Nukus.: 2021
- **4.** Kutlimuratova G.A. Bioecological features promoting medical plants when introduced in the conditions of Karakalpakstan//Turkish Journal of Physical Therapy and Rehabilitation; 32(3) ISSN 2651-4451 e-ISSN 2651-446x December 2021.- S. 30474-30481.
- 5. Kutlimuratova G.A. Ecological Features and Agrotechnology of Growing Atropa Belladonna L. and Echinops Ritro L in the Conditions of Karakalpakstan //Journal of Pharmaceutical Negative Results: Volume 13: Special Issue 8: 2022// C.2400-2404.
- **6.** Tokhtaev B.Y. Introduction of medicinal plants in the salty lands of Uzbekistan. Author. dis. ... doct. BIAL. scien. Tashkent, NPS "Botany" an Ruz. 2009.