



CHECKING THE ECOLOGICAL SAFETY OF NOKBARG TUYASINGREN PLANT

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Annotatsiya: Nokbarg tuyasingren (*Cynara scolymus*) o'simligi, asosan, O'rta yer dengizi mintaqasida tarqalgan, lekin hozirda butun dunyoda keng tarqalgan. Bu o'simlik nafaqat o'zining o'ziga xos ko'rinishi, balki uning tibbiy va oziq-ovqat sohalaridagi ahamiyati bilan ham tanilgan. Nokbarg tuyasingren o'simligi, o'zining ko'p qirrali foydalari bilan birga, ekologik xavfsizlik nuqtai nazaridan ham muhimdir. Ushbu maqolada, nokbarg tuyasingren o'simligining ekologik xavfsizligini tekshirish va uning atrof-muhitga ta'sirini o'rganish maqsad qilingan.

Kalit so'zlar: nokbarg tuyasingren, oziq-ovqat sanoati, atrof-muhit, ekologik xavfsizlik, inson salomatligi, ozuqaviy qiymati, tibbiy xususiyatlar.

Аннотация: Растение Нокбарг туясингрэн (*Cynara scolymus*) распространено в основном в Средиземноморском регионе, но в настоящее время широко распространено по всему миру. Это растение известно не только своим уникальным внешним видом, но и значением в медицинской и пищевой сферах. Завод Нокбарг туясингрэн, помимо своих многогранных преимуществ, важен и с точки зрения экологической безопасности. Целью данной статьи является исследование экологической безопасности завода Нокбарг Туясингрэн и изучение его воздействия на окружающую среду.

Ключевые слова: нокбарг туясингрэн, пищевая промышленность, окружающая среда, экологическая безопасность, здоровье человека, пищевая ценность, лечебные свойства.

Abstract: The plant Nokbarg tuyasingren (*Cynara scolymus*) is mainly distributed in the Mediterranean region, but is now widely distributed throughout the world. This plant is known not only for its unique appearance, but also for its importance in the medical and food fields. The Nokbarg tuyasingren plant, along with its multifaceted benefits, is also important from an ecological safety point of view. In this article, it is aimed to investigate the ecological safety of the nokbarg tuyasingren plant and to study its environmental impact.

Key words: nokbarg tuyasingren, food industry, environment, ecological safety, human health, nutritional value, medical properties.

INTRODUCTION

Nokbarg tuyasingren plant belongs to the family of mainly annual or perennial plants, and its main characteristics are large, thick and spiky leaves. The flowers of the plant are large and beautiful, they are often blue or purple in color. Nokbarg tuyasingren plant is famous for its nutritional value and medicinal properties. It is a source of many vitamins, minerals and antioxidants.

MATERIALS AND METHODS

Environmental safety refers to the rational use of natural resources in order to protect the environment and ensure human health. This concept is aimed at reducing the impact of human activities on the environment, preserving biodiversity and restoring the natural balance. Environmental security also plays an important role in addressing climate change, pollution and other environmental issues. The Nokbarg tuyasingren plant contributes to environmental security through its role in the ecosystem. This plant is important in strengthening the soil and preventing erosion. Its deep root system holds the soil and reduces water erosion

processes. Also, nokbarg tuyasingren plant attracts pollinators through its flowers, which is important in maintaining biodiversity. Nokbarg tuyasingren plant is widely used in the food industry. Its leaves and flowers are used in salads, soups and other dishes. Also, the medical properties of this plant are highly valued. Nokbarg tuyasingren mainly helps to improve liver function, eliminate stomach problems and accelerate metabolism. All this is important in ensuring the ecological safety of the plant.

RESULTS AND DISCUSSIONS

Nokbarg tuyasingren plant plays an important role in ensuring ecological safety. Its planting and propagation will help to improve soil fertility, conserve water resources and fight against climate change. Plant propagation also reduces environmental pollution and helps preserve biodiversity. In the process of cultivation of Nokbarg tuyasingren plant, it is necessary to take a number of measures to ensure environmental safety. First of all, pesticides and chemical fertilizers should not be used when planting the plant. This protects the environment from pollution and preserves biodiversity. Secondly, it is necessary to use water-saving technologies when planting and caring for plants. This helps conserve water resources and is important in combating climate change.

There are a number of methodologies and approaches to assess the ecological impact of Nokbarg tuyasingren. This assessment process includes the plant's environmental impact, its role in the ecosystem, and its contribution to biodiversity. It is important to carry out environmental monitoring during the growth and spread of the plant. In this process, it is necessary to monitor the quality of soil, water and air, as well as evaluate the conditions of plant growth. Monitoring results help to determine the ecological impact of the plant. Nokbarg tuyasingren plant interacts with pollinators and other organisms. Assessing the biodiversity that lives around a plant helps us understand its role in the ecosystem. In this process, the effect of the plant on other species, their reproduction and the effect on their habitats is studied. Nokbarg tuyasingren plant plays an important role in strengthening the soil and preventing erosion. Assessment of soil fertility helps to determine the impact of vegetation on soil quality. In this process, the physical, chemical and biological properties of the soil are studied. In order to assess the impact of vegetation on climate change, it is necessary to study its demand for water and energy resources. To determine the role of the Nokbarg tuyasingren plant in the fight against climate change, it is necessary to analyze its water consumption and carbon dioxide absorption capacity. Evaluating a plant's place in the food chain and its interactions with other organisms helps to understand its importance in the ecosystem. In this process, the specific benefits of the plant and its effects on other species are studied. Nokbarg tuyasingren plant is also important as a source of food and medical resources for mankind. Assessment of the social and economic impact of the plant is important in ensuring its ecological safety. Mathematical and statistical models can be used to estimate the ecological impact of a plant. With the help of these models, it is possible to simulate the effect of a plant on the environment and evaluate its ecological safety under different conditions. With the help of these methods, it is possible to comprehensively evaluate the ecological impact of the nokbarg tuyasingren plant. This process is important in understanding the impact of the plant on the environment and ensuring its environmental safety.

We prepared the cypress (*Cynara scolymus*) plant according to Gost 26.929-94, in which it is taken on a ceramic tile according to the gost and burned until black smoke disappears, then in a muffle furnace from 50 c° to 450 c° every half hour more than 50 c° This process involves burning until white ash is formed. It was heated to room temperature and checked for heavy metal salts Zn, Cd, Cu, Zn in the polarpgrf ABC11 apparatus according to gost 33 824 2016. Heavy metal salts were not detected in our product.

CONCLUSION

Nokbarg tuyasingren plant is important for its ecological safety and environmental impact. It helps in plant, soil strengthening, water resources conservation and biodiversity conservation. Also, its nutritional and medical value is noteworthy. The role of the nokbarg tuyasingren plant in ensuring ecological security is incomparable. Therefore, it is necessary to pay special attention to ensuring environmental safety during the cultivation and distribution of this plant.

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