



International Journal for Innovative Engineering and Management Research

A Peer Reviewed Open Access International Journal

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IJIEMR Transactions, online available on 28th March 2021. Link

<https://ijiemr.org/downloads/Volume-10/ISSUE-3>

DOI: 10.48047/IJIEMR/V10/I03/111

Title: **ECONOMIC VALUE *MELILOTUS OFFICINALIS* L.PALL. FROM THE FABACEAE LINDL FAMILY. CROP WILD RELATIVES OF CULTUVATED PLANTS OF THE REPUBLIC OF KARAKALPAKSTAN**

Volume 10, Issue 03, Pages: 513-515.

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ECONOMIC VALUE *MELILOTUS OFFICINALIS* L.PALL. FROM THE *FABACEAE* LINDL FAMILY. CROP WILD RELATIVES OF CULTIVATED PLANTS OF THE REPUBLIC OF KARAKALPAKSTAN

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Abstract: The article describes the economic value of *Melilotus officinalis* L. A biennial herb that is found on the fine-earth slopes of Ustyurt. Geographic type: Mediterranean-Iranian-Turanian. It is a valuable species and is used as a fodder, food, medicinal and melliferous plant.

Keywords: Crop wild relatives of cultivated plants, flora, *Melilotus officinalis* L., *Fabaceae* Lindl.

Introduction

Plants are widely used in the food industry, as well as in medicine in the treatment of certain diseases, which is not unimportant in ensuring the industrial safety of the population. Play an important role in human nutrition. Their fruits have high taste and technological characteristics, contain sugars useful for the human body, vitamins (A, C, B1, B2, B3, P, Fe, K, etc.), organic acids, vegetable oils, etc. Fruits are used both fresh and dried in the confectionery and canning industry. The wood and leaves of some fruit are widely used in various fields of industry and medicine.

Medicinal plants, in addition to all this, are exposed to a specific type of human economic activity - harvesting for medicinal raw materials, which can lead to a reduction in their number, and sometimes to the complete destruction of populations.

Herbal medicine as an integral part of traditional medicine [1] is an integral part in solving the problem of the rapid spread of these diseases. It is an alternative to traditional specialized medicine, because herbal medicines are effective and affordable. About 2000 species of higher plants of the flora of the territory of the CIS countries are used in traditional medicine. For example, in the treatment of diseases of the cardiovascular system and malignant tumors, preparations obtained from plant materials account for more than 50% [2, 3].

Determination of biological productivity and rational use of wildlife is one of the most important tasks of modern ecology. [4].

Materials and Methods.

The objects of research are *Melilotus officinalis* L., a species from the *Fabaceae* Lindl family, distributed in the territory of the Republic of Karakalpakstan. The research was carried out by expedition in various regions of the republic and the economic and biological characteristics were studied.

Family *Fabaceae* Lindl. - Legumes are an economically important family of flowering plants - a number of legumes have long been cultivated as food plants and are widely used in agriculture, others are known as ornamental or fodder plants, some are a source of valuable wood species. In addition, the practical significance of the claimed study is determined by the uniqueness of the position of legumes in any plant community, since Fabaceae, due to symbiosis with nitrogen-inducing microorganisms, are able to actively enrich the soil with nitrogen available to plants and, therefore, are at the origins of the nitrogen cycle. Apparently, even rare species of legumes in the plant community can be an important element of sustainability and maintenance of biodiversity in biocenoses [8, 11].

It is customary to refer to useful plants as those species that a person uses directly for their needs, both fresh and after processing, i.e. these are plants, the benefits of which are obvious [5].

Results. *Melilotus officinalis* L. - *Melilotus officinalis*. A biennial herb that is found on the fine-earth slopes of Ustyurt.

Geographic type: Mediterranean-Iranian-Turanian. It is a valuable species and is used as a fodder, food, medicinal and melliferous plant. .

Melilotus officinalis L. is a good medicinal plant that is anti-thrombotic. More poisonous and poisoning is associated with the presence of coumarin in all plant organs, which reduces the ability of blood to clot. As a result, multiple hemorrhages occur in the tissues and organs of the sick animal. *Melilotus officinalis* L. is highly valued as a late harvest crop. Green mass is used for livestock feed, for making hay, haylage. At the beginning of flowering, the dry mass of *Melilotus officinalis* L. contains approximately 19% protein. *Melilotus officinalis* L. is also used as a green manure plant. The disadvantage of this culture is the presence in the vegetative mass of a bitter substance - coumarin [5, 7]. And also, it is used in the treatment of cancer, the content (coumarins, xanthotoxins and leucoanthocyanins) substances with antitumor activity [9].

Biennial blooming in the second year of life. The species is interesting for its long flowering. The root system is pivotal, with well-developed lateral roots. Stems are straight, less often ascending, 75-300 cm high. The branching of the stems begins at a height of 25-30 cm. In the upper part, the stems are short-pubescent, below they are glabrous.

It is also a spicy aromatic plant. Plays an important role in enhancing the taste and nutritional value of food. At the same time, they are widely used in the pharmaceutical and perfumery and cosmetic industries. At present, the needs of the republic for spicy-aromatic raw materials are satisfied on the basis of the cultivation of local and introduced plants, as well as largely through imports [10].

Discussions. According to the results obtained, it can be said that *Melilotus officinalis* L. is a biennial plant, it is used as a medicinal, food, fodder and melliferous species. The Fabaceae family, as a whole, and many genera,

subgenus, and legume sections are an example of a very active modern speciation, which is of considerable scientific interest, primarily for understanding the peculiarities of phylogeny in flowering plants. The relative youth and active modern speciation of taxa of this family, a wide range of variability of characters, the presence of different levels of ploidy - all this sharply complicates the study of Fabaceae in a systematic way.

Conclusions. The above data allow us to conclude that *Melilotus officinalis* L. is a valuable plant, it is used as a medicinal, food, fodder and melliferous plant. The wild flora of the Republic of Karakalpakstan has significant potential and, with rational and competent use, will provide the population not only with high-quality, environmentally friendly honey, medicines and other valuable products for many years to come.

The growing interest in therapeutic and prophylactic drugs based on medicinal plants and increased requirements for the quality of medicinal raw materials indicate the need to expand the range of cultivated plants and search for new rare wild-growing ones for the production of phyto-harvests. Practically they are promising for cultivation in culture in order to obtain medicinal raw materials [6]. Due attention must be paid to the preservation of their gene pool.

Recommendations. Sweet clover is recommended to be used as a medicinal raw material. Contains 0.4-0.9% coumarin. Medicinal melilot preparations are used as an external distraction and irritant for rheumatism. It can also be used as a flavoring agent for some foods and tobacco, and is added to some brands of vodka. Melilot honey is one of the first-class and has a high taste. This honey is light amber or white in color with a subtle pleasant aroma reminiscent of vanilla. It can be used as a green fertilizer and is a soil conditioner. *Melilotus officinalis* is an excellent food for livestock [12-15].

Acknowledgments. For constant guidance and assistance in the work, the author expresses sincere gratitude to his scientific advisor, Candidate of Biological Sciences,

Associate Professor A.B. Azhiev. The author expresses his personal gratitude for the advice and advice on completing this work and to all those who provided moral support.

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