THE STUDY OF PLANT-GROWING TERMINOLOGY IN THE UZBEK LANGUAGE

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https://doi.org/10.5281/zenodo.18628554

Abstract. *This article examines the issues of studying plant science terminology in the Uzbek language from linguistic and terminological perspectives. The research focuses on the sources of formation, semantic characteristics, and systemic development of phytological terms. Special attention is given to phytonyms found in folklore, ancient written sources, and modern scientific texts. Descriptive, comparative, and statistical methods were employed in the study. The findings contribute to the enrichment and standardization of Uzbek scientific terminology and highlight the linguocultural significance of plant-related terms.*

Keywords: *plant science terminology, Uzbek language, phytonyms, term, lexico-semantic analysis, scientific language.*

INTRODUCTION

The development of scientific terminology plays a crucial role in the standardization and advancement of any language. In this respect, the study of plant science terminology in the Uzbek language is of particular importance, as it reflects both linguistic evolution and the scientific understanding of the natural world. Uzbek plant-related terms, including phytonyms, have been formed over centuries through folk knowledge, agricultural practices, and scholarly traditions. Despite the growing interest in terminological studies, Uzbek plant science terminology has not yet been sufficiently systematized from a linguistic perspective. Many terms exist in parallel forms, display semantic ambiguity, or lack standard definitions in scientific usage. This situation creates challenges for lexicography, translation, and academic communication. The present study aims to examine the main issues related to the research of Uzbek plant science terminology by analyzing its sources, semantic structure, and functional characteristics. The study also seeks to identify linguistic patterns that contribute to the formation and development of plant-related terms in Uzbek.

METHODOLOGY

The research is based on a combination of qualitative and quantitative linguistic methods. A descriptive method was used to analyze the structural and semantic features of plant science terms in the Uzbek language. Lexico-semantic analysis helped to identify meaning relations, polysemy, and synonymy within phytological terminology. In addition, a comparative method was applied to compare terms found in folk usage, classical written sources, and modern scientific texts. Statistical analysis was employed to determine the frequency and distribution of selected plant terms across different sources. The research materials include explanatory dictionaries, terminological glossaries, folklore texts, and contemporary academic publications related to plant science.

RESULTS AND DISCUSSION

The analysis shows that Uzbek plant science terminology is formed from multiple sources, including native lexical units, borrowings, and metaphorical extensions. A significant number of terms originate from folk plant names, which later acquired scientific meanings. This demonstrates a strong connection between linguistic tradition and scientific terminology. The results also reveal that many phytonyms display semantic expansion, where a single term may refer to both a specific plant species and its symbolic or cultural meaning. Such polysemy enriches the language but may cause difficulties in scientific classification and translation. Furthermore, the lack of terminological standardization leads to variation in usage across academic texts. This highlights the need for unified terminological principles and updated lexicographic resources. From a linguocultural perspective, plant science terminology reflects national identity and traditional ecological knowledge, making it an important object of linguistic research.

It is clear to experts that in Uzbek linguistics, a number of research works have been carried out within the framework of the issues of "terminology", defended dissertations, books and monographs, dictionaries and articles give different definitions of terms and terminology, which are based on the scientific and theoretical views of each researcher. Terminology is a set of terms related to a science, profession and other field, as explained in dictionaries (lat. terminus + logos – word, teaching), and a term (lat. terminus – check, border, boundary mark) is a word or combination of words that clearly expresses the concept of science, technology and something related to another field, the scope of use of which is limited to these areas, the terms have the same meaning, It differs from common words in terms of expressionism and lack of empathy [1,104]. The lexicon 'terminus' is derived from the Latin word 'terminus', which means 'end', 'check', 'border', 'end'" [2, 203].

According to P. Nishonov, "A term is a lexical unit that is a word or combination of a word, which is semantically limited to a special sphere and expresses the concept of this sphere" [3,17]. O. Bobokalonov in his work entitled "Pragmatictic, Lingvocultural and Lingvocognitive Study of the Terminology of French-Uzbek Healing Plants" gives the following definition of the term: "In our opinion, the term is an integral component of the literary vocabulary system, and differs from other categories of words by its clear, compact and rich in information of scientific, technical or other professional concepts [4,18].

In general, we have observed that the exact definition of a term differs sharply from the word in that it belongs to a certain field, i.e., a profession, is limited and limited, has a monotony, a clear, compact expression of scientific, technical, or other professional concepts, and does not have expressiveness and emotion. We didn't dwell on the terminology and terminology briefly above. Because in Uzbek linguistics there is a terminology of such fields that they have not yet been studied linguistically. One such terminological system is a holistic study of the terminological system of plant science. In Uzbek linguistics, the terminology of this field is still not the object of research. However, in world linguistics and Turkic studies, comparative two-trilingual studies of plant studies, in particular, of the terminological system of medicinal plants, have been carried out in Uzbekistan. For the first time, a special scientific analysis of this topic was carried out, in which a pragmatical, linguocultural and lingvocognitive study of the terminology of healing plants was carried out on the basis of materials of Uzbek and French languages.

It's a pity to all of us that humanity is inextricably linked to the plant world. The world of plants eats and drinks man, cloaks him, purifies the air, creates beautiful landscapes. It is difficult to enumerate the benefits and significance of plants. Because one of the most remarkable properties of plants is that they are healing for humans and a source of food for livestock. Humanity has

enjoyed the healing properties of plants since ancient times. In primitive community times, people sought a cure for their ailments, seeking primarily the plant world as well as animal products. Initially, plant fruits, roots, root fruits, as well as animal products served as food for humans. Previously, the healing properties of plants were discovered by accident, but later, after vital tests and observations, they began to be used in folk medicine.

Plant growing is one of the main branches of agriculture, dealing with the issues of cultivation for the purpose of growing food for the population, fodder for livestock and raw materials for many sectors of light industry, and the use of plants that grow wild in nature. This has its own characteristics. First of all, the seasonality of agricultural production, the implementation of certain agrotechnical activities in certain terms, the constant change of conditions. The constant introduction of new varieties, new technologies into agriculture requires specialists in this field to have a thorough knowledge of the field. Grass, hay, millet and succulent feeds are made from plants. The organic fertilizers required for plants are derived from livestock waste. Plant growing originated in ancient times, that is, with the emergence of cultural plants, and it is closely related to farming. Initially, farming began to develop in Iraq, India, China, Syria, Egypt, Mexico, Bolivia, and Central Asia [6,3].

The plant world is considered one of the natural resources. It is known that since the earliest times, our people have tried to know the nature of plants and used them to treat various diseases. Such great thinkers as Abu Ali ibn Sina, Abu Bakr ar-Rozi, Abu Rayhan Beruni tried to cure the sickness of patients with healing herbs. A few centuries ago, the works of our compatriot, the great thinker Abu Rayhan Beruni (973-1048), such as "India", "Geodesy", "Mineralogy", "Saydana", "Saydana", illuminate the history, culture, fauna and fauna of that period. Especially noteworthy is the work "Kitap as-Saydana fi-t tibb", written in 1048 during the reign of Ma'dud, the successor of Mahmud Ghaznavi, in the last years of his life, devoted to the description of medicinal plants, animals and ores. The introduction to this work reveals the author's passion for knowing the universe that surrounds him in his youth and how the universe is called in different languages . In particular, when a scientist is a child, a Greek immigrates to his land. It is said that Abu Rayhan Beruni brought him grain, seeds, fruits, plants, and other things, and asked him how they were called in Greek, and wrote down the Greek names in his notebook

Our people have been trying to find out the nature of plants since the earliest times and have used them to treat various diseases. Our great thinkers such as Abu Ali ibn Sino, Abu Bakr ar-Rozi, Abu Rayhan Beruni tried to cure the pain of patients with healing herbs. The peoples living in the regions of Central Asia, the Caucasus, Iran, Afghanistan, Egypt, Asia Minor were interested in the distribution, growth and characteristics of plants in their regions about 5-6 thousand years ago.Plant science plays an important role in solving existing problems in agriculture. The development of plant science in general depends on the progress of society, and many scientists have contributed to the development of science. Among them are K.A.Timiryazev (1843-1920), who identified the centers of origin of plants N.I. Vavilov (1887-1943), who created new varieties of field crops P.P.Lukyanenko, V.S.Pustovoyt, E. N.Remeslo, N.V.Sisin, M.N.Khodzhinov and others can be listed [7].

In the development of plant science, one of the Uzbek scientists, academician A.I.Imomaliyev, M. V.M. Muhammadjanov, breeders S.M.Mirahmedov, M.A. Karimov, Q.Z.Zokirov, N.N. Nazirov also made their contributions. Scientific work in plant science is linked with the sciences of physics, chemistry, botany, soil science, meteorology, and in addition, it is

necessary to base it on special agricultural sciences.Today, there is a great interest in plants in our country. Not only biologists and zoologists, naturalists, but also linguists are interested in plants, wrote various pamphlets, textbooks, compiled dictionaries. Among them are "Plant Science" by D. Yormatova, "Plant Diseases" by H. Yoldoshev, "Treasures from the Treasure of Folk Medicine" by N. Oljaboeva, "Russian-Uzbek Annotated Dictionary of Plant Science" by S. Muhamadjonov, F. Zhonguzarov "Russian-Uzbek Annotated Dictionary of Botanical Terms" by S. Sahobiddinov.

In many countries, including Uzbekistan, the plant has a very ancient history. In the gardens created by Amir Temur, Babur, special attention was paid to the cultivation of various plants. Unfortunately, such professional terminology has not yet been explored from a linguistic perspective. In Uzbek linguistics, the terminology of the Uzbek people in terms of plant studies has not been studied in a diachronic and synchronous aspect. A study of written monuments and words related to plant studies in the Uzbek folk speech, including the Uzbek folk speech, shows that the Uzbek language is much richer in terms related to plant science. The terminology of plant science can be divided into several species according to the structure, habitability, resemblance to certain things, and the expression of their life forms. They can be classified as follows:

1. Terms for Woody Plants: We *can cite plant names such as* fig, juniper, quince, almond, pearl, jiyda, chilonjiyda, peach joka, lemon, coral tree, cherry, white, piston, thorn tree, caterpillar, vine, mountain, egg, corn, olive, plum, oak, birch, apricot.

2. Terms representing shrub plants: zirk,monkey, bumblebee, raccoon, blueberry, scab, rosemary, raspberry, monkey, na'matak, eggplant, sano, pistachio, chakanda, black currant, black zirk, great pink, flax. Includes shrubby plants ;

3. Terms representing semi-bumble plants: izen, keyreuk, teresken, sarsasan, wormwood, etc.

3. Terms representing herbs: dandelion, white-tailed, onion, ravoj//ravoch//chukri, garlic, shirach, kruzilma, kantepar, scabbard, pumpkin, strawberry, fennel, lionear, bittersweet, bangidevona, gazako't, rosehip, millet, peanuts, peanut, ginger, flax, zupturum, bite, isfarak, dogrape, sunflower, sesame, ko'ko't, lemon, corn, mingbosh, mingdevona, dandelion, white, parsley, onion, carrot There are terms.

The above-mentioned terms of herbal science are genetically related to Persian-Tajik, Arabic, Russian, and Turkic. Most of these compound terms are used in our literary language. Written sources are recorded in dictionaries and books, historical, geographical, artistic works, such as poetry and prose. In general, today in Uzbek linguistics, the terms of national economy, in particular agriculture, which have a special place and importance in the order of terminology, are considered to be one of the terminological systems that should be studied at the level of modern lexicography requirements.

Terms related to plant studies should also be systematically studied as a linguistic phenomenon that carries important historical, national, cultural, and social information. Because the study of the terms of this field acquires scientific, educational value. The assimilation of knowledge about plant science, the relationship of human society to mother nature, the world of plants, the environment occupies an important position and place within the framework of topical issues of all times and spaces. Issues and tasks related to the study of plant science terms on the basis of modern linguistic principles and methods, analysis of lexical-sematological, genetic-etymological, nominative-funsionymic properties of terminological units, evaluation of the relationship between general lexical and terminological units are becoming more urgent.

The study of terms related to plant studies and its use in the artistic arts, mentioning them in the names of boys and girls, the multiplicity of terms related to this field, their formations, meanings, antonyms, paronyms are important for linguistics. The study of the structure, structure, composition of morphemes, as well as lexic-semantic features of the terminology of this field, namely periodic, spatial sign, shape, color, smell and other characteristics, will also be relevant in the teaching and study of such disciplines as language, botany, geography, biology, farming, ethnography, history, plant science. Folk words and terms related to plant growing will further enrich the terminological system and vocabulary of the Uzbek language, provide practical assistance in the nationalization of scientific terminology of plant growing.

CONCLUSION

The study confirms that Uzbek plant science terminology represents a complex and dynamic linguistic system shaped by historical, cultural, and scientific factors. The research identifies key issues such as semantic ambiguity, variation in usage, and insufficient standardization of terms. Addressing these challenges requires systematic linguistic analysis and the development of specialized terminological dictionaries. The findings of this study contribute to a deeper understanding of Uzbek scientific language and provide a foundation for further research in terminology, lexicography, and linguistic culture.

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