Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 2, Issue 3, March, 2026
Website: usajournals.org

LINGUISTIC SUPPORT OF THE THESEURUS OF AGRICULTURAL TERMS

(Based on the semantic field system of agricultural terms)

Ashirmatova Manzura
Associate Professor of the Department of Uzbek Language and Literature Tashkent State Agrarian University, UZ

Abstract

In this article, Uzbek agricultural terminology is systematically analyzed based on semantic field theory. During the research, the lexico-semantic structure of agricultural terms, the principles of their semantic grouping, and internal systemic connections are revealed. Terms are studied based on paradigmatic and syntagmatic relationships, and the main semantic fields and their constituent units are described. The central and peripheral layers of agricultural terminology, its relationship with common vocabulary, and sectoral hierarchy are also highlighted. The research results serve as a solid theoretical and practical basis for systematizing agricultural terminology, its scientific classification, and creating a sectoral thesaurus (a special terminological vocabulary system built on semantic connections).

Keywords: Agricultural terms, semantic field, thesaurus, agricultural terminology.

Introduction

In modern linguistics, the systematic study of field-specific terminology, including the determination of its internal structure, semantic connections, and hierarchy, is considered one of the most relevant scientific issues. In particular, the terminology of a historically developed, multifaceted, and practice-oriented field like agriculture requires a distinct scholarly approach. The core of Uzbek agricultural terminology is linked to farming activities, which are intrinsically connected to the labor experience, natural-climatic conditions, and national mindset accumulated by the people over centuries.

Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 2, Issue 3, March, 2026
Website: usajournals.org

Farming terms encompass processes such as land cultivation, crop sowing, plant care, irrigation, fertilization, harvesting, and product storage. Unless these terms are studied systematically, certain problems will arise in their lexicographical compilation, standardization, and application in information technologies. From this perspective, researching farming terms based on semantic field theory and creating a terminological thesaurus on that basis holds significant scientific and practical importance.

The purpose of this article is to systematize Uzbek farming terms based on semantic fields, to reveal their mutual semantic relationships, and to elucidate the linguistic foundations for creating a thesaurus of agricultural terms. The research employed semantic analysis, classification, comparative, and descriptive methods.

The theory of the semantic field emerged in 20th-century linguistics from the necessity to study the lexicon as a system. According to this theory, words and terms related to a specific domain do not exist in isolation but form a semantic system unified around a common core of meaning. Such an approach makes it possible to identify the semantic connections between lexical units.

In the field of terminology, the semantic field approach is considered particularly effective. This is because terms pertain to a specific science or field of activity, and relationships such as hyperonymy, hyponymy, meronymy, and synonymy exist between them. Farming terms also constitute a cohesive system based on these relationships.

Semantic field theory provides the theoretical foundation for creating a terminological thesaurus. A thesaurus is not merely an explanation of terms but a system that reflects their mutual semantic relationships, hierarchy, and functions. Therefore, when presenting farming terms in the form of a thesaurus, it is crucial to clearly define the semantic fields.

Farming terms are distinguished by their precision, functionality, and domain-specific limitations. They are typically monosemous and differ semantically from words in the general lexicon. For example, although words such as “yer” (land), “urug'” (seed), and “hosil” (harvest) are also used in common parlance, they acquire a special terminological meaning within the field of agriculture.

Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 2, Issue 3, March, 2026
Website: usajournals.org

One of the key features of agricultural terms is their systematic nature. One term necessitates another, and they are used in logical and semantic connection. For example, the process of "planting crops" is inextricably linked with the terms "land preparation", "seed selection", "irrigation", and "fertilization". Additionally, national and traditional factors play an important role in agricultural terminology. Some terms are formed based on the experience of folk agriculture, making their direct translation into other languages difficult. This situation also requires a thorough development of the semantic description of terms when creating a thesaurus.

As a result of the research, the following main semantic fields were identified within the framework of agricultural terminology. Each field has its own central (core) and peripheral units, which form a system based on hyperonymic (general-specific), meronymic (whole-part), and functional relationships.

1. Terms related to land and soil. This semantic field constitutes the conceptual basis of agricultural activity, as any agrarian process is directly related to land and soil. This field includes terms such as "land", "field", "soil", "sandy soil", "saline soil", "humus", "fertility", "melioration", and "structured soil".

These units describe the physical (composition, moisture, density), chemical (mineral content, salinity), and biological (presence of microorganisms) properties of the land. While the term "soil" forms the core of this field, units like "sandy soil" and "saline soil" constitute its hyponymic layer.

This field serves as the foundation for all other semantic fields.

2. Crop and seed production terms. This field reflects the biological and breeding aspects of agriculture. It includes terms such as "seed", "variety", "seedling", "hybrid", "selection", "variety development" and "certified seed".

The concepts of "crop" and "seed" are the central units of this field. The terms "variety" and "hybrid" express biological diversity and establish a hyperonymic relationship (for example, "wheat" is a general concept, while its specific varieties appear as specific units). This semantic field is intrinsically linked with the land and soil field, expressing the interaction of biological processes with the natural environment.

3. Agro technical processes. Agro technical processes consist of terms that denote the practical stages of agriculture. For example: "plowing", "harrowing",

Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 2, Issue 3, March, 2026
Website: usajournals.org

"cultivation", "irrigation", "fertilization", "weeding", and "pest control". These terms are process-oriented and are related to time and sequence. They form a system based on functional interdependence. For instance, the "plowing" process is followed by "harrowing", after whom the "sowing" stage is carried out. This semantic field constitutes the dynamic layer of agricultural terminology.

4. Agricultural machinery. This field includes terms related to mechanization and technological progress: "tractor", "combine harvester", "seeder", "cultivator", "sprayer", and "reaping machine". These terms denote the implementation of agro technical processes through technical equipment. For example, a "tractor" is a general piece of equipment, while a "cultivator" or "seeder" refers to devices that perform specific functions. This field has a direct functional connection with the semantic field of agro technical processes.

5. Harvest and product quality. This semantic field is result-oriented and reflects the final stage of agricultural activity. It includes terms such as "harvest," "yield", "harvesting", "storage", "packaging", "quality control", and "export-quality product".

"Harvest" is the central concept of this field, while "yield" refers to a quantitative indicator and is associated with statistical concepts.

This field manifests as the logical outcome of all preceding semantic fields.

The identified semantic fields form a single terminological system based on hierarchical and functional connections. While the "land and soil" field serves as the conceptual foundation, "crop and seed production" represents the biological context, "agro technical processes" the practical stages, "equipment" the technological means, and "harvest" the final indicator.

Thus, agricultural terminology constitutes a holistic semantic space with an internal system. Defining and describing this system serves as an important methodological basis for creating a terminological thesaurus.

An analysis of existing agricultural dictionaries shows that in most of them, terms are listed in alphabetical order, but the semantic relationships between them are not fully reflected. This complicates the use of these terms in scientific and information systems.

This problem can be solved by creating a terminological thesaurus. In a thesaurus, terms are arranged based on semantic fields, hierarchical relationships, and

Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 2, Issue 3, March, 2026
Website: usajournals.org

interconnections. This facilitates information retrieval, translation, and automated text analysis in the field of agriculture.

In conclusion, studying agricultural terms based on semantic field theory makes it possible to reveal their internal structure and systemic characteristics. The identified semantic fields serve as a solid linguistic foundation for creating a thesaurus of agricultural terms. The research findings are of practical significance for the field's lexicography, translation studies, and information technology.

REFERENCES

1. Trier J. Der deutsche Wortschatz im Sinnbezirk des Verstandes. – Heidelberg: Winter, 1931. – 347 S.
2. Urinovna H. N. Scientific onomasiological analysis of the names of national games //Нововведения Современного Научного Развития в Эпоху Глобализации: Проблемы и Решения. – 2023. – Т. 1. – №. 3. – С. 1-3.
3. Weisgerber L. Vom Weltbild der deutschen Sprache. – Düsseldorf: Schwann, 1950. – 392 S.
4. Lyons J. Semantics. – Cambridge: Cambridge University Press, 1977. – 897 p.
5. Lehrer A. Semantic Fields and Lexical Structure. – Amsterdam: North-Holland Publishing Company, 1974. – 221 p.
6. Cruse D. A. Lexical Semantics. – Cambridge: Cambridge University Press, 1986. – 310 p.
7. Wüster E. Introduction to the General Theory of Terminology and Terminological Lexicography. – Vienna: Springer, 1979. – 295 p.
8. Cabré M. T. Terminology: Theory, Methods and Applications. – Amsterdam: John Benjamins Publishing Company, 1999. – 248 p.
9. Sager J. C. A Practical Course in Terminology Processing. – Amsterdam: John Benjamins Publishing Company, 1990. – 256 p.
10. Hojiyev, A. Uzbek Lexicology and Lexicography. - Tashkent: O'qituvchi, 2002. - 256 p.
11. Rahmatullayev, Sh. Explanatory Dictionary of the Uzbek Language. - Tashkent: National Encyclopedia of Uzbekistan, 2006. - 680 p.
12. Urinovna K. N. Analysis of the Names of Folk Games as Onomastic Units //Spanish Journal of Innovation and Integrity. – 2025. – Т. 41. – С. 111-117.