

VERNACULAR SYNONYMS OF LATIN BOTANICAL TERMS IN ENGLISH AND UZBEK, THEIR ETYMOLOGICAL AND LINGUISTIC FEATURES

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LOTIN TILIDAGI BOTANIK TERMINLARNING INGLIZ VA O'ZBEK TILLARIDAGI XALQONA SINONIMLARI, ULARNING ETIMOLOGIK VA LINGVISTIK XUSUSIYATLARI

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НАРОДНЫЕ СИНОНИМЫ ЛАТИНСКИХ БОТАНИЧЕСКИХ ТЕРМИНОВ В АНГЛИЙСКОМ И УЗБЕКСКОМ ЯЗЫКАХ, ИХ ЭТИМОЛОГИЧЕСКАЯ И ЛИНГВИСТИЧЕСКАЯ ХАРАКТЕРИСТИКА

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Abstract. This article is devoted to the emergence of botanical terms and the influence of the Latin language on them, as well as the analysis of their similarities and differences by comparing and contrasting their synonyms in English and Uzbek. Thus, we tried to find answers to the following several questions: 1. Why was Latin used to denote botanical terms? 2. What botanical terms in Latin can we see in the works of scientists? 3. Why did other languages need to be used when naming plants? Do botanical terms in Uzbek and English correspond to each other when translated? If not, what is the reason? We found 325 botanical terms in Latin, 650 in English, and 400 in Uzbek for analysis. Scientists used Latin to denote botanical terms because the first scientists who studied botany were from the Greco-Roman states. Their primary language of science was Latin. One of the main reasons why English and Uzbek abandoned Latin words and used words in their native language as terms is that over the years, Latin became a dead language, and we came to the conclusion that misunderstandings in naming arose because of it. Although representatives of both nations call plants using English and Uzbek words that they understand, the terms expressed in Latin are recognized worldwide. They are still used as scientific language terms.

Keywords: terminology; usage of Latin; botanical terminology; synonym; etymology; English botanical terms; Uzbek botanical terms; binary nomenclature; semantic meaning; structure of botanical terms

Annotatsiya. Ushbu maqola botanik terminlarning paydo bo'lishi va bunda lotin tilining ta'siri, qolaversa, ularning ingliz va o'zbek tillaridagi sinonimlarini qiyoslash va chog'ishtirish orqali ularning o'xshash va farqli tomonlarini tahlil qilishga bag'ishlangan. Bu orqali biz quyidagi bir nechta savollarga javob topishga harakat qildik: 1. Botanik terminlarni ifodalashda nima uchun aynan lotin tilidan foydalanilgan? 2. Lotin tilidagi botanik terminlarni qaysi olimlarning ishlarida ko'rishimiz mumkin? 3. Nima uchun xalq seleksiyasida o'simliklarni nomlashda lotincha so'zlardan tashqari boshqa tildagi so'zlardan foydalanishga ehtiyoj sezildi? O'zbek va ingliz tillaridagi botanik terminlar tarjima qilinganda bir-biriga mutanosib keladimi? Agar mos kelmasa, sababi nima? Foydalangan adabiyotlarimizdan tahlil uchun lotin tilidagi 325ta, ingliz tilida 650ta, o'zbek tilida esa 400ta botanik terminlarni yig'dik. Olimlar botanik terminlarni ifodalash uchun lotin tilidan foydalanganligining sababi botanika fani bilan shug'ullangan dastlabki olimlar yunon-rim davlatlaridan ekanligi va ularning asosiy fani tili lotin tili ekanligini, ingliz va o'zbek tilida lotincha so'zlardan voz kechib o'z tillaridagi so'zlardan termin sifatida foydalanishining asosiy sabablaridan biri, yillar o'tgani sayin lotin tilining o'lik tilga aylanishi va oddiy xalq tomonidan o'simliklarni nomlashda tushunmovchiliklar kelib chiqqanidan deb xulosa qildik. Garchi har ikki xalq vakillari o'simliklarni o'zlariga tushunarli bo'lgan ingliz va o'zbek tilidagi so'zlar bilan atashsada, lekin lotin tilida ifodalangan terminlar butun dunyo bo'yicha tan olingan va hozirgi kungacha ilmiy til terminlari sifatida foydalaniladi.

Kalit so'zlar: terminologiya; lotin tilidan foydalanish; botanika terminologiyasi; sinonim; etimologiya; inglizcha botanik terminlar; o'zbekcha botanik terminlar; ikkilik (binar) nomenklatura; semantik ma'no; botanika terminlarning tuzilish.

Аннотация. Статья посвящена появлению ботанических терминов и влиянию на них латинского языка, а также анализу их сходств и различий путем сравнения и сопоставления их синонимов в английском и узбекском языках. Таким образом, мы попытались найти ответы на следующие несколько вопросов: 1. Почему именно латынь использовалась для обозначения ботанических терминов? 2. Какие ботанические термины на латыни мы можем встретить в работах ученых? 3. Почему в народной селекции при названии растений, помимо латинских слов, возникла необходимость в использовании слов из другого языка? Соотносятся ли при переводе ботанические термины на узбекском и английском языках друг с другом? Если не соотносятся, в чем причина этого? Из использованной литературы мы собрали для анализа 325 ботанических терминов на латыни, 650 на английском и 400 на узбекском. Причина, по которой ученые использовали латынь для обозначения ботанических терминов, заключается в том, что первые ученые, занимавшиеся ботаникой, были из греко-римских государств и что их основным языком науки была латынь. Одна из основных причин, по которой английский и узбекский отказались от латинских слов и использовали слова на своем родном языке в качестве терминов, заключается в том, что с годами латынь стала мертвым языком, и мы пришли к выводу, что из-за этого возникли недоразумения в названиях. Хотя представители обоих народов называют растения понятными им английскими и узбекскими словами, термины, переданные на латыни, признаны во всем мире и до сих пор используются в качестве научных языковых терминов.

Ключевые слова: терминология; использование латыни;

ботаническая терминология; синоним; этимология; английские ботанические термины; узбекские ботанические термины; двоичная (бинарная) номенклатура; семантическое значение; структура ботанических терминов.

Introduction

Relevance of the topic of the article. Within the scope of each field in society, there are specific terminology. The study of terminology in world linguistics is differentiated by its relevance. Naming recently found objects and notions is a necessary but necessary requirement for scientific advancement. Botany has recently gained linguistic attention among botanists and linguists alike (39, 31–51). As a result, various botanical terminology dictionaries have been produced in print and electronic formats in partnership to this day (31). There are specific characteristics that influence the construction of terminology, and these characteristics should be considered when working on a dictionary (3).

The degree of study of the problem. The necessity to communicate new ideas and phenomena that arise in all spheres of social life to the public is intimately tied to the process of creating terminology in Uzbek and English. According to Russian researcher I. V. Sivakov, terms are words that signify ideas that are relatively new due to advancements in science, technology, and art. It should be kept in mind that the translation of terminology depends on the application and area of competence, regardless of the discipline they belong to, such as economics, material science, metrology, or transportation (36). Consequently, one of the crucial and unachievable problems with the terminology of both languages is the investigation and advancement of the terminology in several fields about its necessity in society, especially botanical terms. As far as we are aware, Latin words serve as the basis for the international nomenclature proposed by Linnaeus (24), which is used to name plants and is accepted by scientists worldwide (5). It is sometimes named after an open nomenclature (23). Greek word systems and composition were used to overcome Latin's only linguistic shortcoming, which was its poor word composition when names were assigned in early modern science. Until then, it was the most successful naming process in human history (13). This can be attributed to the fact that the majority of ancient philosophers lived and worked in the Greek and Roman Empires, where Greek and Latin were the dominant languages. Consequently, all of their writings have survived to be read by succeeding scholars in Latin and Greek, and the majority of the words and word combinations they employed have been altered or used throughout the ages in a variety of subjects, particularly in botanical science, while maintaining their original meaning. Specifically, W. T. Stern, an English botanist, said that: "Latin is the international language used by botanists worldwide for naming and describing plants." It is not required to be used unless describing plants that are thought to be novel to science, but Systematic Botany study can be done without consulting earlier Latin-language works (28). E. J. H. Korner wrote the following piece: — "We botanists preserve Latin culture. In

place of our mother tongue, we read, write, and speak Latin. We have an apolitical obligation to honour it! Latin is actually a highly important international language for botanical science, even though it is rarely acknowledged, and its differences from classical Latin are frequently observed." (41). Plant-related literature has traditionally been written primarily in Latin. The writings of Theophrastus, Pliny (17), Isidora (33), monk Albert Magnus (2), Valerius Cordus and his contemporary Fyuh are among them. As a result, throughout the Renaissance, people from all across Europe utilised Latin as a language of instruction. Additionally, it evolved until the 16th century and was extensively applied in legal, religious and diplomatic affairs.

Purpose of the study. It consists of revealing their etymological and linguistic features by comparing botanical terms in English and Uzbek with their scientific names in Latin.

The object of study. Botanical terms are listed in lexicographic sources in English and Uzbek.

The subject of research. Analysis of etymological and linguistic features of botanic terms in English and Uzbek.

Main part

In the process of writing this article, we researched the linguistic and etymological elements of botanical terminology in Latin, English, and Uzbek, as well as the scientific work of numerous linguists (35) and botanical experts from around the world. We attempted to do a comparative study (9) on botanic terminology, which serves as the primary source for our article, utilising qualitative, quantitative, and statistical methods. We gathered and applied the Latin (6), (8), (14) and English botanic terms (40) given in the article from the scientific works of different scientists.

Latin was employed as an educational and international language among Europeans during the Renaissance. It also gained popularity in diplomatic, legal and ecclesiastical settings. It is important to highlight that Latin words make up the majority of scientific botanical terminology. However, as the decades went by, a multitude of languages and thousands of dialects derived from them emerged in human civilisation, and Latin, which had become obsolete outside of the language of science, turned its face to challenging and intricate concepts that the general public could understand. Furthermore, there are some shortcomings in the use of Latin terms by scientists all over the world (11). However, individuals are beginning to give the nearby plant names in a language that makes sense to them, and naturally, these names have developed into full terms, whereas some scientists have researched the disadvantages of using common names for plants (32). Several scientists actively participated in their research work during the process of identifying the specific plant, and a worldwide nomenclature was produced. It has a small history of its own as well. According to Indian botanist H. Gupta, the current method of binomial nomenclature has a lengthy evolutionary history. He claims that a scholar named Kato used two names for plants in his work, known as "De Re

Rustica", in 200 BC, but he was not as familiar with the terms generation and species as we know them today. Subsequently, the Latin translations of the Greek names for the species assumed the form of common binary names. Braunfels combined numerous binary common names into a single name in the middle of the 16th century. Dodonaeus was developing names that resembled the binomial nomenclature system that is in use today a few years later. However, in the context of botanical research at the time, none of the mentioned scholars was able to make a quantitative judgement on binary naming, and they all continued to utilise terms like monomial, binomial, trinomial, and polynomial in their works in a mixed form (18). Linguist V. Stern notes that Carl Linnaeus, who developed modern botanical nomenclature in the 16th century for use by herbalists and botanists, proposed that all plants should be given Latin names regardless of regional folk names and that any research about them would be conducted in Latin. This idea resulted in the creation of a binary system for plant naming, which is a confirmation of this (28). Specifically, German researcher D. Berrens discussed the etymology of some botanical terminology and how scientists and philosophers originally understood them in his work known as "The Rise of Botanical Terminology in the Sixth and Seventh Centuries" (7). Fyuh's dictionary about botanical terminology is the most compact yet most valuable of them. By arranging alphabetically, he also included a chapter explaining Latin terms which were not easy to understand. In his lexicon, he listed 130 Latin names related to plants. According to V. Stern, several of Fyuh's botanical dictionaries are out-of-date or have distinct meanings, so it is no longer used as a botanical term. P. Anderson-Fung, an American ethnobotanist and linguist, examined Hawaiian flora ethno-botanically and culturally, comparing native names to Linnaeus's Latin terminology (4). After the top information, it is normal to have a question. In the study of plants, the binary naming system and its precise definition are explained, along with the necessity of plant names. The reason for this is that a single plant can have multiple different looks throughout the world, and each region gives it a folkname based on its knowledge and worldview as well as the shape, colour, and character of that plant. This leads to a variety of challenges and misunderstandings for researchers and students when utilising scientific terminology. When the cause is well-known, the following three explanations are the most frequent ones:

1. Common or regional names might be extremely ambiguous. For instance, the single bamboo tree has many names. Examples include fish poles, golden, monk's bellies, and fairyland bamboo (*Phyllostachys aurea*).

2. A single plant can grow in multiple states, and it has different names in the native language of each state and the language of another nation, but it lacks any distinctive characteristics. For instance, garlic onion is known in Uzbek, and green-flowered garlic is known in English.

3. Because of the first two factors mentioned above, the third challenge — that is, studying the world of plants in the same state — has a severely detrimental effect on foreign herbalists' ability to do research because of the paucity of available study materials and the obscurity of the local language (18).

Botanical terminology has been studied in world linguistics using a variety of ideas and techniques, and this process is still in place at present. Numerous research experts have also looked into the study of botanical terminology that we will cover, either in conjunction with or apart from folk names, and how people use them. Specifically, a team of scientists under the direction of the Chinese Yi Von Eddy used a variety of techniques to investigate the names of scientific and folk plants in various Chinese provinces. He said that the morphological, cultural, and functional aspects of the plants in the Kholingshan province were the basis for the grouping and analysis of the plant folk names by the researchers (1). Based on Eugenio Cesariu's lexematic theory, Romanian researcher Oana Zamfirescu investigated the situation of popular botanical nomenclature in Romania. According to the study, terminology used in science and popular botany represents objective and conditional classifications, and the materials supplied in different publications, such as dictionaries, encyclopedias, and plant names, define their characteristics. Based on his research, Zamfirescu concludes that popular plant names fall between scientific terminology and common English (43). Furthermore, Thai researcher U. Singoni examined Brent Berlin's traditional societies to comprehend the folk taxonomy and conceptualisation of Thai plant names. This is because the Thai language and culture are intertwined, and the plant naming system reflects this relationship through a complex system based on Lakoff's cognitive-linguistic principles and plant classification principles. He discovered approximately 3,000 botanical names gathered from various sources while researching plant naming systems from biological, ecological, anthropological, linguistic, and cultural viewpoints. Singoni did not include plant elements or names connected to plant states in this composition. Instead, her research focused on morpho-syntactic moulds of plant names, categorisation systems, and folk notions (26). In his research, Peter Sutton, an additional academic, examines the morphology and semantics of plant names using conjunction, reduplication and metaphorical expansions, among other naming techniques. Additionally, as research is conducted, names of plant parts in different languages, physiological indicators, plant growth stages, and various linguistic registers and principles — such as hyponymy and antonymy — are taken into consideration when naming plants, as well as how plant names change overtime in everyday speech (29). From Uzbek linguists as well, O. Turakhodjayeva examined the structural-semantic analysis of English plant names and demonstrated their nominative characteristics and folk selection peculiarities in her study (34). M.M. Khoshimkhojaeva investigated the function of plant names in the universe's linguistic landscape using materials in English, Russian, and Uzbek (25).

Semantic meanings of botanical terminology

In this article, we examined the semantic significance of Latin botanical terminology as well as their folk names in English and Uzbek, utilising Karl Linnaeus' notion of binary plant naming. Carl Linnaeus postulated that plant names are assigned for the following purposes:

- from the environment in which they grow;
- from their growth conditions;
- from their morphological characteristics (appearance, structure);
- from attributes like colour, flavour and aroma;
- from resemblance to other objects or plants;
- from both its harmful and therapeutic effects;
- in recognition of the researchers who made the initial discoveries and descriptions.
- in line with myths and stories from Greece and Rome (24).

The tables below contrast the botanical terminology used in Uzbek and English and their Latin counterparts.

Table 1

From the environment in which plants grow

No	Latin botanical terms	English	Terms in Uzbek
1	<i>Dianthus monspessulanus</i>	dianthus, fringed pink, carnation, dianthus olivia cherry	chinnigul
2	<i>Persea americana</i>	avocado, alligator pear	avocado, timsoh noki
3	<i>Phelodendron amurense</i>	Amur cork tree	baxmal daraxt
4	<i>Anchusa italica</i>	Forget me not, Alkanet	ho'kiz tili, govzabon
5	<i>Sesamum indicum</i>	simsim, benne or gingelly	kunjut
6	<i>Nelumbium nuciferum</i>	The Indian lotus	nilufar
7	<i>Medicago</i>	medick or burclover	beda
8	<i>Armoracia rusticana</i>	Horseradish	xren, yerqalampir
9	<i>Cynanchum sibiricum</i>	Siberian swallow-wort	sutpechak
10	<i>Scorzonera hispanica</i>	black salsify or Spanish salsify, black oyster plant, serpent root	qoratomir

While the Latin terms in the table are given about the location where these plants grow, not all English and Uzbek names follow this pattern, and rather, they are supplied according to other qualities of the plant. For example, while the designation *Persea americana* refers to the plant's growth in the Americas, the word *avocado* is derived from the Nahuatl Indian (Aztec) word "*ahuácatl*", meaning *egg* and the name is given in response to its shape. However, in Spanish, "*ahuácatl*" was pronounced in the "*aguacate*" form, and over time, the term became "*avogato*" or "*avocado*". Because of its pear-like shape, the fruit was once referred to

as an *"avagato pear"* in English. It was later dubbed the *"alligator pear"* because of its crocodile skin-like look (27). The term avocado has evolved into a widespread English phrase for fruit. The Uzbek name is directly translated from the Russian translation of the English name of the fruit. While the name *"indicum"* in *Sesamum indicum* indicates that the plant is native to India, it is known in English as *simsim*, *benne*, and *gingelly*, with the word *"simsim"* originating from Arabic. The Uzbek word *"kunjut"* is derived from the Tajik word *"kunchit"*, which replaces the vowel *i* with the vowel *u* (37).

Table 2
From the growing conditions of plants

No	Latin botanical terms	English	Terms in Uzbek
1	Polygonum hydropiper	water pepper, marsh pepper, knotweed	suvqalampir
2	Convolvulus arvensis	field bindweed	qo‘ypechak
3	Origanum tythanthum	—	tog‘rayxon
4	Saxifraga	Rockfoil	toshyorar, qoyachigul
5	Bolboschoenus maritimus	sea clubrush	suvhilol
6	Phleum pratense	timothy-grass, meadow cat's-tail	qora qiyoq
7	Cichorium intybus	blue dandelion, blue daisy, coffee-weed, blueweed, wild endive, bunk, horseweed, bachelor's buttons	sachratqi
8	Alisma plantago	Aquatica, water-plantain, mad-dog weed	bulduruq o‘ti
9	Tribulus terrestris	—	temir tikan
10	Thymus serpyllum	thyme	jambil

It appears that the English and Uzbek names of plants derived from their growth environments are spiritually similar to Latin terminology. For example, the Latin word *Saxifraga* is derived from the words *"sáxum sasso"* and *"frángo"* which indicate creeper or breaker (15). The names *rockfoil* (*eng*), *toshyorar*, and *qoyachigul* (*uzb*) are also used to describe this plant which grows primarily in rocky locations.

Table 3

According to the morphological characteristics of plants (appearance, structure)

No	Latin botanical terms	English	Terms in Uzbek
1	Adansonia digitata	Baobab, monkey-bread tree, upside-down tree, cream of tartar tree	baobab
2	Ligustrum vulgare	wild privet	ligustra, devorgul
3	Heracleum villosum	hogweed and cow parsnip	oybolting'on
4	Vanilla planifolia	flat-leaved vanilla	vanil
5	Centaurea iberica	Iberian star thistle	ko'ztikan
6	Dactylis glomerata	Cock's-foot, orchard grass, cat grass	oq so'xta
7	Stellaria neglecta	Chickweed	yulduz o't
8	Schoenoplectus mucronatus	bulrush	qiyoq
9	Capparis spinosa	Caper	kovul, kovar
10	Ricinus communis	Castorbean, Castor Oil Bean, Castor Oil Plant, Palma Christi, Castor Bean Plant	kanakunjut

The terms in Table 3 are examples of the morphological structure naming of plants and analysing the term **Ricinus communis** among them, the word *ricinus* is translated as the Greek *cicinos* - beaver for the shape of its seed, which looks like a parasitic insect. In English, the plant is named after the Castor bean, castor oil beans, castor oil plant, palm Christie, while the Uzbek name *kanakunjut* is derived from the combination of the Tajik words "*kana*" and "*kunjut*" and means a "*hemp-like type of sesame seed*" (37).

Table 4

According to signs such as the color, taste and aroma of plants

No	Latin botanical terms	English	Terms in Uzbek
1	Ocimum basilicum (20)	sacred basil or holy basil	rayxon
2	Impatiens balsamina	balsam, garden balsam, rose balsam, touch-me-not or spotted snapweed	xina
3	Pelargonium roseum	geranium	pelargon, xushbo'y geran, xushbo'y

4	Lablab purpureus	hyacinth bean, indian bean, seim	yorongul qirmizi lablab
5	Rubus caesius	blackberry/raspberry	maymunjon
6	Cassia	wild senna	sano
7	Citrullus colocynthus	Abu Jahl's melon, colocynth, bitter apple, bitter cucumber, vine of sodom, wild gourd	achchiq tarvuz
8	Cinnamomum zeylanicum	cinnamon tree	dolchin
9	Rubus idaeus	red raspberry	xo'jag'at, buldurg'un, malina
10	Citrus reticulata	mandarin, tangerine, unshu orange, satsuma orange, temple orange	mandarin

Plant names based on colour, taste, and fragrance are also important in the botanical words of both languages under consideration. For instance, *Rubusidaeus* is the Latin term for raspberries, which are named after their red colour. It is commonly referred to as *red raspberry*. In Uzbek, this plant is referred to as *khojagat*, *buldurgun*, *malina*. The term *khojagat* refers to the old Turkic language, as stated in Mahmud Qoshgari's "Devoni-lugati at-Turk", whereas the term *malina* came into the contemporary Uzbek language directly from the Russian translation of the plant's English name.

Table 5

From both its harmful and therapeutic effects

No	Latin botanical terms	English	Terms in Uzbek
1	Agapanthus umbellatus	star of bethlehem	soyabongulli agapantus
2	Dracaena draco	dragon tree, magenta	ajdar daraxt, mo'jiza daraxt
3	Erodium cicutarium	stork's-bill, redstem filaree, redstem stork's bill or pinweed	laylaktumshuq
4	Aquilegia	granny's bonnet	suvyig'ar, akvilgiya
5	Campanula	bell flower, harebell, canterbury bell, fairy thimbles	qo'ng'iroqgul
6	Butomus umbellatus	flowering rush or grass rush	suvpiyoz
7	Equisetum arvense	horsetail	qirqbo'g'im

8	Chelidonium majus	celandine, great celandine, greater celandine, tetterwort, nipplewort, swallow-wort	qoncho‘p
9	Sambucus	elderberry	marjon daraxt
10	Sagittaria latifolia (10)	Duck Potato, Broadleaf Arrowhead	nayzabarg

The Latin *Erodium cicutarium* is an example of a plant being named based on its resemblance in appearance to another object, plant, or animal because the name relates to the form of the plant's fruit, which is similar to that of a bird's beak. In related English, the plant is known as *Stork's-bill*, *red stem filaree*, *redstem Stork's bill*, or *pinweed*, all of which retain the meaning of the Latin name. In Uzbek, however, the Russian translation of the English name employs the literal translation as a phrase.

Table 6

From both its harmful and therapeutic effects

No	Latin botanical terms	Terms in English	Terms in Uzbek
1	Calendula officinalis	pot marigold	tirnoqgul
2	Melissa officinalis (12)	balm, balm mint, bee balm, blue balm	limono‘t
3	Althaea officinalis	mallards, mauls, schloss tea, cheeses, mortification koot, mallow, white mallow, common marsh-mallow, mortification root, sweet weed, wymote	dorivor gulxayri
4	Fumaria officinalis	drug fumitory, earth smoke, <u>fumeroot</u> , <u>fumewort</u> , <u>fumitory</u>	narkotik fumariya, ko‘knor, nasha
5	Solanum melongena (38)	eggplant	baqlajon
6	Rosmarinus officinalis	anthos, old man, rosemary	rozmarin
7	Helichrysum arenarium	<u>strawflower</u>	bo‘znoch
8	Valeriana officinalis	valeria	dorivor valeriana
9	Verbena officinalis	holy herb, mosquito plant, wild hyssop	tizimgul
10	Cnicus benedictus	St. Benedict's thistle	qushqo‘nmas
11	Lithospermum officinale	gromwell or european stoneseed	dorivor iloncho‘p

The term *officinalis* frequently appears in the Latin names of medicinal plants, as shown in the table above, making it easier to

distinguish medicinal plants from other species. However, this word does not appear in some of their vernacular names in English or Uzbek. *Calendula officinalis* is known as **pot marigold** in English and **tirnoqgul** in Uzbek, depending on the shape of the petal.

Table 7

Names given in recognition of the merits of the researchers who made the initial discoveries and descriptions

No	Latin botanical terms	Terms in	
		English	Uzbek
1	<i>Geranium robertianum</i>	herb-Robert, Roberts geranium, red robin, death come quickly, fox geranium, stinking Bob, squinter-pip, crow's foot.	yopishqoq o't
2	<i>Descurainia sophia</i>	flixweed, herb-Sophia, tansy mustard	sassiqkapa, shuvaran
3	<i>Bergenia crassifolia</i>	heart-leaved Bergenia, heartleaf Bergenia, leather Bergenia, winter-blooming Bergenia, elephant ears, elephant's ears, Korean elephant ear, badan, pigsqueak, Siberian tea, and Mongolian tea	badan, mo'gul choyi
4	<i>Adansonia digitata</i>	Baobab, monkey-bread tree, upside-down tree, cream of tartar tree	baobab
5	<i>Robinia pseudacacia</i>	Black locust	oq akatsiya
6	<i>Abutilon theophrastii</i>	Velvetleaf, Velvet Plant, Velvetweed	dag'al kanop, g'o'zag'or
7	<i>Karelinia caspia</i>	—	oqbosh
8	<i>Koelpinia linearis</i>	koelpinia	qarg'atirnoq, qushoyoq
9	<i>Koelreuteria paniculata</i>	goldenrain tree	sovun daraxti
10	<i>Albizzia julibrissin</i>	Mimosa, Silktree, Mimosa Tree	ipak akatsiya

Carl Linnaeus, the famous botanist, also contributed the names of scientists who introduced or researched them to science in the binary naming of plants, one of which was ***Robinia pseudacacia***, named by Linnaeus in honour of the French botanical scholar Jen Robin and his son

Vespasin. They were gardeners for the Royal Court and introduced this plant to Europe (16). In common English, this plant is referred to as **black lotus**, whereas in Uzbek, it is known as **oq akatsiya** (*white acacia*).

Table 8

Names given according to the myths and stories of Greece and Rome

No	Latin botanical terms	English	Terms in Uzbek
1	Adonis parviflora	marsh elders	mushuko't, sassiqmatal, maydagulli adonis
2	Heracleum villosum	hogweed and cow parsnip	oyboltirg'on
3	Paeonia	garden peony	sallagul
4	Artemisia	Wormwood, old man, old woman, lad's love, dusty miller, mugwort	shuvoq
5	Achillea millefolium	yarrow	bo'ymodaron
6	Achillea santolina	cotton lavender, gray santolina, holy flax	boshog'riq o'ti
7	Zizyphus jujuba	Indian Jujube, Chinese Date	chilonjiyda
8	Artemisia dracunculus	tarragon	sherolchin
9	Athamanta macrophylla	—	olqar, tog'zira
10	Atropa belladonna (19)	deadly nightshade, belladonna	belladonna

Some botanical terms are related to the names of Greek-Roman mythology and heroes. However, in English and Uzbek, these plants are named based on their other features. For example, according to Greek-Roman tradition, the plant *Achillea millefolium* was used to cure the wounds of Achilles' men at the time, yet in English, the plant was known as **yarrow**, from ancient French "*thousand leaves*" (42). In Uzbek, however, it is known as "*boymodaron*" due to its therapeutic effects.

Structure of botanical terms

Azim Khodjayev, a scientist who examined the word-making system of the Uzbek language, believes that the word-making systems of nouns, adjectives and verbs comprise the language's word-making system (22). As a result, if we look at how botanic terms are created in English (30) and Uzbek, we can observe that they are primarily composed of noun + noun and adjective + noun combinations. For example:

—English botanical terminology in the form of a noun + noun: *alligator pear, Amur cork tree, Horseradish, water pepper, field bindweed, horseweed, cow parsnip, cat grass, dragon tree, etc.*

—English botanical terms that combine adjectives + nouns: *fairy thimbles, wild hyssop, red robin, dusty miller, bitter apple, blackberry, flat-leaved vanilla, blue daisy, black salsify, etc.*

—Uzbek botanical terminology in the form of a noun + noun: *ho'kiz tili, yerqalampir, sutpechak, tog'rayxon, suvhilol, devorgul, kanakunjut, qo'ng'iroqgul, suvpiyoz, etc.*

—Uzbek botanical terminology in the form of adjective + noun: *dorivor gulxayri, sassiqkapa, oq akatsiya, dag'al kanop, achchiq tarvuz, qora qiyoq, qoratomir, etc.*

Furthermore, the structure "noun + 's + noun" plays an active role in forming English-language botanical terminology. For instance: *bachelor's buttons, Cock's-foot, Abu Jahl's melon, stork's-bill, granny's bonnet, St. Benedict's thistle, crow's foot, elephant's ears, lad's love, etc.* Even in the creation of botanical terminology in Uzbek, the possessive meaning is expressed by tone, while the form is disguised.

Conclusion

As shown by the data above, there are English and Uzbek equivalents of the Latin language variety of botanical terminology, and English has a more productive indication than Uzbek in terms of word synonymy. During the research process, we became convinced that while the Latin-language variant of botanical terms is understandable precisely for botanical science and the layer that operates in areas related to this science, it is far more difficult for the general public to understand both linguistically, morphologically and semantically.

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