

Phytonyms Representing Faunal Characteristics and Their Linguistic Features (A Study on the Yaghnob Language)

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Abstract

An important and valuable part of every language, including the Yaghnobi language, is the various types of plant terms, which play a role in bringing order to a language. Accordingly, studying and analyzing these plant terms is a fundamental issue. We, thus, decided to research and analyze the linguistic features of phytonyms that express fauna characteristics based on one of the Eastern Iranian languages, Yaghnobi, from a historical and ethnolinguistic perspective. In the same way, this article draws mainly from the material of fauna characteristic phytonyms of the Yaghnobi language from the Yaghnob valley and delves into research of their structural and semantic characteristics, grammar, and etiology. The necessity to choose this topic arose due to a need for more research on the subject from the perspective of the researchers. The research aims to determine the structural and semantical features, word formation (morphology), and phraseological models of plant vocabulary and define and determine their role. In the article, eleven plants terms are analyzed and discussed; most of these are related to domestic animals, including donkey (four words), goats (two words), cow, and horse (one word each), and about birds and reptiles, for example, crows, sparrows, and mice (one word each).

Keywords: plant term, phytonym, fauna, Yaghnobi language, linguistic, compound words, genitive phrases, structural and grammatical characteristics, Yaghnobi language dialect, Yaghnobi studies.

The study and analysis of plant terms hold significant importance and value as they represent the names of natural components. Plant terms are widely recognized in the Tajik language as such, viz. “plant names.” Similarly, on an international scale, plants and herbs are commonly referred to as phytonyms, necessitating specialized linguistic research. In terms of structure, the word “phytonym” is a composite word consisting of two independent elements: “phyto,” which is related to “plant,” and “onyma,” pertaining to “term” or “name.” It can otherwise be called “plant term.”

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In the explanatory dictionary of foreign words, the first component of phytonym, namely “phyto,” is defined as follows: “Фито ... (гре phyton растение). Первая составная часть сложных слов, имеющая значение относящийся к растениям” (rus) (fito ... [gre phyton plant]. The first component of a compound word, with its meaning pertaining to plants) (Krisin 2008, 757).

Extensive research has been conducted on the analysis of plant terms across various disciplines, such as anthropology, medicine, and botany. However, within the field of linguistics, aside from a few articles and brief references, there needs to be more comprehensive studies on this subject. In response to this gap, lexicographers have made efforts to include a portion of plant terms from their respective cultures in dictionaries, thus emphasizing their significance in lexicography.

In the realm of Tajik and Yaghnobi linguistics, there is a pressing need for more comprehensive studies specifically addressing the meaning, structure, and semantics of plant terms in the Yaghnob region. While there exist some scattered references and research, it is important to highlight that specific linguistic features associated with plant terms in the Tajik language and their expression remain largely unexplored.

The scarcity of studies on plant terms in the Yaghnob valley has intrigued us, prompting our focused attention on a specific subset in this article. We have deliberately selected a limited number of plant terms that depict notable animal or bird characteristics observed in the region. The chosen material serves to highlight how numerous plant terms reflect the internal or external signs, traits, and markings associated with animals and/or birds. These names predominantly take the form of compound words and genitive noun phrases.

In these particular types of plants, comparisons and similarities are established through their structures. As a result, a specific component of their composition directly aligns with the name of the object or thing being compared. This effectively accentuates the resemblance between a plant and an object, highlighting it in their respective names.

It is worth mentioning that an extensive study on the lexical and structural aspects of specific plant terms in the Tajik language has previously been conducted by the renowned Tajik scholar T. Shakirov (2018). In his research, Shakirov delves into the linguistic characteristics of plants and categorizes them into four distinct groups based on their structure: simple, constructed, complex, and composite.

In the realm of nature, herbs and plants display a wide array of classifications based on their discernible characteristics, encompassing medicinal properties, consumability, and non-consumability. An intriguing dimension pertaining to plants terminology lies in the utilization of plant features as indicators of their intended usage. This practice of plant identification and nomenclature has a long history spanning diverse cultures. In specific cultural contexts, these features are denoted as “plant signatures,” metaphorically similar to a handwritten signature employed for individual identification. The comprehensive concept encompassing this practice is commonly acknowledged as the “doctrine of signatures” (Pizzorno and Murray 2013, 258). It is crucial, however, to recognize the presence of

variations across cultures, as this fundamental concept transcends cultural boundaries. This elucidates the inseparable interconnection between language and culture, notably in the realm of taxonomical nomenclature, including the assignment of plant names. The language employed for naming, more broadly, cannot be disentangled from its cultural context. A plethora of features, encompassing color, shape, texture, scent, as well as allusions to roots, leaves, flowers, fruit, seeds, or habitat, are drawn upon for the purpose of naming plants. Some of these characteristics may align with the notion of a plant signature, wherein plants are named based on such distinctive attributes.

An illuminating instance that exemplifies this naming practice is *chormaghz* (tgk) or walnut (bot. *Juglans regia*). Throughout various cultures, it has long been attributed with benefits for head ailments (Azonzod 2010, 631), owing to its shape resembling that of a brain. In fact, the name *chormaghz* itself translates literally to “four brains.” Research has substantiated the richness of walnuts in omega-3 oils, particularly notable among plant sources, which are crucial for maintaining brain health (Julvez *et al.* 2021). Moreover, walnuts contain melatonin, a brain-secreted hormone that regulates sleep cycles and performs various other functions pertinent to mental health (Verde *et al.* 2022).

Another compelling example is the plant referred to as eyebright, indicated by its English name (rus очанка *ochanka*). It holds medicinal applications for various eye conditions (Balch 2006, 108) and derives its name from the striking resemblance of its flower to an eye (Dukes 2017). Thus, by considering the shapes, types, characteristics, and markings of plants, individuals have chosen fitting and captivating names for them, often drawing inspiration from body parts of animals or birds.

1.1 *Aspkhururak* (Аспхурурак) (ygb) is a robust plant characterized by its thorny appearance, reaching a height of approximately 70-80 cm during the spring season. This plant is indigenous to the Yaghnob valley and commonly thrives in moist areas such as wetlands, damp meadows, canal borders, springs, and mountain rivers. Similar to *revoj* (tgk) (rhubarb) and *toron* (tgk) (bot. *Polygonum coriaryum*), *aspkhururak* is consumed after peeling the skin and adding salt. It possesses a tangy flavor and is known for its potential to lower blood pressure. The term in question is a compound word, structurally composed of the following elements: *asp* + *khurura* + *k*. Consequently, it can be inferred that this plant term is formed through the combination of a noun, another noun, and the suffix *-k* (*-ak*). Why did the Yaghnobi choose this name for the plant? The first part of the name refers to a domestic animal, specifically a horse, while the second part alludes to thorns. The thorns on the plant's branches resemble the head of a horse, which justifies the fittingness of its name. In Yaghnobi, it is expressed as “Пулагитимох чари лап ашавимист аспхурурак ачин ахвар” (Pullagitimokh chari lap ashawimisht aspkhururak achin akhwar) (ygb). During childhood, we used to go to the edge of the waterfall, pick *aspkhururak*, and eat it. Interestingly, this particular plant term is not documented in the research conducted by early Yaghnobi scholars, nor is it included in their dictionaries. However, it has been defined in

the dictionary compiled by the present researcher (Mirzozoda 2008, 26). It is notable that present-day children are unfamiliar with the concept of *aspkhururak*, as reflected in the statement “Ҳозира пуллот нағирифошт, ки аспхурурак чоҳ?” (Hozira pullot naghirifosht, ki aspkhururak chokh?) (ygb).

Among the Tajik-speaking Yaghnobis of Khishortov village, the term *aspkhururak* is commonly known as *khori aspak* (tgk) (*khori asp* with the suffix *-ak*), showing that in the Yaghnobi language, it is expressed as a compound word, while in the dialect of Tajik-speaking Yaghnobis, it takes the form of a genitive noun. Certain compound words are formed by combining phrases with the suffix *-ak*; the word *aspkhururak* exemplifies this pattern. This word formation method is commonly used in both Tajik and Yaghnobi languages, resulting in the creation of numerous words. As a result, it is considered an effective way to enrich the vocabulary of these languages.

The word *aspkhururak* is a combination of elements from both the Tajik and Yaghnobi languages. The first part, *asp* (horse), is a common term in Tajik. The second part, *khurura* (thorn), is related to the Yaghnobi language. The third part is the suffix *-ak*, which is expressed as *-k* in this specific word. In the Yaghnobi language, according to its grammatical rules, when a word ends with the vowel *-a*, the *-a* in the suffix is omitted. The suffix *-ak* carries a subjective meaning, implying “smallness” and “tenderness.” In some cases, it also connotes a sense of “humiliation” and “neglect.” Rustamov extensively examined the formation and construction features of this affix in his monograph (1981, 114-16).

Moreover, certain terms related to plants are linked to the word “donkey” and its various body parts, appearing in compound forms and genitive expressions.

1.2.1. *Kharsumpak* (харсумпак) (ygb) is a term used for a specific plant, which consists of three parts: *khar* + *sump* + *-ak*. In terms of word construction, it follows the pattern of noun + noun + suffix. While the components of this word are generally found in Tajik, there is a phonetic difference in the second part. In Tajik, it is pronounced as *sum* instead of *sump*. However, it is important to note that this particular plant may have a different name in the Tajik language, requiring further clarification. *Kharsumpak* is documented in the book “*Фарҳанги яғнобӣ-тоҷикӣ*” (Farhangi Yaghnobi-Tojikī) (tgk) (Yaghnobi-Tajik Dictionary), where it is defined as follows: “ғиёҳест барғҳои паҳни ба суми хар шабеҳро дорад, ғӯра карда, гулҳои зард, сафед, кабуд мекунад” (giyohest barghoi pahni ba symi khar shabehro dorad, ghūra karda, gulhoi zard, cafed, kabud mekunak) (tgk) (A plant with broad leaves resembling a donkey’s hoof, bearing yellow, white, and blue flowers) (Mirzozoda 2008, 213).

1.2.2. *Kharjavak* (харчавак) (ygb) is another plant term that consists of three parts, similar to the word *kharsumpak*. Interestingly, all the components of this term are also commonly found in the Tajik language. However, it is worth mentioning that

this specific word form is not recorded in Tajik language dictionaries, suggesting its exclusivity to the Yaghnobi language.

In the book *Фарҳанги яғнобӣ-тоҷикӣ* (Farhangi Yaghnobi-Tojiki) (tgk) (Yaghnobi-Tajiki Dictionary), this plant term is identified as “гиёҳ газанда” (giyohi gazanda) (tgk) (stinging plant). An example usage is provided: “Тав зойи харҷавак навита” (Tav zoyi kharjavak navita) (ygb) (There was no kharjavak in your field) (Mirzozoda 2008, 213).

1.2.3. *Kharsidqa* (харсидқа) (ygb) is a compound plant term that composed of two roots: khar (donkey) and sidqa (plant name). It follows the noun + noun pattern. In the Yaghnobi language, this plant term can be pronounced as both kharsidqa and kharsitqa, showing a variation in the consonant sounds “d” and “t.” The term sidqa refers to an herbaceous seasonal plant with large, wide, and long leaves. One example usage of this term is: “Хани лаптивик харситқа ғулӯ вичӣ, имедай чин қоқ кун, доригих” (Khani lapтивик kharsitqa ghulu vichi, imeday chin qoq kun, dorigikh) (ygb) (On the banks of the canal, there are a lot of *kharsidqas*; pick a little and dry it, as it has medicinal qualities).

It is worth noting that this plant has multiple names in English, one of which being “snakeweed.” The term “snakeweed” is attributed to two factors. Firstly, it is derived from the plant’s elongated, straight branches and its seed head, which bear a resemblance to a snake. Secondly, the name is deemed appropriate due to the plant’s medicinal properties as an antidote against snake bites and other venomous insects and reptiles [Eisenman... 2013,191]. Both of these characteristics are reflected in the name “snakeweed” present in both the Tajik and English languages. Hence, it can be inferred that the plant’s similarity to a snake in appearance and its ability to counteract snake bites are the reasons behind its given name.

1.2.4. *Ghushi kharak* (ғуши харак) (ygb) is a plant characterized by its thick, wide, grey-colored leaves and branches. It bears yellow flowers at the tips of its smaller branches. The term *Ghushi kharak* is a genitive noun phrase, with all its components being common in the Tajik language. This particular plant predominantly grows in the vicinity of Khishortov village. Consequently, among the Tajik-speaking Yaghnobis who reside there, this name has become prevalent. The name *Ghushi Kharak* has been assigned to this plant due to the notable resemblance of its leaves to donkey ears. Considering the leaf shape, the local inhabitants deemed the name *Ghushi kharak* appropriate. The phrase itself is formed by combining the words *ghush* (ear) with the genitive affix *-i*, and *khar* (donkey) with the suffix *-ak*. It is clear that all the constituent parts are derived from the Tajik language. However, despite each component belonging to the Tajik language, such a specific form is not found in standard Tajik, its dialects, or Tajik dictionaries. Therefore, *Ghushi Kharak* can be attributed to the speech of Tajik-speaking Yaghnobis in the village of Khishortov.

Field observations and surveys indicate that the ash of *Ghushi kharak* possesses therapeutic properties. Once the plant has dried, the ash is collected and burned. The resulting ash is then applied to draining injuries or wounds, effectively removing discharge and impurities from the affected area.

It is important to mention that the name of this plant species has not been documented in previous research conducted by Yaghnobi scholars, nor is it found in published Yaghnobi dictionaries.

1.3. *Sichaki sarkalla* (сичаки саркалла) (ygb) is a plant that is characterized by numerous thin, leafless stems resembling threads. It typically grows to a height of approximately 10-15 cm. The term *Sichaki sarkalla* is derived from the combination of the Yaghnobi word *sicha* (sparrow) with the diminutive suffix *-ak* and the genitive affix *-i*, along with *sarkalla* (tgk, ygb) meaning “head.” This plant name is specific to the Yaghnobi language. The tuber of this plant bears a resemblance to the head of a sparrow, which is the distinctive feature that led the Yaghnobis to assign it this name. Here is an example usage: “Сичаки саркалла хама чогаhti навичй. Мох мени й чогахиш Худи Тег’ воошт, нихедока сичаки саркалла гулу вичй” (*Sichaki sarkalla hama jogahiti navichi. Mokh meni i jogahish Khudi Tegh’ voosht, nihedoka sichaki sarkalla ghulu vichi*) (ygb) (*Sichaki sarkalla* does not grow everywhere. There is one place in our village known as Khudi Tegh (a location close to the village of Gharmen). In that place, there is an abundance of *sichaki sarkalla* growing).

Analyses have indicated that a significant number of plant terms in the Yaghnobi language depict features, traits, markings, and resemblances to domestic animals and birds. These terms are mainly constructed using compound words and genitive noun phrases. The inclusion of these essential semantic elements has played a vital role in the creation of these plant terms.

Comparisons and similarities between plants and animals within these specific terms have contributed to the enrichment of the Yaghnobi language’s vocabulary. Furthermore, the analysis and research demonstrate that a component of these plant terms specifically reflects the name of an animal and/or bird, or the name of their body parts, which bear a resemblance to the described characteristic.

1.4. *Ghovzivoka* (ҒОВЗИВОКА) (ygb). In certain areas of the Yaghnob valley, there thrives a plant called *ghovzivoka*, a name given by the Yaghnobi people. The dictionary section of the book Ягнобские тексты (Yagnobskie teksti) (rus) (Yaghnobi texts) provides an explanation about the plant: “*ghovzivoka* растение, употребляемое как приправа к пище ‘бычий язык’, *Orchis umbrosa*” Кар. Et Kir. [1957, 258] (*ghovzivoka* rastenie, upotreblYaemoe kak priprava k pishche ‘bovine tongue’, *Orchis umbrosa*) (rus) (*ghovzivoka*, a plant used as a seasoning for food known as ‘bovine tongue,’ *Orchis umbrosa*).

This plant bears resemblance to a cow's tongue and is employed to enhance the flavor of certain dishes. The term *ghovzivoka* is composed of the elements *ghov* (ygb) (cow), *zivok* (ygb) (tongue), and the suffix *-a*. In contrast to the previously examined plant terms, all components of this herb are derived from the Yaghnobi language; thus, the name maintains its Yaghnobi origin in full. When translated into the Tajik language, this plant term becomes *govzabon*, and in English, it is referred to as "cow's tongue."

From our perspective, the plant term has undergone a two-tier process of word formation. Initially, it took the form of a genitive noun phrase, specifically *ghovi zivok* (cow's tongue). Subsequently, as the Yaghnobi language continued to evolve, this term transitioned into a compound word by adding the suffix *-a*, signifying the second level of word formation. In the Yaghnobi language, the suffix *-a* is used to create compound words from phrases containing various parts of speech. These include combinations of noun to noun, noun to adjective, adjective to noun, noun to verb, and similar constructs. It is widely recognized as one of the most prolific suffixes.

Following a similar pattern, the terms *mushvesha* (mouse grass) and *hawkvesha* (marmot grass) also emerged as plant terms.

1.5. *Mushvesha* (мушвеша) (ygb). The term is formed by combining *mush* (mouse), *vesh* (grass), and the suffix *-a*. This plant term is also recorded in the dictionary section of the book *Ягнобские тексты* (Yagnobskie teksti) (rus) (Yaghnobi texts), where it is described as follows: "мушвайша название кормовой травы (*Nepeta podostachys* Benth.)" (Mushwaycha hazvanie kormovoy travy (*Nepeta podostachys* Benth.))(rus) (*mushwaysha*, the name of a forage grass (*Nepeta podostachys* Benth.))(1957, 288).

In various Yaghnobi dialects, the pronunciation of names can vary. For instance, in the eastern Yaghnobi dialect, it is pronounced as *mushvesha*, while in the Western Yaghnobi dialect, it is pronounced as *mushvaysha* or *mishvaysha*. This plant is seasonal and has a resemblance to the shape of a mouse, hence its name: "Иш веш муши мета хаст, чав бахша иранка нумшинт иктах" (Ish vesh mushi meta khast, chav bakhsha iranka numshint iktakh)(ygb) (This grass is like a mouse, which is why it has been given that name).

1.6. *Zoghroyak* (зоғрояк)(ygb). This term is another compound word, composed of the noun *zogh* (crow), the noun *roy* (foot), and the suffix *-ak*. *Zoghroyak* is a robust plant with rounded leaves that resemble the claws of a crow. This herb possesses medicinal properties and is used for treating heart and liver ailments. It is a mountainous and lower foothill species characterized by its reddish coloration.

The authors of the books *Ягнобские тексты* (Yagnobskiy teksty)(rus) (Yaghnobi texts) and *Ягнобский язык* (Yagnobskiy yazyk)(rus) (Yaghnobi language) did not record this specific plant term.

From our perspective, the term *zoghroyak* can be understood as a compound word originating from the genitive phrase *zoghi poda*, meaning “crow’s foot,” with the addition of the suffix *-ak*. This particular term undergoes a two-step process of word formation. Firstly, it is formed by combining the name of a bird, *zogh* (crow), with *poy* (leg), through the addition of the genitive affix *-i*. This results in the formation of a phrase that represents both the bird and a plant. Secondly, *-ak* is suffixed to this phrase, transforming it into a complex word, whereby the genitive affix is subsequently removed. “Ҳозира яғнобӣ пуллот зогпойаки веши нум нағирифосшт, фақат яғхел калонсол одамт ғирифосшт.” (Hozira Yaghnobi pullot zoghroyaki beshi nym naghirifosht, faqat yagkhel kalonsol odamt ghirifosht)(ygb) (The younger generation is unfamiliar with the name of the *zoghroyak* plant; only a few of the older individuals are acquainted with it).

1.7.1 *Vuzkafak* (вужкафак) is a word comprised of three components: *vuz* + *kaf* + *-ak*. It is constructed by combining a noun, a present stem, and a suffix. A clear definition of the word is provided by the Russian Yaghnobi scholars M. C. Andreev and E. M. Pesherava, who define it as “название растения” (nazvanie rasteniya), which itself translates to “plant name” in English. They further specify the plant as *Silene venosa* Aschers (1957, 349).

The first part, *vuz* (ygb), refers to a goat, while the second part, which is the present stem *kaf* (tgk, ygb), signifies split or burst. The final element, *-ak*, was explained above. Such a word formation pattern is frequently observed in compound nouns within the Yaghnobi language. When directly translated into the Tajik language, this word becomes *buzkafak*, with the first part *buz* representing the Tajik word for goat.

Consequently, one might question why the Yaghnobis chose to assign this specific name to the plant. The rationale behind naming this plant as *vuzkafak* stems from its seasonal nature. If consumed by a goat, it has the potential to cause bloating and ultimately rupture the goat’s rumen.

1.7.2. *Vuzighushak* is a genitive noun phrase used to denote a plant. The first component of this phrase is *vuz* (ygb), which means “goat.” The second part is the phrase *ghushak* (ygb), which itself consists of *ghush* (ygb) meaning “ear,” and the diminutive suffix *-ak*. Therefore, the plant term *vuzi ghushak* (ygb) can be understood as “little goat’s ears.” As it is evident from its name, the leaves of this plant are like the ears of a young goat.

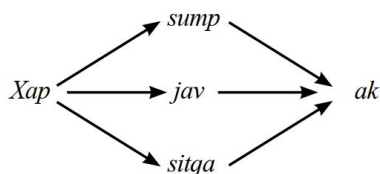
It’s important to mention that the name of this herb is not found in published Yaghnobi dictionaries. In Yaghnobi, the word structure follows a pattern where the noun comes before its attributes. On the other hand, Tajik language employs a different structure, where the attributes come before the noun. Therefore, the term *vuzi ghushak* (ygb) for the plant is formed according to the grammatical rules of the Yaghnobi language.

Given that the words and terms used in plant names hold significant importance as fundamental components of any language’s vocabulary, it becomes crucial to compile

and study them, especially in the context of the Yaghnobi language. Unfortunately, the Yaghnobi community is experiencing a lack of elders as a result of migration from the Yaghnob valley to other areas. Consequently, the names of plants have been neglected and are slowly fading away. Given the circumstances, it is clear that the analysis and examination of this specific subset of plant terms require attention. Linguistic research on these terms holds particular significance for two key reasons. First, the language from which our data is collected is regarded as a continuation of the historical Sogdian language. Secondly, the phytonyms analyzed from several linguistic aspects exhibit fauna-related characteristics.

This article relied on primarily materials derived from plant terms associated with fauna-related phytonyms in the language of the Yaghnob valley. The discussion encompasses their structural, semantic, grammatical, and etymological features. Through linguistic research conducted on certain plant terms from the Yaghnob valley, it has become evident that naming the analyzed plants has been mostly based on the resemblance of them to a particular body part of an animal, bird, or reptile. Structurally, these names are compound words and genitive noun phrases, with the initial component being associated with the name of an animal, bird, or its respective body part. It is undeniable that every community and culture, including the Yaghnobis, contribute significantly to the development of vocabulary and the enhancement of meaning within a language, employing their unique methods of semantic construction.

Within this article, eleven words were analyzed and discussed, with four of them being connected to the donkey and its various body parts. The relationship between these words can be illustrated using the following diagram:



Furthermore, the Yaghnobi language and region have plant terms specifically associated with goats (two terms), horses, sparrows, cows, crows, and mice (one term each).

Therefore, the vocabulary of plant terms in the Yaghnobi language places a greater emphasis on local objects compared to other categories of words within the agricultural domain. This observation has also been acknowledged by researchers studying the southern dialects of the Tajik language (SHJZT 1981, 189). By collecting materials and examining various types of plant terms, it has become evident that the Yaghnobi language has an increasing number of words. Moreover, when it comes to this specific vocabulary referring to plant and herb names, there has been a substantial proliferation of plant names, characteristic of the Yaghnob valley region.

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