

**PHENOLOGICAL KNOWLEDGE OF THE SURKHON VALLEY
POPULATION RELATED TO NATURAL PHENOMENA**

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Abstract: *This article examines the ancient phenological knowledge, beliefs, and magical practices of the Surkhon Valley population associated with the movement of celestial bodies (Sun, Moon, stars) and natural phenomena. The study shows that the local population observed the movements of celestial bodies to track seasonal changes, weather patterns, and agricultural and livestock activities, thereby developing practical knowledge. The article highlights the sacredness of the number seven, the association of weekdays with occupational activities, beliefs based on the Moon and stars, and ancient agricultural and phenological observations in a historical context.*

Keywords: *Surkhon Valley, phenological knowledge, celestial bodies, magical beliefs, ancient agriculture, number seven, weekdays, ethnographic research*

Аннотация: *В статье исследуются древние фенологические знания, верования и магические практики населения Сурхандаринской долины, связанные с движением небесных тел (Солнце, Луна, звёзды) и природными явлениями. Исследование показывает, что местное население наблюдало за движением небесных тел для отслеживания сезонных изменений, погодных условий, а также сельскохозяйственной и скотоводческой деятельности, формируя таким образом практические знания. В статье освещается священность числа семь, связь дней недели с профессиональной деятельностью, верования, основанные на Луне и звёздах, а также древние сельскохозяйственные и фенологические наблюдения в историческом контексте.*

Ключевые слова: Сурхандарьинская долина, фенологические знания, небесные тела, магические верования, древнее земледелие, число семь, дни недели, этнографическое исследование.

Introduction

Since ancient times, the inhabitants of the Surkhon Valley have formed phenological knowledge by observing the movements of celestial bodies to predict natural phenomena and plan agricultural activities. Beliefs and magical practices related to the Sun, Moon, and stars played a significant role not only in daily life but also in organizing seasonal labor. These traditions served as a practical basis for the population in livestock herding, agriculture, horticulture, and trade, allowing them to monitor natural events and determine the timing of specific activities.

The main aim of this article is to study the ancient phenological knowledge, beliefs, and magical concepts of the Surkhon Valley population based on celestial bodies, as well as to identify their practical significance in agriculture and social life. The research also explores the historical context of phenological observations linked to ancient farming practices and folk traditions.

Discussion

The Surkhon Valley population's ideas, superstitions, and magical practices associated with celestial bodies and planets also included observations related to the Sun, Moon, and stars. Like the ancestors of the region, they consistently monitored the positions and movements of celestial bodies. Therefore, the inhabitants possessed precise knowledge about seasonal changes and the positions of constellations. Phenological experience based on observing celestial movements was of practical importance in managing agricultural activities. Herdsmen, farmers, and gardeners in the valley could roughly predict weather conditions based on the positions of the stars, the Sun, and the Moon. For example, long-term observations indicated that if the Sun rose reddish in the morning during winter, precipitation or storms were expected, or the appearance of the Libra constellation on the horizon signaled the beginning of summer [1:36-38].

According to informants, thirteen stars are associated with the Sun, which passes through their boundaries over the course of a year. Consequently, the names of the twelve months are linked to these constellations. However, the Scorpion and Serpent constellations are close to each other and often appear simultaneously, so in naming the months, they were combined as the Scorpion constellation [2:58].

Among the local population, there is a mythological belief that every person on Earth has a corresponding star in the sky, and if that star falls, someone on Earth will die [3:39-43]. Historically, during the matriarchal period of tribal societies, initial religious ideas and symbols began to emerge. People worshiped natural phenomena, celestial bodies, the Sun, stars, Moon, animals, and fire. Later, by the end of the Mesolithic period, the first forms of primitive agriculture appeared in the ancient East. In the Neolithic period, the first farming settlements in Central Asia emerged, including Joyitun and Nomozgoh. The earliest farmers in Uzbekistan lived in the Surkhon Valley, notably at the Sopollitepa site along the Olanbulloqsoy in Muzrabod district [4]. During the Bronze Age, the valley's ancestral farmers attributed agricultural productivity to celestial bodies or divine forces connected to magical concepts.

The number of celestial bodies is vast, but ancient ancestors paid special attention to seven: the Sun and six associated stars. This may explain why the number seven is considered sacred in many cultures [5].

Renowned ethnologist S.A. Tokaryev studied how magical beliefs persist in modern rituals and noted practices such as believing in “lucky” and “unlucky” days or “favorable” and “unfavorable” numbers [6:9].

In the Surkhon Valley, several beliefs and customs are linked to the sacredness of seven. For example, people belonging to certain Uzbek clans (Qo'ng'iroq, Do'rman, Loqay) associated various rituals with the number seven: baking seven flatbreads for ancestors, placing a newborn in a cradle seven days after birth, holding seven mourning ceremonies, binding sick persons with seven types of cloth, or considering specific animals as part of seven treasures. They believed that if pests like locusts or worms attacked crops, baking seven flatbreads and smearing

them with fat would help eliminate three of the pests [7:30]. Many other magical practices exist in the local tradition.

Occupational groups in the valley believed each weekday had its own characteristics: Saturday was for blacksmiths, Friday for scholars, Sunday for merchants, Monday for millers, Tuesday for builders, Wednesday for carpenters, and Thursday for farmers and shepherds. Each profession offered lamps to patron saints on their designated day. Ancestors also recorded observations of natural phenomena on specific weekdays in special manuscripts called Solnoma and Haftanoma, indicating which activities were permissible [8].

According to ancient magical beliefs, moving during the Safar month, building a house in Ashur month, or arranging marriages in Barot month was considered inauspicious. Additionally, certain days of each month were prohibited for traveling in specific directions (east, south, west, north), so herders avoided moving to new pastures on those days [7:35].

Conclusion

The phenological knowledge of the Surkhon Valley population concerning natural phenomena developed over a long historical process and is closely connected with the observation of the Sun, Moon, and stars. This knowledge was crucial in agricultural, livestock, and other economic activities. Planning activities based on seasonal changes, weather patterns, and the positions of stars reflects centuries of observation and experience.

The study shows that phenological knowledge had practical significance, and the related beliefs, magical practices, and mythological concepts played an important role in shaping the worldview of the local population.

REFERENCES:

1. Жўраев М. Об-хаво даракчилари. -Т. 1996. – Б. 36-38.
2. Шомуродов Н. Сурхон воҳаси аҳолисининг этномаданий хусусиятлари. – Тошкент: “Академнашр”, 2010. – Б. 58.
3. Жўраев М. Юлдуз учиши билан боғлиқ мифологик қарашлар // Ўзбек тили ва адабиёти, -1996.-№2. – Б. 39-43.
4. Ўзбекистон ҳудудида деҳқончилик маданиятининг тарихий илдизлари ва замонавий жараёнлар // Академик Яҳё Ғуломов номидаги республика илмий семинари материаллари. – Тошкент., 2006. – Б 138.
5. Фролов Б. А. Как появилась «магическая семерка» // Атеистические чтения. – М. 1970, №4,. – С. 116-122; Бородин А.И. Число и мистика. – Донецк, 1975,. – С. 102, 113-114; Жўраев М., Холмухамедов К. Етти иқлимдаги «етти»лар. -Т.: Фан, 1989; Жўраев М. Ўзбек халқ эртақларида «сехрли» рақамлар. – Т: Фан, 1991. – Б . 90-126.
6. Токарев С.А. Сушность и происхождение магии // Исследования и материалы по вопросам первобытных верований. – М . 1959. – С. 9.
7. Жўраев М. «Сехрли» рақамлар сирн. –Т.: Ўзбекистон, 1991. – Б. 30, 35.
8. Шербак А.М. Салнаме (по рукописи В-721), хранящейся в рукописном отделе ЛО ИВАН // Письменные памятники Востока 1971. –М.. 1974. – С. 171-180.