

Article

## Lepidoptera of Kampirtepa and Tangidara Branch of Surkhan State Reserve

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**Abstract:** The article provides information about lepidopterax living in the Kampirtepa and Tangidara areas of the Surkhan State Reserve. Special nets were used to collect butterflies. A collection was prepared from the collected materials. Specifiers are used to determine species composition. Among the representatives of the order Lepidoptera, many species belonging to the family Nymphalidae have been identified.

**Keywords:** Lepidoptera, Sphingidae, Saturnidae, Geometridae, Campirtepa, Tangidara, butterfly, reserve

### 1. Introduction

Lepidoptera (Insecta: *Lepidoptera*) are ancient winged insects. It is distinguished from other insects by its attractive wings and flying movements, as if in a dance. Lepidoptera are insects that undergo complete metamorphosis. Adult butterflies participate in plant pollination. Some feed on nectar, but most do not. Accordingly, their imago period is different. There are representatives of butterflies that live for several months and even live only one day. The main activity of butterflies in the adult phase is mating and reproduction. Short-lived representatives can leave offspring if they find a mate during their lifetime, otherwise they die and cannot fulfill their role in nature.

The taxonomy of the butterfly family has not been clearly developed; it is divided into 100-200 families. About 140 thousand species are known to science. The butterfly fauna is especially diverse in the tropical region. About 1,500 species have been identified in Uzbekistan.

In the 90s in Uzbekistan, scientific research on lepidoptera was carried out by A. V. Kreisberg (1989, 1992, 1997) [1-4], A. A. Bekuzin (1993) [5], O. G. Legezin (1996, 1997) [4, 6], V. A. Moiseev, A. G. Davleshina (1997) [7].

Today, I.H.U. Bekchanov and M.Kh. Bekchanov studied the North-Western part of Uzbekistan and the Khorezm region, Sh.N. Omonov studied the Samarkand region and the middle reaches of the Zarafshan River, M.R. Shermatov studied the squamates of the Fergana Valley. In addition, M.H. Egamberdiev, L.K. Rustamova, Kh.Z. Murodova, B.B. Koshakboev, A.Kh. Yusupov, A.A. Yuldoshev studied lepidoptera living on fruit trees and plants of the tomato family in different regions of Uzbekistan.

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Since the species composition, biology and ecology of lepidoptera in the Surkhan Nature Reserve have not yet been studied, we have set ourselves the task of starting research work.

## 2. Materials and Methods

The research materials were collected in the Kampirtepa and Tangidara sections of the Surkhan State Reserve in May - October 2023.

Special nets were used to collect butterflies. Caused the collected materials to faint using a jar of cotton wool soaked in chloroform. After a few hours, the dead butterflies were placed in previously prepared places and pierced with special needles. A collection was prepared from the collected materials. Determinants were used to determine species composition.

Camera traps were not used, since the studies took place mainly during daylight hours.

## 3. Results and Discussion

As a result of the study, 9 families and 12 species of Lepidoptera were registered. Including (2) *Polyammuatus Icarus Rothemburg* 1775 (12) and *Lucaena alpciphron Rothemburg* 1775 (2) species of the Lycaenidae family, *Danaus chryisippus Linnaeus* 1758 (8) of the Nymphalidae family, *Hyponphele lupina O. Costa* 1836 (3), *Hipparchia wyssi Christ* 1889 (2 species), *Chazara briseis Linnaeus* 1764 (5 species), *Neoris huttoni Moore* 1862 (2 species) of the Saturniidae family, *Pieris rapae Linnaeus* 1758 (9 species) of the Pieridae family, *Aporia crataegi Linnaeus* 1758 (1 species), Sphingidae family *Theretra Alecto Linnaeus* 1758 (1) species, *Aspitates gilvaria Denis* and *Schiffermuller* 1775 (2) species of Geometridae family and *Hyles livornica Esper* 1780 (2) species of Hyles family were identified.

## 4. Conclusion

Although there are many different species of Lepidoptera, there are also species that are declining and becoming extinct in the wild. *Parnassus. Staudinger* A.B.-N. 1891, *Parnassius tianschanicus Oberthur*, 1879, *Glaucopsyche charibdis Staudinger*, 1886 and *Ghissar Sphinx Moore*, 1857 are listed in the Red Book of Uzbekistan. This situation is a pressing problem for modern entomologists. As a result of this scientific research, when the above situations are identified, we are faced with the tasks of their protection, reproduction and conservation.

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