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# THE FAUNA ORTHOPTERA INSECTS OF CABBAGE AGROCENOSIS NUKUS DISTRICT OF KARAKALPAKSTAN

Begjanov Muratbay Kuralbaevich<sup>1</sup>, Bekjanov Muratbay Turganbaevich<sup>2</sup>

<sup>1</sup>Docent, Doctor of Philosophy in Biological Sciences Karakalpak State University General Biology and Physiology of Department

<sup>2</sup>Postgraduate of Karakalpak State University

It is known from time immemorial that the fruit of the vegetable plant is a valuable food product with dietary properties. They cure many diseases and are used as nutritious feed for livestock.

The climatic conditions of Karakalpakstan are somewhat favorable for the spread and development of cabbage phytophages. White-headed cabbage is mainly cultivated in the region as a vegetable crop. Among the insects found in field crops, representatives of the Orthoptera family are distinguished by their morphological characteristics, biology, life forms, and biocenotic relationships in nature [1,2,4,7].

Taking this into account, the research work was carried out in the spring, summer and autumn seasons of 2022 in the conditions of Nukus district in cabbage agrocenoses.

Based on the research, collected data on species composition, quantitative number of species, density, distribution of orthoptera belonging to the order Orthoptera were summarized.

Collection of insect samples was collected using methods developed for general entomology and taxonomy [1,5,6]. In addition, the works of a number of scientists were used in the study of long-whiskered insects [3,4,7].

Order - Orthoptera - Orthoptera Sub-group - Dolichera - Longbeards Large family - Tettigonioidea - Ironclads Family - Tettigonidae - iron beetles Subfamily - Tettigoninae Genus - Tettigonia L. 1758 Tettigonia caudata (Charp.1845) Tettigonia viridissima L., 1758

Location, duration and distribution: Nukus district, (2Q.J.1L. 17-22.05.22 y.). Distribution: Central Europe, Turkey, Iran, India. Kyrgyzstan, Uzbekistan [5,6,8]. Permanent type. Larvae and adults damage the large leaves of cabbage.

Tettigonia viridissima L., 1758

Location, duration and distribution: Nukus district,  $(4 \stackrel{\bigcirc}{_{+}} . 1 \stackrel{\bigcirc}{_{-}} . 17 - 22.05.22)$ . Distribution: North-West Africa, Europe, Turkey, Russia, Iran, Central Asia, Kazakhstan, Russia, Uzbekistan [5,6,8]. Permanent type.

Larvae and adults damage cabbage seedlings and large leaves.

Decticus Aud-Serv., 1831 - gen

### Decticus verrucivorus (Lin., 1758)

Place of detection, period and distribution: Nukus district,  $(3 \stackrel{\frown}{} . 2 \stackrel{\frown}{} . 17 - 22.07.22 \text{ y.})$ . Distribution: Europe, South, Central Russia, Kazakhstan, Mongolia, Central Asia, Uzbekistan [5,6,8]. Larvae and adults damage cabbage leaves. SJIF Impact Factor (2023): 8.574 | ISI I.F. Value: 1.241 | Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)

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# The large family Grylloidea - Grylloids Family - Grylloidae - Gryllos Subfamily - Oecanthinae Oecanthus Aud.-Serv., 1931 - gen Oecanthus turanicus Uv., 1912

Place of detection, period and distribution: Nukus district,  $(3 \bigcirc .2 \bigcirc .17$ -22.07.22 y.).

Distribution: Kazakhstan, Iran, Pakistan, Arabian Peninsula, Central Asia, Uzbekistan [5,6,8].

Being an omnivorous species, its larvae and adults gnaw newly sprouted cabbage seedlings, its stems and root nodules.

### Gryllotalpidae - The species composition of the calfs Gryllotalpa Latr., 1802 - gen Gryllotalpa grullatalpa (L., 1758)

Place of detection, period and distribution: Nukus district,  $(6 \stackrel{\bigcirc}{_{-}} . 5 \stackrel{\bigcirc}{_{-}} . 17 - 22.05.22y)$ .

Distribution: Europe, North Africa, America, Russia, Turkey, Iran, Arabian Peninsula, Kazakhstan, Central Asia, Uzbekistan [5,6,8].

Larvae and adults severely damage the sown cabbage seeds, young seedlings, plant roots, especially in wet areas of the crop, in greenhouses and greenhouses.

# Acridoidea MacLeay are true grasshoppers Acrididaeis a family of true grasshoppers Catantopinae is a subfamily Calliptamus Aud.-Serv., 1831 - descendant Calliptamus italicus italicus L., 1758

Place of detection, period and distribution: Nukus district, (7<sup>Q</sup>.4<sup>d</sup>.L3. 17-22.07.22 y.).

Distribution: Europe, Asia, Uzbekistan [5,6,8].

Larvae and adults were found to gnaw cabbage leaves.

Heteracris Walk., 1870 - descendant

Heteracris pterosticha (F.d.W., 1833)

Place of detection, period and distribution: Nukus district,  $(2 \stackrel{\bigcirc}{_{-}} 17.07.22 \text{ y.})$ .

Distribution: Russia, Kazakhstan, Central Asia, Western Asia, Afghanistan, Uzbekistan [5,6,8]

Larvae and adults were observed to feed on cabbage leaves.

# Mesasippus Serg. Tarb., 1931 - generation

### Mesasippus kozhevnikovi kozhevnikovi (Serg. Tarb., 1925)

Place of detection, period and distribution: Nukus district,  $(3 \bigcirc .1 \bigcirc .22.07.22 \text{ y.})$ .

Distribution: South Kazakhstan, Uzbekistan [5,6,8].

It was found that larvae and adults feed on cabbage leaves.

### Hilethera Uv., 1923 - descendant

### Hilethera turanica Uv., 1925

Place of detection, period and distribution: Nukus district,  $(1 \bigcirc .1 \bigcirc .02.09.22 \text{ y.})$ .

Distribution: Central Asia, China, Iran, Afghanistan, Uzbekistan [5,6,8].

It was noted that larvae and adults severely damage the crop (cabbage).

# Eyprepocnemis Fieber, 1853 - descendant

# Eyprepocnemis unicolor Serg. Tarb., 1928

Place of detection, period and distribution: Nukus district,  $(2 \stackrel{\bigcirc}{+} .1 \stackrel{\bigcirc}{-} .22.07.22 \text{ y.})$ .

Distribution: Central Asia, South Kazakhstan, Uzbekistan [5,6,8].

It was noted that larvae and adults cause serious damage by feeding on cabbage leaves.

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### Chorthippus Fieb., 1852 - gen

#### Chorthippus (s.str.) albomarginatus karelini (Uv., 1910)

Place of detection, period and distribution: Nukus district,  $(5 \bigcirc .2 \bigcirc .17$ -22.07.22 y.). Distribution: Europe, Russia, Kazakhstan, Mongolia, Uzbekistan [5,6,8].

It was found that larvae and adults feed on cabbage leaves and cause damage.

### Glyptobothrus Chop., 1950 - Genus

#### Glyptobothrus meridionalis (Mistsh., 1950)

Place of detection, period and distribution: Nukus district, (1L. 17.07.22 y.). Distribution: Europe, Kazakhstan, Turkmenistan, Mongolia, Uzbekistan [5,6,8].

It was found that larvae and adults feed on cabbage leaves and cause damage.

According to the results of our research, it was noted that 1 family, 3 species of grasshoppers belonging to 2 genera, 1 family of grasshoppers, 1 species belonging to 1 genus, 1 species of grasshoppers belonging to 1 genus, and 1 family, 7 species of grasshoppers belonging to 7 genera were distributed in cabbage agrocenoses of Nukus district

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