

**TAXONOMIC ANALYSIS OF LONG-NOSE (WEEVILS) BEETLES (COLEOPTERA,
CURCULIONIDAE) DISTRIBUTED IN SOUTHERN FERGANA**

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Abstract: *Long-nosed (weevils) beetles weevils (Curculionidae) There are 63,400 species of phytophagous species common in all regions of Uzbekistan; As a result of research, 20 species belonging to 4 subfamilies and 8 genera of Curculionidae family were registered. Researches on the study of long-horned beetles in the territory of Uzbekistan and this list have important scientific and practical importance in studying the fauna and distribution of these beetles, as well as in determining effective pest control measures.*

Key words: *Phytonomus variabilis Woll., 1854, Sub family, genus, taxonomic analysis.*

INTRODUCTION

Currently, the representatives of the order of Coleoptera make up almost 1/4 of the known insects on earth (Rossa & Goczal, 2021). It is important to study the diversity of these insects and the patterns of their distribution across different geographical regions, and this may play a key role in planning the next work in the era of anthropogenic-caused biodiversity loss (Ceballos et al., 2015). Long-nosed beetles are one of the largest families of hardy beetles, and today there are more than 63,400 species of them, and the number of discovered species is increasing every year. Research aimed at studying the fauna of this hardy family in Central Asia is increasing year by year.

The coleopteran fauna of Uzbekistan is rich and diverse. This situation is reflected in various historical studies, the formation of the country's fauna and diversity of species is determined by this, its natural conditions are completely unique.

V. V. Yakhontov's hard work in the study of the entomofauna of Uzbekistan was of great importance, and his work is still effectively used to generalize the fauna of ground beetles.

V. V. Yakhontov bioecological characteristics of alfalfa leaf weevil or phytonomus (*Phytonomus variabilis* Woll., 1854), including its seasonal dynamic number in alfalfa in different periods in some regions of Uzbekistan, Bukhara and Tashkent, Tashkent region V. N. Polevshikova [14] , studied by R.A.Alimdzhanov [10], R.Jononova [23] and N.G.Shamuratova in the north of the Republic of Karakalpakstan in the conditions of the Karshi desert.

Catching beetles can be done by setting traps, various traps, using a series of bottles or jars. Spring entomofauna (end of April - second decade of May), late spring (third

decade of May - beginning of June), early summer (June), summer (July - beginning of August), end of summer (August - early September) and autumn (mid-September-October) aspects can be distinguished.

The purpose of this article is to present the species composition of long-nosed beetles found in Uzbekistan together with their higher taxonomic positions.

RESULTS AND DISCUSSION

A number of internationally recognized official databases and hundreds of scientific literature were used to determine the species composition of long-nosed beetles in the Southern Fergana region. In addition, the samples collected from more than 10 points of Southern Fergana during March-July 2024 became the basis for determining the species composition of long-nosed beetles.

During the research conducted in March-July 2024, 20 species belonging to 4 subfamilies and 8 genera were recorded in the Southern Fergana region. In terms of species diversity, Entiminae includes 10 species, which makes up 50% of the identified species. It was followed by the subfamilies Apioninae and Lixinae, with 5 species and 4 species, respectively, accounting for 25% and 20%. The Hypera Kenja family consists of 1 species and makes up 5%. (Chart 1)

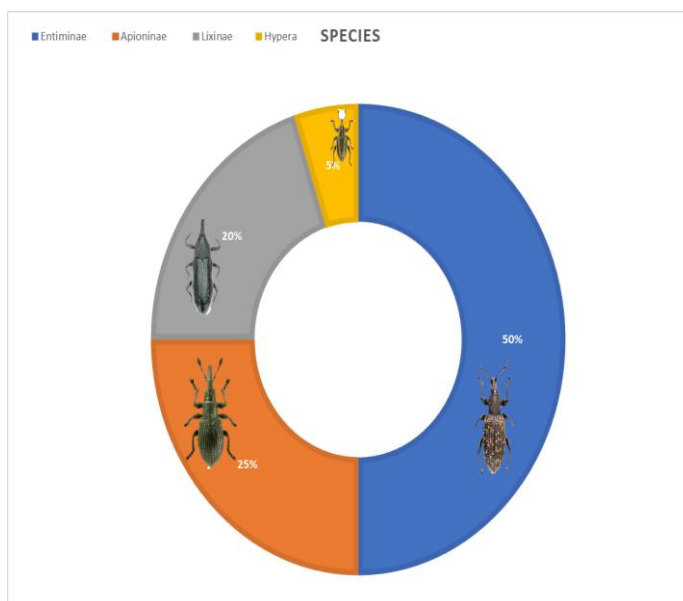


Chart 1

Distribution of members of the Curculionidae family found in Southern Fergana in different taxa in the section of subfamilies

In terms of species diversity, the genus *Sitona* Germ includes 9 species and makes up 45% of the identified species. Next is the genus *Lixus*, which consists of 2 species and contains 10% of the identified species. The rest of the genera contain 1 species each. (Table 1)

Table 1

Distribution of representatives of the Curculionidae family found in Southern Fergana in different taxa in the section of subfamilies and genera.

Sub family	Genus	Species
Lixinae		
	Cleonis	<i>Cleonis</i> <i>Pigra</i> J.A.Scopoli, 1763
	Lixus	<i>Lixus</i> <i>Bardanae</i> J.C. Fabricius, 1787

		<i>Lixus</i> <i>Subtilis</i> Boheman, 1835
	Eustenopus	<i>Eustenopus</i> <i>Ianuginosus</i> Faust 1885
Entiminae		
	Sitona Germ	<i>Sitona</i> <i>crinitus</i> Herbst, 1795
		<i>Sitona</i> <i>cylindricollis</i> Fahraeus, 1840
		<i>Sitona</i> <i>lineellus</i> Bonsdorff, 1785
		<i>Sitona</i> <i>callosus</i> Gyllenhal, 1834
		<i>Sitona</i> <i>sulcifrons</i> Thunberg, 1798
		<i>Sitona</i> <i>longulus</i> Gyllenhal, 1834
		<i>Sitona</i> <i>inops</i> Gyllenhal, 1832
		<i>Sitona</i> <i>flavescens</i> Fabricius, 1787
		<i>Sitona</i> <i>humeralis</i> Steph
	<i>Eusomus</i>	<i>Eusomus</i> <i>ovulum</i> Germar 1824
Apioninae		
	<i>Eutrichapion</i>	(<i>Eutrichapion</i> facetum) <i>Apion</i> <i>facetum</i> Gyllenhal, 1839

	<i>Protapion</i>	(<i>Protapion filirostre</i>) <i>Apion filirostre</i> Kirby, 1808
	<i>Oryxolaemus</i>	(<i>Oryxolaemus flavifemoratus</i>) <i>Apion flavifemoratum</i> Herbst, 1797
	<i>Catapion</i>	(<i>Catapion seniculus</i>) <i>Apion seniculus</i> Kirby, 1808
	Stenopterapion	(<i>Stenopterapion tenue</i>) <i>Apion tenue</i> Kirby, 1808
Hyperinae		
	Hypera	<i>Phytonomus variabilis</i> Woll., 1854.

CONCLUSION

From the obtained results, it can be concluded that long-nosed beetles in Uzbekistan are unique in terms of the number of species and the extent of distribution, and constant monitoring of their taxonomic status is necessary. Determining the species number and composition of long-nosed beetles in Uzbekistan can serve as an important key to control the number of dominant pest species among them.

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