
THE FAUNA OF SPIDER (ARANEAE) IN THE NIZIP AND KARKAMIS – GAZIANTEP (TURKEY)

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ABSTRACT

In this study, the fauna of spider was researched in the Nizip and Karkamis (Gaziantep). At the end of work; 26 families were determined at family base, furthermore seven families (Gnaphosidae, Lycosidae, Theridiidae, Thomisidae, Philodromidae, Liocranidae and Miturgidae) were examined till to species level. The rate of sex and individual members in the families were stated out. These families found out that belonging to the 29 genera and the 56 species in the taxonomical order. The individual sex, adult / sub-adult ratios of each family were listed. It is found out that the male to female ratio in these seven families were found as 1: 2.93 and 1: 1.34 in adult and subadult respectively.

Introduction

Due to favourable climatic conditions and fertile land, Nizip and Karkamis is the region where the intensive agricultural practices have been made over centuries. The euphrates passes through the researched area. Recently, the Government has been instructed two irrigation dam. Due to river and dam, importance of agricultural practices in the region has been increased. Spider species, are large number in varieties which are significant predatory in terrestrial ecosystem (9). Because of monofag spider, they have an increase importance playing role for providence bio-control and ecologic balance (10).

The aim of this study is to determine the spider fauna of Nizip -Karkamis (Gaziantep). There is no scientific report on the spider fauna of the region therefore the second goal of our research is prepare a base material for further works on spider fauna in Gaziantep.

Materials and Methods

Specimens were collected between May 2002 and September 2003 from the researched areas. The specimens have been

collected with aspirator, insect net, hole trap and Japanese umbrella. All of the species was identified according to Heimer, and Nentwig (3), Roberts (15, 16) Locket, and Millidge (6, 7) Varol M.I. (19, 20) Bayram et al. (2) Karol (4) and Tyschchenko (18). Terminology follows primarily Platnick (14). The specimens were deposited in the University of Gaziantep, Department of Biology, Gaziantep, Turkey.

Results and Discussion

717 samples belonging to 26 families were collected in this study (**Table 1**). Moreover, seven families out of sampled 26 families were studied with detail. The most common family out of seven families is found as Lycosidae (with the ratio in sampled spiders in this research 27.2 %), followed by Gnaphosidae (22.2 %), Theridiidae (12.4 %), Thomisidae (6.1 %), Philodromidae (3.4 %), Liocranidae (3.1 %) and Miturgidae (0.3 %). The list of 56 species belonging to 29 genera is given. Moreover, the ratio of male/female in 56 taxas represented (**Table 2** and **Table 3**).

It is reported that the abundance of spi-

TABLE 1
Spider families, total number and percentages of subadults, adults and sex in Nizip and Karkamis

Family	Subadult	Female	Male	Adult	Total	%
Lycosidae	115	51	29	80	195	27.2
Gnaphosidae	117	30	12	42	159	22.2
Theridiidae	37	46	6	52	89	12.4
Araneidae	30	8	9	17	47	6.5
Thomisidae	6	30	8	38	44	6.1
Salticidae	20	6	12	18	38	5.3
Philodromidae	10	11	3	14	24	3.4
Liocranidae	21	1	0	1	22	3.1
Pholcidae	4	10	1	11	15	2.1
Hahnidae	12	-	-	-	12	1.7
Scytodidae	5	2	4	6	11	1.5
Linyphiidae	4	3	3	6	10	1.4
Dysderidae	7	3	-	3	10	1.4
Nesticidae	4	3	-	3	7	0.9
Tetragnathidae	4	-	2	2	6	0.8
Agelenidae	3	1	1	2	5	0.7
Pisauridae	3	-	1	1	4	0.6
Amaurobidae	2	-	1	1	3	0.5
Segestridae	3	-	-	-	3	0.5
Oecobidae	2	1	-	1	3	0.5
Oxyopidae	-	1	2	3	3	0.5
Dctiynidae	1	-	1	1	2	0.4
Eresidae	1	-	1	1	2	0.4
Zodariidae	-	-	1	1	1	0.3
Uloboridae	1	-	-	-	1	0.3
Miturgidae	0	1	0	1	1	0.3
Total	412	208	97	305	717	100

ders is parallel with the favourable ecological conditions (9, 10). In spite of the fact that Nizip-Karkamis has fertile land and favourable climatic conditions, Nizip-Karkamis is a virgin location in case of absence of reports on spider in this region.

At the end of literatures study, we determined 373 spider species in Turkey (17), 100 spider species is found from Southeast Anatolia region (21). Systematic and ecology of the spiders (Arachnida: Araneae) of Huzurlu High Plateau named study, 33

species were determined (5). Another research that systematics and Ecology of The Spiders of Nizip and Karkamis named study, 56 species were found (13). Otherwise, the Spiders of Hancağız Dam named study, 16 spider species were investigated (1).

The research was planned and conducted to have a look the fauna of spiders of Nizip-Karkamis to avoid this absence by scientific manner. The most common families are Lycosidae and Gnaphosidae. These families are mainly known as predator spiders and they are mostly adjusted to hunt the pests of cash crops in fertile lands (9, 10). The percentage of those families in Nizip-Karkamis is about 49 %. It is indicated that the presence of Lycosidae and Gnaphosidae families in this location is parallel to the reports in the literature (8, 3) *Pardosa proxima* (30) was the widespread species in the sampled region. *Diaea livens* (21) is taken the second one, followed by *Simitidion smile* (18), *Aulonia kratochvili* (15), *Enoplognatha mordax* (9) in this study.

The adults of those seven families were seen in July and August in Nizip-Karkamis. They are reported as summer adulance spiders. This results also similar to the report of Nyffeler (9) and Nentwig (8).

Interestingly the collected spider species in Nizip more than Karkamis. According to common knowledge in spider, the moisture is one of the important tool for life cycle of spider (3). Therefore the relative humidity in Nizip is higher than Karkamis and this explains the reason of being preferred location by spiders. This research is a preliminary research work of the spider fauna in Nizip-Karkamis (Gaziantep). It is determined that this region is an important area for spiders and researcher working on them.

We have collected 717 specimens and determined, 26 families, the detailed works in the laboratory was made on the 56 species belonging to 29 genera in the seven families. Lists given here is the first report for Nizip-Karkamis (Gaziantep-Turkey).

TABLE 2

The list of the families, males and females in the Nizip - Karkamıs

Family	Genus	Species
Gnaphosidae	<i>Drassodes</i>	<i>lapidosus</i> (Walckenaer, 1802) – 4 ♀
		<i>pebuscens</i> (Thorell, 1856) – 2 ♀
	<i>Haplodrassus</i>	<i>signifier</i> Koch, 1839 – 1 ♂, 1 ♀
		<i>dalmatensis</i> Koch, 1866 – 1 ♂, 1 ♀
		<i>soerensei</i> Strand, 1900 – 1 ♂, 1 ♀
	<i>Zelotes</i>	<i>latreilli</i> Simon, 1878 – 2 ♀
		<i>atrocoerumleus</i> Simon, 1878 – 5 ♀
		<i>aeneus</i> Simon, 1878 – 1 ♀
		<i>clivicola</i> Koch, 1870 – 1 ♀
		<i>puritanus</i> Chamberlin, 1922 – 1 ♂, 1 ♀
	<i>Gnaphosa</i>	<i>muscorum</i> Koch, 1866 – 1 ♀
	<i>Scotophaeus</i>	<i>blackwalli</i> Thorell, 1873 – 5 ♀
	<i>Drassylus</i>	<i>pumilus</i> (Koch, 1839) – 6 ♂, 1 ♀
<i>Micaria</i>	<i>albovittata</i> (Lucas, 1846) – 1 ♀	
<i>Nomisia</i>	<i>aussereri</i> Koch, 1872 – 1 ♂	
<i>Urozelotes</i>	<i>rusticus</i> Koch, 1872 – 1 ♂	
<i>Parasyriaca</i>	<i>vinosa</i> Simon, 1878 – 2 ♂	
Lycosidae	<i>Pardosa</i>	<i>pseudotragillata</i> Tongiorgi, 1966 – 2 ♀
		<i>proxima</i> Koch, 1847 – 30 ♀
		<i>saturationior</i> Simon, 1937 – 2 ♀
		<i>vittata</i> Keyseling, 1863 – 1 ♀
		<i>cribrata</i> Simon, 1876 – 3 ♀
		<i>paludicola</i> Clerck, 1757 – 2 ♂
		<i>bifasciata</i> (Koch, 1834) – 4 ♂
		<i>monticola</i> Clerck, 1757 – 5 ♂
		<i>saltuaria</i> Koch, 1870 – 11 ♂
	<i>Arctosa</i>	<i>personata</i> (Koch, 1872) – 1 ♀
		<i>perita</i> Latreille, 1799 – 1 ♂
	<i>Acanthlycosa</i>	<i>lignoria</i> Clerck, 1757 – 1 ♀
	<i>Aulonia</i>	<i>kratochvili</i> Dunin, 1986 – 6 ♂, 9 ♀
	<i>Alopecosa</i>	<i>pinetorum</i> Thorell, 1856 – 2 ♀
<i>Trochosa</i>	<i>hispanica</i> Simon, 1870 – 2 ♂	
Thomisidae	<i>Xycticus</i>	<i>ulmi</i> Hahn, 1831 – 1 ♀
		<i>luctosus</i> Blackvalli, 1836 – 1 ♀
		<i>macedonicus</i> Silhavy, 1944 – 3 ♂
		<i>robustus</i> Hahn, 1832 – 2 ♂
	<i>Thomisus</i>	<i>onostus</i> Walckenaer, 1805 – 2 ♀
	<i>Ozyptila</i>	<i>simplex</i> Cambridge, 1862 – 6 ♀
		<i>claveata</i> (Walckenaer, 1837) – 1 ♀
	<i>Diaea</i>	<i>livens</i> Simon, 1876 – 3 ♂, 18 ♀
<i>Synema</i>	<i>globosum</i> Fabricius, 1775 – 1 ♀	

TABLE 3

The list of the families, males and females in Nizip - Karkamıs (continue of the list in Table 2)

Family	Genus	Species
Theridiidae	<i>Enoplognatha</i>	<i>thoracica</i> Hahn, 183 – 1 ♂, 4 ♀
		<i>ovata</i> (Clerck, 1757) – 4 ♀
		<i>mordax</i> (Thorell, 1875) – 9 ♀
		<i>oelabdica</i> (Thorell, 1875) – 5 ♀
		<i>mandibularis</i> Lucas, 1846 – 2 ♀
	<i>Theridion</i>	<i>smile</i> Koch, 1836 – 18 ♀
	<i>Steatoda</i>	<i>triangulosa</i> Walckenaer, 1802 – 2 ♀
		<i>albomaculata</i> De Geer, 1778 – 1 ♀
		<i>grosa</i> Koch, 1838 – 1 ♀
<i>castanea</i> Clerck, 1757 – 5 ♂		
Philodromidae	<i>Thanatus</i>	<i>vulgaris</i> Simon, 1870 – 3 ♀
		<i>formicinus</i> Clerck, 1757 – 3 ♀
	<i>Philodromus</i>	<i>albidus</i> Kulczynski, 1911 – 5 ♀
	<i>Paratibellus</i>	<i>oblongiusculus</i> Lucas, 1846 – 3 ♂
Liocranidae	<i>Liocranum</i>	<i>rupicola</i> Walckenaer, 1830 – 1 ♀
Miturgidae	<i>Cheiracanthium</i>	<i>mildei</i> Koch, 1864 – 1 ♀

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