

Families and genera of Cape Verdean spiders in comparison to those of the Canary Islands

Günter SCHMIDT

Von-Kleist-Weg 4, D-21407 Deutsch Evern, Germany.

Key words: Cape Verde Islands, Canary Islands, spiders.

ABSTRACT

23 of the 25 families, 48 of the 75 genera and 25 of the 116 species of spiders, present on the Cape Verde Islands also occur on the Canary Islands. 15 of these species are transgressing, 6 are cosmopolitan and 4 are of Makaronesian origin. There is no more than one species common in those genera occurring on both archipelagos. The Cape Verde Islands are the most southern distribution for 9 species living on the Canary Islands.

INTRODUCTION

The Cape Verde Islands are situated between the 20 °C and the 25 °C isotherm. That corresponds with the Canary Islands and the north African Mediterranean area. They represent the border between the Palaearctic and the Ethiopian Region. On account of the location and the climate one can expect spiders also living on the Canary Islands which have the closest relationship to the Cape Verde Islands. Therefore the spiders of both archipelagos are compared to each other.

MATERIAL AND METHODS

Collecting was exclusively done by hand. Most spiders of the Cape Verde Islands were documented by photo. Immature spiders were brought alive to Germany to bring them up to maturity. The material was preserved in 70 % alcohol. Genitalia were prepared by embedding them in polyvinylactophenol, if necessary. The identification was made using the papers mentioned in bibliography. The material was deposited in the Senckenberg Museum, Frankfurt a. M. A part of the Canary Islands collection was given to the Museum für Tierkunde, Dresden.

RESULTS

25 families and 75 genera are known on the Cape Verde Islands, 38 families and 151 genera of spiders on the Canary Islands. Hersiliidae and Tetrablemmidae do not exist on the Canary Islands. 51 of the Cape Verdean

genera contain one species, 12 two, 7 three and 4 four species. Although the Canary Islands are 1500 km away, 48 genera and 25 species are common on both archipelagos. 15 of them are transgressing species that live also in the Mediterranean region (Tab. 2). 6 are cosmopolitan. 5 of them can be found in the Mediterranean. 4 are of Makaronesian origin, but do not live on the other Makaronesian Islands (Madeira, Acores). There is at most one common species in genera occurring on the Cape Verde and Canary Islands. The number of recorded species on Cape Verde Islands is 116 while the Canarian fauna comprises more than 430 species (Wunderlich 1991).

Remarkable are the great differences in the genera *Dysdera* and *Oecobius*. Of 50 species of *Dysdera* and 37 of *Oecobius* on the Canary Islands only one of each genus occurs on the Cape Verde Islands. On the other hand 1 species of *Bianor* exists on the Canary Islands, but four occur on the Cape Verde Islands.

For the following Mediterranean species the Cape Verde Islands are the most southern distribution: *Filistata canarensis*, *Orchestina pavesii*, *Uroctea paivai*, *Drassodes assimilatus*, *Latrodectus pallidus*, *Tidarren chevalieri*, *Ebo patellidens*, *Thanatus vulgaris*, *Arctosa variana*, *Lycorma ferox*, *Thomisus hilarulus*, *Cheiracanthium mildei*, *Bianor albobimaculatus*. 9 of them are also the Canary Island inhabitants.

Tab.1 Families and genera of Cape Verdean (CVI) spiders in comparison to those of the Canary Islands (CI).

Families	Genera	No. of species on CVI	No. of species on CI	Species common on CVI and CI
Agelenidae	<i>Tegenaria</i>	1	4	-
Araneidae	<i>Afraranea</i>	2	-	-
	<i>Argiope</i>	1	2	-
	<i>Cyclosa</i>	1	3	<i>C. insulana</i>
	<i>Cyrtophora</i>	1	1	<i>C. citricola</i>
	<i>Meta</i>	1	3	-
	<i>Neoscona</i>	2	2	<i>N. subfusca</i>
	<i>Nephila</i>	1	-	-
	<i>Pararaneus</i>	1	-	-
	<i>Tetragnatha</i>	2	3	<i>T. nitens</i> (?)
Clubionidae	<i>Cheiracanthium</i>	3	3	-
	<i>Clubiona</i>	2	5	-
	<i>Tecution</i>	1	-	-
Dysderidae	<i>Dysdera</i>	1	50	
Filistatidae	<i>Filistata</i>	1	5	<i>F. canariensis</i>
Gnaphosidae	<i>Australoechemus</i>	2	-	-
	<i>Berlandina</i>	3	-	-

Tab.1. cont.

Families	Genera	No. of species on CVI	No. of species on CI	Species common on CVI and CI
Gnaphosidae	<i>Camillina</i>	1	-	-
	<i>Drassodes</i>	1	4	<i>D. assimilatus</i>
	<i>Haplodrassus</i>	1	5	-
	<i>Micaria</i>	1	3	-
	<i>Scotophaeus</i>	4	5	-
	<i>Setaphis</i>	2	3	-
Hersiliidae	<i>Hersiliola</i>	2	-	-
Heteropodidae	<i>Heteropoda</i>	1	-	-
Linyphiidae	<i>Koinothrix</i>	1	1	-
	? <i>Meioneta</i>	1	-	-
Loxoscelidae	<i>Loxosceles</i>	1	1	<i>L. rufescens</i>
Lycosidae	? <i>Allocosa</i>	1	-	-
	<i>Arctosa</i>	2	3	-
	<i>Lycorma</i>	1	1	<i>L. ferox</i>
	? <i>Lycosa</i>	1	-	-
	<i>Pardosa</i>	1	2	-
Oecobiidae	<i>Oecobius</i>	1	37	<i>O. annulipes</i>
	<i>Uroctea</i>	1	1	<i>U. paivai</i>
Oonopidae	<i>Orchestina</i>	1	1	<i>O. pavesii</i>
Oxyopidae	<i>Oxyopes</i>	2	1	-
	<i>Peucetia</i>	1	-	-
Philodromidae	<i>Ebo</i>	1	1	-
	<i>Philodromus</i>	2	7	-
	<i>Thanatus</i>	3	4	<i>T. vulgaris</i>
Pholcidae	<i>Artema</i>	1	-	-
	<i>Micropholcus</i>	1	-	-
	<i>Smeringopus</i>	1	-	-
Pisauridae	<i>Perenethis</i>	1	-	-
Salticidae	<i>Bianor</i>	4	1	<i>B. albobimaculatus</i>
	? <i>Dendryphantus</i>	1	-	-
	<i>Euophrys</i>	1	1	-
	<i>Hasarius</i>	1	1	<i>H. adansoni</i>
	<i>Blaisea</i>	1	-	-
	<i>Menemerus</i>	1	3	? <i>M. bivittatus</i>
	<i>Pellenes</i>	1	1	-
	<i>Phlegma</i>	1	-	-
	<i>Plexippus</i>	2	-	-
			1	1
Scytodidae	<i>Scytodes</i>	3	5	<i>S. velutina</i>
Selenopidae	<i>Selenops</i>	1	-	-
Tetrablemmidae	gen. indet.	1	-	-

Tab. 1. cont.

Families	Genera	No. of species on CVI	No. of species on CI	Species common on CVI and CI
Theridiidae	<i>Anelosimus</i>	1	1	<i>A. aulicus</i>
	<i>Argyrodes</i>	3	5	<i>A. argyrodes</i>
	<i>Coleosoma</i>	2	-	-
	<i>Latrodectus</i>	4	3	-
	<i>Nesticodes</i>	1	1	<i>N. rufipes</i>
	<i>Paidiscura</i>	1	2	<i>P. dromedaria</i>
	<i>Steatoda</i>	3	5	-
	<i>Theridion</i>	3	5	-
	<i>Tidarren</i>	1	1	<i>T. chavalieri</i>
Thomisidae	<i>Misumenops</i>	1	-	-
	<i>Thomisus</i>	4	2	<i>T. onustus</i>
	<i>Xysticus</i>	1	3	-
Uloboridae	<i>Uloborus</i>	4	3	<i>U. plumipes</i>
	<i>Zosis</i>	1	1	<i>Z. geniculatus</i>
Zodariidae	<i>Zodarion</i>	1	2	-

Tab.2. Transgressing species common on CVI and CI.

Species	Distribution
<i>Cyclosa insulana</i>	Mediterranean to Australia
<i>Cyrtophora citricola</i>	Old World
<i>Neoscona subfusca</i>	Mediterranean to whole Africa
<i>Lycorma ferox</i>	Mediterranean
<i>Orchestina pavesii</i>	Mediterranean
<i>Thanatus vulgaris</i>	northern temperate zones of the World
<i>Bianor albobimaculatus</i>	Mediterranean
<i>Stenaclurillus nigricauda</i>	Senegal
<i>Scytodes velutina</i>	Mediterranean, Africa, Arabia
<i>Anelosimus aulicus</i>	Central Europe, Mediterranean to Middle East
<i>Argyrodes argyrodes</i>	Mediterranean, West Africa, Seychelles
<i>Paidiscura dromedaria</i>	Mediterranean, Yemen
<i>Thomisus onustus</i>	Palaeartic (CVI doubtful)
<i>Thomisus hilarulus</i>	Mediterranean (CI doubtful)
<i>Uloborus plumipes</i>	Old World

DISCUSSION

Apart from the endemic species, those living also on the Canary Islands are the biggest group of the Cape Verdean spiders. They belong to 13 families: 5 species represent Theridiidae, 4 Araneidae, 4 Salticidae, 2 Oecobidae, 2 Uloboridae and single species belong to Filistatidae, Gnaphosidae, Loxoscelidae, Lycosidae, Oonopidae, Philodromidae, Scytodidae and Thomisidae.

On the Cape Verde Islands there are 10 transgressing species: *Hersiliola simoni*, *Scytodes major*, *Neoscona moreli*, *Latrodectus pallidus*, *Cheiracanthium mildei*, *Selenops radiatus*, *Thomisus citrinellus*, *Ebo patellidens*, *Arctosa variana* and *Peucetia viridis* that do not occur on the Canary Islands. Except for *Neoscona moreli* all are of Mediterranean distribution. The Afrotropical region is represented by 11 species. That means that the Palaearctic component is the biggest one on the Cape Verde Islands, although these islands are situated in the Afrotropical region.

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