An English collection of Tyrolean spiders (Arachnida: Aranei)

by

John MURPHY and Frances MURPHY *)

Ein Beitrag zur Spinnenfauna Nordtirols (Arachnidae: Aranei)

S y n o p s i s : Aufsammlungen im Pitztal 1450 - 2400 m (1969), Ötztal 2000 - 2500 m (1969) und bei Seefeld 1000 - 2000 m (1971) erbrachten 169 Spinnen-Arten. 34 werden näher besprochen, mit Angaben über Habitat und Verbreitung, und besonders ihr Auftreten im Gebiet mit der Art ihres Vorkommens in Großbritannien verglichen. Faunistische Besonderheiten sind die Nachweise von Clubiona kulczynskii LESSERT, C. vegeta SIMON und Haplodrassus soerenseni (STRAND). Rhaebothorax foveatus (DAHL) (Linyphiidae, Erigoninae) steht Erigonoplus simplex MILLIDGE sehr nahe, die Kombination der Art ist zu überprüfen.

During the summers of 1969 and 1971 we spent two short holidays in the Austrian Tyrol. The first of these, from 22 July to 7 August, 1969, was spent in Pitztal, some 10 km to the west of Ötztal and the second, from 20 August to 2 September, 1971, was spent at Seefeld.

Our hobby is general natural history but for some years, prior to our visits to Austria, spiders had become a particular interest of ours. By observing and collecting spiders in the Tyrol we were not only hoping to extend our knowledge of certain British spider species which occur in the region, but we were also hoping to see some of the local specialities. We were not disappointed. The following account gives the names of the places visited, the habitats in which spiders were collected and a list of the species taken. Short notes are given for certain species which are of interest from either a British or an Austrian point of view. A number of species common both to the Tyrol and Britain are compared. Some of the species, such as *Clubiona subsultans, Arctosa alpigena* and *Haplodrassus soerenseni* have been recorded in Britain, only from a few isolated localities in the Scottish highlands, whilst *Micaria alpina* is known from only three sites in the Welsh mountains. On the other hand *Callilepis nocturna, Tricboncus backmani, Pblegra fasciata* and *Sitticus rupicola* are, in Britain, restricted to a few places on coastal sand or shingle.

^{•)} Anschrift der Autoren: John and Frances Murphy, 323 Hanworth Road, Hampton, Middlesex, TW12 3EJ, England.

Some other species which we collected, such as Apostenus fuscus and Pityohyphantes phrygianus have, only in recent years, been found in Britain. Records for P. phrygianus indicate that a rapid colonisation is taking place. For certain Austrian species which are either rare or which have only been recorded from the Tyrol since the early 1960's, additional locations and habitat notes are given.

Altogether, during these two holidays, 169 species of spiders were taken and included some rare and important species such as *Clubiona vegeta* (a species close to and often mistaken for *C. genevensis*), *C. kulczynskii*, *Gnaphosa montana*, *Arctosa renidens*, *Janetschekia monodon*, *Euophrys alpicola*, *Salticus cingulatus*, *Haplodrassus soerenseni*.

Rhaebothorax (?) foveatus (DAHL) is found to be close to and possibly identical to Erigonoplus simplex MILLIDGE and its generic combination should be reconsidered.

1. Localities and habitats

P i t z t a 1: Most of our spider collecting was carried out near Kaitanger, above Jerzens in Pitztal, where we were staying. It is a region of non-alkaline, crystalline rocks and schists. However, one day was spent collecting near Mittelberg, at the head of Pitztal and another day was spent at Obergurgl in Otztal. The principal collecting places and habitats were

P(1). Kaitanger. Edge of pine woods and alpine meadows. 1450 - 1600 m.

P(2). Hochzeiger & Sechzeiger. Pine woods up to alpenrose zone. 1500 - 2000 m.

P(3). Mittelberg. Stony, moorland region on approach to glacier. 2000 m.

P(4). Hochzeiger. Grassy, stony region above alpenrose zone. 2200 - 2400 m.

In Ötztal we collected at

O(1). Obergurgl. Heather and grassy region, alpentose zone. 2000 m.

O(2). Timmelsjoch. Bare, stony region. 2500 m.

S e e f e l d : This is a region of limestone mountains. The principal collecting places were mostly within walking distance of Seefeld.

S(1). Scharnitz, Stable scree beds and light pine cover, 1000 - 1200 m.

S(2). Giessenbach & Seefeld. River banks and shingle beds. 1000 - 1500 m.

- S(3). Seefeld. Alpine meadows. 1200 1500 m.
- S(4). Seefeld. Pine woods. 1200 1500 m.

S(5). Seefelderjoch. Grassy mountains slopes. 1800 - 2000 m.

Out of the 169 different species collected, 116 were taken from Pitztal, Ötztal, 97 were taken from Seefeld, whilst 115 occur in Britain (B).

2. Species list:

The families are in alphabetical order.

Aş	gele	nidae				
Ŷ	-	Agelena labyrinthica			S(3)	В
Ŷ		Cicurina cicur			S(1)	В
	ರ	Coelotes inermis			S(1,2)	
ç	്	C. terrestris	P(1)		S(1,5)	В
Ŷ		Tegenaria silvestris		O(1)		в
	්	T. tridentina			S(1) -	
A	mau	robiidae				
	්	Amaurobius fenestralis			S(1,4)	В
Ŷ	đ	Callobius claustrarius	P(2)			

Аг	and	eidae				
ç		· Aculepeira carbonaria	P(3)			
ç	đ	A. ceropegia	P(1)			? ₿
ç		Araneus quadratus	P(4)			В
ç		Araniella alpica	P(1)			в
ç		Cyclosa conica	P(2)			В
ç		Zygiella montana	P(1,2)		S(4)	
	ubi	onidae				
Ŷ		Agroeca proxima			S(3)	В
Ŷ		Apostenus fuscus	P(2)			В
Ŷ		Clubiona hilaris	P(2)	O(1)		
ç		C. vegeta	P(1)			
Ŷ		C. kulczynskii	P(2)			
Ŷ		C. neglecta	P(2)		S(3)	В
Ŷ		C. reclusa	P(2)		S(2)	В
	ð	C. subsultans			S(1)	В
ę	ೆ	C. trivialis	P(1,2)			В
	đ	Liocranum rupicola	P(1)			В
Ŷ		Phrurolithus minimus	P(1)			В
				•		
	сту	nidae	D(1)			~
ç		Dictyna arundinacea	P(1)			В
D٩	sde	: ridae		•	4	
ç,	3	Segestria senoculata	P(1)		S(1)	В
	-		- (-)			-
Gn	apl	hosidae				
ç		Callilepis nocturna	P(1)			В
ç	ð	Drassodes cupreus	P(2,3)			В
ç		D. lapidosus	P(3)		S(1)	В
Ŷ		D. pubescens			S(1,3,4)	В
ç		D. villosus			S(3) .	
Ŷ		Gnaphosa badia	P(1,2)			
ç		G. leporina	P(4)			В
ç		G. montana	P(1,4)			
Ŷ	đ	G. muscorum	P(4)			
ç		Haplodrassus signifer	P(1)			В
ç		H, soerenseni	P(1)		S(3)	В
ç	ð	Micaria alpina	P(4)			в
ç		Zelotes aeneus			S(2)	
Ŷ		Z. clivicola	P(2)	O(1)		
Ŷ		Z. latreillei	P(1)			В
Ŷ	đ	Z. petrensis	P(1)		S(1)	В
ç	đ	Z. similis	P(1)		S(2)	
¢	đ	Z. subterraneus	P(1,3)		ţ	
					,	
		idae .				
Ŷ	ి	Cryphoeca silvicola	P(1)			В
Ŷ	ð	C. lichenum lichenum			S(4)	
Ŷ		Hahnia difficilis		O(1)		
Ŷ		H. ononidum		O(1)	<i>1</i> .	
ç		H. pusilla			S(2)	В

•

.

		· •				
	COS	idae	540			
Ŷ	_	Alopecosa accentuata	P(1)	0 (0)	·	В
Ŷ	ೆ	A. aculeata	P(2,)	O(2)	S(1,4)	
ç	ੈ	A, inquilina	P(2)		S(3)	
Ŷ		A. pulverulenta	P(2)			В
Ŷ	ర	Arctosa alpigena	P(4)	O(2)		в
	ð	A. renidens	P(1,2)			
Ŷ	đ	Pardosa agrestis	P(1,2,3,4)			в
ç	ೆ	P. amentata		O(1)	S(3,4)	В
Ŷ		P. ferruginea	P(1,2)		S(4)	
	đ	P. giebeli	P(4)	O(2)		
ç		P. lugubris		• •	S(4)	в
ç		P. nigra			S(5)	-
ç		P. palustris			S(3)	в
ç	ರ	P. pullata	P(1)		S(3)	В
•	ರೆ	P. riparia	P(2)		0(3)	5
ç	ర	P. saltuaria	P(4)		S(5)	
ç	ර ර	P. wagleri	1(4)		S(2)	
ç	J J	Pirata knorri				
Ŷ	Q				S(1,2)	п
		Trochosa terricola	D(1 0)		S(1,4)	B
Ŷ	ರ	Xerolycosa nemoralis	P(1,2)		S(1,4)	в
Li	n y p	hiidae				
Erig	gonin	ae				
ç	ర	Araeoncus anguineus	P(4)		S(5)	
Ŷ	đ	Asthenargus paganus			S(3,4)	В
ç		Ceratinella brevipes	P(1)			В
ç	ð	C. brevis	P(1)	O(1)	S(1)	в
Ŷ		Ceratinopsis austerus	- (-)	- (-)	S(3)	
Ŷ		Dicymbium brevisetosum			S(3)	В
ç	ರ	Diplocephalus cristatus			S(1,2,4,5)	В
ç	ರ	D. helleri	P(3)			D
ç	U	D. latifrons	r(3)		S(1,2)	п
			D(4)		S(4) .	В
9		Entelecara media	P(4)		() () () () () () () () () () () () () (
Ŷ	đ	Erigone atra	P(2)		S(3)	B
Ŷ	đ	E. dentipalpis			S(3,5)	В
Ŷ	đ	Erigonella subelevata subelevata			S(5)	
ç	ೆ	Gonatium paradoxum			S(3,4)	В
	đ	G. rubellum	P(2)			В
ç		G. rubens	P(1)			В
Ŷ		Gongylidiellum latebricola			S(4)	В
	ð	Janetschekia monodon			S(2)	
ç		Minicia marginella			S(1)	
Ŷ	ರ	Micrargus herbigradus			S(2)	В
ç	đ	Minyriolus pusillus			S(3,4)	В
ç	ರ	Oedothorax agrestis			S(2)	В
ç	~	Pelecopsis radicicola	P(1,2)			В
ç	ರ	Rhaebothorax brocchus	P(4)	O(2)		D
Ŷ Ç	0	R. (?) foveatus	1 (T)			
ç		Sciastes carli		0(1)	5(2)	
			B (4)		S(3)	
Ŷ	đ	Scotinotylus antennatus Trick or sure hard around	P(4)			_
ç	ೆ	Trichoncus hackmani	P(1,2)		-	в

-

.

	•	l				
۰¢		Troxochrus scabriculus			S(2)	В
ç	്	Walckenaera antica	P(1)		S(1,5)	В
	ి	W. mitrata			S(4)	В
Lit	nyphi	nac				
	đ	Agyneta conigera	P(2)			В
ç	ి	Bolyphantes alticeps	P(2)		S(2,4)	В
ç	ð	B. index	P(1)		S(3,4)	
ç		B. luteolus	P(4)		S(3)	В
ç		Centromerita concinna			S(5)	В
ç		Centromerus arcanus	P(1)		S(4)	В
Ŷ	đ	C. pabulator	P(1,2)		S(2,4,5)	
ç		C. sylvaticus			S(2)	В
ç		Drapetisca socialis			S(4)	В
¢		Labulla thoracica	P(1)		S(4)	В
Ŷ	đ	Lepthyphantes alacris	P(1)		S(2,4)	В
ç		L. cristatus			S(4)	В
ç		L. expunctus			S(4)	В
ç	đ	L. fragilis			S(2)	
ç		L. kotulai	P(4)			
ç	ð	L. mengei	P(2,3)		S(2,3,4)	В
ç		L. monticola	P(4)			
ç	đ	L. mughi	P(1)		S(4)	
ç		L. nebulosus			S(1,3)	В
ç		L. obscurus			S(2)	В
Ŷ	đ	L. tenebricola	P(2)	a (a)	S(3,4)	В
Ŷ		L. variabilis	5(4)	O(2)	D (4)	
ç		Linyphia (Neriene) marginata	P(1)		S(1)	B
	ರೆ ರೆ	L. (Neriene) peltata	P(2)		6(1)	B B
ç	o	L. triangularis Meioneta beata	P(2)		S(1)	B
ç	đ	Meloneta beata M. gulosa	P(2) P(1,4)	O(1)	S(1,3)	В
ç	Ŭ	M. rurestris	P(2)	0(1)	S(4)	В
ç		Microlinyphia pusilla	P(1)		5(1)	B
ç		Microneta viaria	1(1)		S(3)	B
ç		Pityohyphantes phrygianus	P(1)		S(3)	B
ç	రే	Porrhomma convexum	- (-)		S(2)	В
ç	•	Syedra gracilis	P(1)	O(1)		В
	ð	Syedrula innotabilis	P(1)			в
ç	đ	Tapinopa longidens			S(1)	В
Ρh	i10	dromidae				
	്	Philodromus collinus			S(4)	В
ç		P. vagulus	P(2)	O(1)	S(2)	
ę		Thanatus formicinus	P(1)			В
S a	ltic	idae				
	٠ ځ	Aclurillus v-insignitus			S(1)	В
Ŷ		Euophrys alpicola	P(4)		- >-/	-
ç	đ	E. crratica	P(1,2)			в
ç		E. frontalis	P(1)		S(1,2,4)	В
ç		E. monticola	P(1)			-
ç		E. petrensis	P(4)			в
		-				

	ç	ರ	Evarcha falcata	P(1,2)		S(1,3)	В
	ç		Heliophanus flavipes	P(2)			В
	ç	đ	H. muscorum	P(1,2)		S(2)	
	ç		Neon reticulatus	P(2)		S(4)	В
•	ç	്	Phlegra fasciata	P(2)			В
	ç		Salticus cingulatus	P(1)			В
4	ç		S. scenicus	P(1)			В
(ç	đ	Sitticus rupicola	P(2)			В
0	ç	്	S. terebratus			S(4)	
	Tet	ra	gnathida e				
		đ	Metellina mengei			S(4)	В
	Γhe	eria	diidae				
		đ	Crustulina guttata	P(2)			В
	ç		Episinus angulatus	P(1)			В
		đ	Robertus lividus			S(1)	В
ę	ç	đ	R, truncorum	P(1,2)		S(4)	
\$	₽		Steatoda phalerata	P(2)			В
ç	ç		Theridion mystaceum	P(1)			В
9	ç.		T. petraeum	P(4)	O(1)		
¢	Ş		T. sisyphium	P(1,2)		S(3)	В
	The	o m	isidae				
4	Ş	്	Oxyptila atomaria	P(1)	O(1)	S(1,2)	В
9	Ş		Xysticus audax	P(2,4)		S(3)	В
(P		X. kochi	P(1)			В
		්	X, lanio			S(5)	В
2	Zor	id	a e				
Ş	2		Zora nemoralis	P(1)			В
Ş	2	ð	Z. spinimana	P(1,2)			В

3. Notes:

Araneidae:

Aculepeira ceropegia (WALCKENAER): Kaitanger, Pitztal 1600 m (9 ¢ 24.7.1969).

Although these were plentiful in the alpine meadows at Kaitanger we were very pleased to see them. Our interest in this species results from a curious British record. Apparently several specimens were taken in Monmouthshire, which lies on the northern side of the Severn estuary, during the autumn of 1853. However, the species has never been found in Britain since that time. The generic combination of this species is discussed by LEVI (1977).

Araniella alpica (L. KOCH): Kaitanger, Pitztal 1500 m (2 9 27.7.1969).

There are very few records of this species in Britain, being known only from some 5 localities, all of which lie in the South and mostly Eastern corner of England. In England it appears to be associated with old yew and beech woods, whereas, in the Tyrol,

we found them on small pine trees, by the side of a woodland road. The generic combination of this species is discussed by LEVI (1974).

Clubionidae:

Agroeca proxima (O.P. CAMBRIDGE): Wildmoos, Seefeld 1200 m (9 23.8.1971).

In Britain this species is widespread and in places, quite common (LOCKET et al., 1974), but in the Tyrol it appears to be known from only a few sites (THALER, 1981). This additional locality was a woodland meadow at Wildmoos near Seefeld.

Apostenus fuscus WESTRING:

Kaitanger, Pitztal 1500 m (9 3.8.1969).

A wide but in our experience, thinly spread European species which only in 1981, was recorded for the first time in Britain (WILLIAMS & LOCKET, 1982). A male and female were found on the extensive, maritime shingle beds at Dungeness, Kent. In the Tyrol we found a female in a disused stone quarry.

Clubiona kulczynskii LESSERT:

Kaitanger, Pitztal 1500 m (9 30,7,1969).

This specimen was taken from a cell, containing eggs, which was found whilst grubbing in long grass in a small, wet, alpine meadow located in deep pine forest. The cell was almost certainly attached to a piece of bark lying in the grass. Although the species is known from some neighbouring countries, there are very few records for Austria (THA-LER, 1981).

Clubiona subsultans THORELL:

Seefeld 1100 m (d 28.8.1971).

This appears to be a North European, alpine species. In Britain *C. subsultans* has been recorded from only 2 localities, namely the Black Wood of Rannoch, Perthshire and Abernethy Forest, Invernessshire, both in Scotland (LOCKET et al., 1974).

Clubiona vegeta SIMON:

Kaitanger, Pitztal 1500 m (9 22.7.1969).

Following van HELSDINGEN (1979), the specimen that we collected from under a stone at Kaitanger conforms to C. vegeta rather than the more likely C. genevensis L. KOCH. In Europe C. genevensis has a more northerly distribution which includes Britain, the Nederlands, Germany and extends to southern Sweden, whereas C. vegeta occurs in central and southern France, southern Switzerland and the Mediterranean region. So far no records have been traced for Austria but it is possible that this species has been overlooked among specimens of C. genevensis. The distribution of these two species suggest that the Alps could be a region in which they overlap.

Gnaphosidae:

Callilepis nocturna (LINNAEUS):

Kaitanger, Pitztal 1600 m (9 6.8.1969).

This widespread European species was found in Britain for the first time in 1969, by

us (MURPHY, 1971). A small, but thriving colony is known only from a small sandy bank at the base of a steep, grassy slope on the south coast of Devon. In the Tyrol we found a female on eggs, under a stone, among pines near an alpine meadow. The distribution of this Holarctic species is given by PLATNICK (1975).

Drassodes lapidosus (WALCKENAER) and D. cupreus (BLACKWALL): D. lapidosus Hochzeiger, Pitztal 2400 m (§ 2.8.1969). Scharnitz 1000 m (§ 30.8.1971). D. cupreus Hochzeiger, Pitztal 1700 m (§ 25.7.1969), 2000 m (§ 1.8.1969).

Until 1974, the British list of spiders admitted *Drassodus lapidosus* and the two subspecies *macer* and *cupreus*. However, as the result of investigations on a large number of specimens, Dr. Merrett (British Spiders 3, 1974) came to the conclusion that there were two distinct species, namely *D. lapidosus* and *D. cupreus* with the subspecies *macer* being but an extreme form of the latter. Both species were collected by us in the Tyrol, our identifications being confirmed by Dr. Merrett. It became clear in subsequent correspondence that, following Dr. Merrett's work, Dr. Thaler had also found both species to be present in the Tyrol and noted in the process that the two species had slightly different habitat preferences (THALER, 1981).

Gnaphosa montana (L. KOCH):

Kaitanger, Pitztal 1600 m (9 24.7.1969).

The above specimen was found in a cell, with eggs, unter the bark of a tree which was standing on the side of an extensive alpine meadow. A subadult female, almost certainly belonging to the same species, was found under a stone at the top of the same alpine meadow at a height of about 2000 m. We have not succeeded in finding any recent Tyrolian records for *G. montana* but a few Austrian records are given by WIEHLE & FRANZ (1954).

Haplodrassus soerenseni (STRAND):

Kaitanger, Pitztal 1500 m (§ 22.7.1969). Wildmoos, Seefeld 1300 m (§ 28.8.1971).

Like *Clubiona subsultans*, this species has been recorded in Britain, only from the Black Wood of Rannoch and Abernethy Forest in Scotland. In the Tyrol we found two females, one during each holiday. The first one was found in a pile of stones at the edge of an alpine meadow and the second in long grass at the edge of a golf course (alpine meadow?). According to THALER (1981) there appears to be very few records for this species in Central Europe.

Micaria alpina L. KOCH:

Hochzeiger, Pitztal 2400 m (9 2 o 5.8.1969).

We found this species in the grassy-stony area above the alpenrose zone on the Hochzeiger. In Britain *M. alpina* has been recorded only from 3 localities in North Wales, all on mountains and at a height of about 1000 m (LOCKET & MILLIDGE, 1951; LOCKET et al., 1974).

Zelotes petrensis (C.L. KOCH):

Kaitanger, Pitztal 1500 m (d 22.7.1969). Scharnitz 1000 m (9 1.9.1971).

This species was first recorded in Britain in 1949, and since then has been occasionally collected at a number of sites all in the South East of England. (LOCKET et al., 1974).

Its habitat, in Britain, appears to be established heaths, thin woodlands and the edges of woods. In the Tyrol Z. petrensis is possibly much commoner, since we found it among stones both in Pitztal and at Scharnitz.

Hahniidae:

Cryphoeca lichenum lichenum L. KOCH: Seefeld 1300 m (2 9 & 21.8.1971).

In a recent paper, THALER (1978a), has discussed in some detail the 2 forms C. l. lichenum and C. l. nigerrima which occur in the Alps. We collected specimens of the formerfrom under stones, by the side of a stream, on the wooded slopes of the Seefelderjoch.This appears to be a typical habitat for this particular species. Besides the above, some4 other Cryphoeca species have been recorded from the Alps, whereas in Britain there isbut one representative, namely C. silvicola.

Lycosidae:

Arctosa alpigena (DOLESCHALL):

Hochzeiger, Pitztal 2400 m (9 2.8.1969). Timmelsjoch, Ötztal 2500 m (d 29.7.1969).

In Britain this species is rare and has been recorded only from the Cairngorm Mountains in Scotland. Specimens have been collected at a height of over 1000 m on the grassystony slopes of this bare massif. We collected specimens from similar habitats on the Hochzeiger and Timmelsjoch. Over the years the generic combination of this species has fluctuated, see, for example, LUGETTI & TONGIORGI (1965) and BUCHAR (1981).

Arctosa renidens (SIMON):

Kaitanger, Pitztal 1500 m (d 24.7.1969).

This specimen was found running on bare ground at the edge of a small, well grazed meadow in a wood. An immature male was found in much the same place a few days later. There appears to be very few records for the species in Austria and like the previous species its generic combination has changed on a number of occasions, see, for example, LUGETTI & TONGIORGI (1965, 1966).

Linyphiidae - Erigoninae:

Ceratinopsis austerus (L. KOCH):

Seefeld 1200 - 1500 m (\$ 29.8.1971).

This specimen was found at the base of long grass among scattered pine trees. This species is discussed in some detail by THALER (1970).

Gonatium paradoxum (O.P. CAMBRIDGE):

Wildmoos, Seefeld 1300 m (2 9 4 8 29.8.1971).

Although widely spread throughout Europe, this species was recorded in Britain for the first time as recently as 1965. Since that time it has been found at a few other localities, but these are all clustered together within a restricted area in the South East of England. Its habitat in the Tyrol was at the base of long grass with a thin cover of pine trees. In England it has been found in a similar habitat, but it has also been found on mature, dry heathland (LOCKET et al., 1974; THALER, 1972).

Gonatium rubens (BLACKWALL):

Kaitanger, Pitztal 1600 m (9 24.7.1969).

This holarctic species is common throughout Britain (LOCKET & MILLIDGE, 1953), but the first record for North Tyrol was in 1963, near Obergurgl in Ötztal (THALER, 1969). A female was collected by us in a small wet, grassy clearing in pine woods at about 1600-m, near Kaitanger.

Janetschekia monodon (O.P. CAMBRIDGE):

Scharnitz 1000 m (3 d 1.9.1971).

This Erigonine was taken from under stones in the river beds of the Giessenbach near Scharnitz. Although, originally thought to be a true mountain species, recent records sugfest that it is a species of river beds, with a range that extends even up to the front of glaciers (THALER, 1969, 1973, 1978b).

·Pelecopsis radicicola (L. KOCH):

Kaitanger, Pitztal 1500 m (2 9 4.8.1969).

In Britain this species is known, at present, from 4 widely separated localities all in the South of England. It was first recorded, in Britain, in 1949. Its habitat can vary from the base of long grass to oak/holly leaf litter (LOCKET et al., 1974). In the Tyrol we found the specimens at the base of grass on the edge of an alpine meadow (DENIS, 1964; MILLER, 1971; THALER, 1978b).

Rhaebothorax (?) foveatus (DAHL):

Obergurgl, Ötztal 2000 m (9 29.8,1969).

This specimen was found under stones in the alpenrose zone.

Some doubt on the correct placement of this species has arisen as a result of the following. In 1975 A.F. MILLIDGE published a taxonomic revision of the genus *Erigonop*lus. In 1979, he added to the list a new species *E. simplex*, his description being based on a single male from Italy. Whilst in the Pyrenees in 1982, we collected a male and female *E. simplex*, our identifications being confirmed by Dr. Millidge. Later, whilst checking our Tyrolean spiders, we observed a strong similarity between the female collected at Obergurgl and our female *E. simplex* from the Pyrenees. Specimens of *R. foveatus* were kindly sent to us by Dr. Thaler and all the material was subsequently studied by Dr. Millidge. His opinion was that *E. simplex* is very close to and probably identical to *R. foveatus*, but he thinks, however, that *foveatus* is not a *Rbaebotborax* and that *Erigonoplus* may be the correct genus (THALER, 1969, 1973; WIEHLE, 1960).

Sciastes carli (LESSERT):

Seefeld 1200 - 1500 m (9 29.8.1971).

This specimen was found at the base of long grass with a thin pine-birch cover (THA-LER, 1971, 1972, 1973, 1976, 1978).

Trichoncus hackmani MILLIDGE:

Kaitanger, Pitztal 1600 m (3 9 4 8 6.8.1969).

First recorded in Britain in 1961, this species is known from a few coastal localities where it occurs among tide litter and sparse vegeration on shingle beaches (LOCKET et al., 1974). In Pitztal we found several specimens under stones in a large alpine meadow.

Walckenaera mitrata (MENGE):

Seefelderjoch 1300 m (d 21,8,1971).

Although the species has a widespread distribution in Central and Northern Europe, the only recording in Britain occurred in 1967. Both sexes were collected in pitfall traps in a mature chestnut coppice (SWANN, 1971). Our Austrian specimen was taken from pine litter.

Linyphiidae - Linyphiinae:

Lepthyphantes expunctus (O.P. CAMBRIDGE): Seefelderjoch 1300 m (2 9 21.8,1971).

These specimens were shaken from pine trees, a typical habitat for this species. For many years its stronghold in Britain was in pinewoods in Scotland, where, often, it was numerous. However by 1967 it had been recorded at a few localities in northern England, the southernmost being at Malham in North Yorkshire. During the recent investigation of the *Pityobyphantes phrygianus* explosion in Britain, it came to light that the sites in Dalby Forest, Yorkshire, also supported large populations of *L. expunctus* (LOCKET et al., 1974; WIEHLE, 1956).

Pityohyphantes phrygianus (C.L. KOCH):

Kaitanger, Pitztal 1600 m (3 9 6.8.1969). Seefeld 1200 m (9 23.8.1971).

A number of females in their characteristic shaped webs were found in grassy clearings in pine woods both near Kaitanger and near Seefeld. Although this spider has a widespread Palearctic and Nearctic distribution it was only in 1974 that it was first recorded . in Britain, in a spruce (*Picea* sp.) plantation near Peebles in southern Scotland. By 1977 additional localities were found not only in spruce plantation near the original site but also at a number of places in Northumberland and Yorkshire (ASHMOLE et al., 1978).

Philodromidae:

Philodromus collinus C.L. KOCH: Seefelderjoch 1300 m (d 21,8,1971).

In a paper by DUFFEY, LOCKET and MILLIDGE (1954) it is stated that probably the first record of *P. collinus* in Britain was that of J.E. Hull in 1948, although his drawings were not convincing and his specimens had been lost. They collected specimens in 1953 in East Anglia in much the same area as those collected by Hull. Since then, *P. collinus* has been found at other sites in Surrey in the south of England.

In the Tyrol we shook a subadult male from pine trees near Seefeld in late August and since it seemed, to us, an unfamiliar species, it was taken back to England and reared to maturity. An extensive account of the *Philodromus aureolus* group is given by BRAUN (1965).

Thanatus formicinus (CLERCK):

Kaitanger, Pitztal 1500 m (§ 27.7.1969).

At present this species is known in Britain only from two boggy areas in the Ashdown Forest, Sussex. There is also an old record from the New Forest, 1894 (LOCKET & MIL-LIDGE, 1951; LOCKET et al., 1974; DONDALE & REDNER, 1978). We found a number of specimens, mostly immature, running in wet parts of alpine meadows in pine woods.

Salticidae:

Euophrys (?) alpicola L. KOCH: Hochzeiger, Pitztal 2200 m (9 2.8.1969).

As the type specimen had been lost, the status of this interesting, high alpine species remained in doubt for many years. It was rediscovered once more at the original site in the Stubaier Alps in 1962. Since that time additional specimens have been found at a few other localities (THALER, 1981). Our specimen was found in the alpenrose zone.

Phlegra fasciata (HAHN):

Kaitanger, Pitztal 1500 m (9 d 3.8.1969).

This widespread Holarctic species is known, in Britain, from but a few sand dunes and shingle beaches on the South and South East coasts of England. It is now very rarely found and the records suggest that it is becoming rarer. In Pitztal we found these specimens among stones in a sunny, small, disused quarry (HARM, 1977; LOCKET et al., 1974; PROSZYNSKI, 1976).

Salticus cingulatus (PANZER):

Kaitanger, Pitztal 1600 m (2 9 4.8.1969).

In Britain this black and white salticid is quite common (LOCKET et al., 1974). The Tyrolean specimens were found in a completely typical habitat, in cells under the bark of a dead tree situated at the edge of a large alpine meadow. We have not traced any recent records for this species in the Tyrol, although there are 2 Austrian records given by WIEHLE & FRANZ (1954).

Sitticus rupicola (C.L. KOCH):

Sechzeiger, Pitztal 2000 m (2 9 2 d 25.7.1969).

Another Salticid that in Britain is restricted to sand dunes and shingle beaches, mostly on the South and East coasts. We found a small colony in a pile of stones in a high alpine meadow (HARM, 1973; LOCKET et al., 1974; PROSZYNSKI, 1976, 1980).

A c k n o w l e d g e m e n t s : The authors are grateful to Dr. P. Merrett and Dr. A.F. Millidge for their help and advice, and, particularly grateful to Dr. K. Thaler who, over the years, has provided us with a great deal of literature and helpful, interesting correspondence dealing with Tyrolean spiders.

S u m m a r y : 169 spider species caught in three regions of the Austrian Tyrol are listed: Pitztal 1450 - 2400 m (1969), Ötztal 2000 - 2500 m (1969), Seefeld 1000 - 2000 m (1971). 34 species have been discussed more broadly, with notes on habitat and distribution, including comparative remarks on some species common both to the Tyrol and Britain. There are recorded three rarities: Clubiona kulczynskii LESSERT, C. vegeta SIMON, Haplodrassus soerenseni (STRAND). Rhaebothorax foveatus (DAHL) (Linyphiidae, Erigoninae) is close to Erigonoplus simplex MILLIDGE and its combination should be reconsidered.

References:

ASHMOLE, N.P. et al. (1978): Pityobyphantes phrygianus (C.L. KOCH) a possible recent colonist of Britain (Araneae: Linyphiidae). – Bull. Br. Arachnol. Soc., 4: 279 - 284.

- BRAUN, R. (1965): Beitrag zu einer Revision der Palaärktischen Arten der Philodromus aureolus-Gruppe (Arach., Araneae). – Senckenbergiana biol., 46: 369 - 428.
- BUCHAR, J. (1981): Zur Lycosiden-Fauna von Tirol (Araneae, Lycosidae). Vestn. Česk. Spol. Zool., 45: 4 - 13.

- DENIS, J. (1964): Notes sur les Erigonides. 27. Remarques sur les genres Pelecopsis Simon and Trichopterna Kulcz. avec la description du mâle de Pelecopsis major (Denis). – Bull. Mus. Hist. nat. Paris, (2), 36: 339 - 347.
- DONDALE, C.D. & J.H. REDNER (1978): The Crab Spiders of Canada and Alaska (Araneae: Philodromidae and Thomisidae). -- Insects and Arachnids of Canada, Ottawa, 5: 1 - 255.
- DUFFEY, E., G.H. LOCKET & A.F. MILLIDGE (1954): On some spiders collected in East Suffolk and Essex. – Ann. Mag. nat. Hist., 7: 474 - 478.
- HARM, M. (1973): Revision der Gattung Sitticus Simon (Arachnida: Araneae: Salticidae). Senckenbergiana biol., 54: 369 - 403.
- (1977): Revision der mitteleuropäischen Arten der Gattung Phlegra Simon. Ibidem, 58: 63 - 77.
- HELSDINGEN, P.J. van (1979): Remarks concerning Clubionidae. Bull. Br. arachnol. Soc., 4: 298 302.
- LEVI, H.W. (1974): The Orb-weaver Genera Araniella and Nuctenea (Araneae: Araneidae). Bull. Mus. comp. Zool., 146: 291 - 316.
 - (1977): The Orb-Weaver Genera *Metepeira, Kaira* and *Aculepeira* in America North of Mexico (Araneae: Araneidae). Ibidem, 148: 185 238.
- LOCKET, G.H. & A.F. MILLIDGE (1951): British Spiders 1. Ray Society (London), 135: 1 310. – (1953): British Spiders 2. – Ibidem, 137: 7, 1 - 449.
- LOCKET, G.H., A.F. MILLIDGE & P. MERRETT (1974): British Spiders 3. Ibidem, 149: 7, 1-314.
- LUGETTI, G. & P. TONGIORGI (1965): Revisione delle specie italiane dei generi Arctosa C.L. Koch e Tricca Simon con note su una Acantholycosa della Alpi Giulie (Araneae, Lycosidae). – Redia (Firenze), 49: 165 - 229.
- (1966): Su alcune specie dei generi Arctosa C.L. Koch e Tricca Simon (Araneae, Lycosidae). – Ibidem, 50: 133 - 150.
- MILLER, F. (1971): Řad Pavouce Araneida. Klić Zviřeny ČSSR, Česk Akad. Věd. Praha, 4: 51 -306.
- MILLIDGE, A.F. (1975): A taxonomic revision of the genus Erigonoplus Simon 1884 (Araneae: Linyphiidae: Erigoninae). – Bull. Br. arachnol. Soc., 3: 85 - 90.
 - (1979): Some erigonine spiders from Southern Europe. Ibidem, 4: 316 328.
- MURPHY, F.M. (1971): Callilepis nocturna (Linnaeus), (Araneae, Gnaphosidae) newly found in Britain. – Entomologist's Gaz., 22: 269 - 271.
- PLATNICK, N.I. (1975): A Revision of the Holarctic Spider Genus Callilepis (Araneae, Gnaphosidae). – Amer. Mus. Novit., 2573: 1 - 32.
- PROSZYNSKI, J. (1976): (A systematic-zoogeographic study on the family Salticidae (Aranei) of the Palearctic and Nearctic Regions). Wyzsza skola Pedagog. Siedl. Rozpr., 6: 1 260.
 (1980): Revision of the spider genus Sitticus Simon, 1901 (Aranei, Salticidae) 4 Sitticus floricola (C.L. Koch) group. Ann, Zool. Warszawa, 36: 1 35.
- SWANN, P.H. (1971): Wideria mitrata (Menge). A spider new to Britain (Araneae: Linyphiidae). Bull. Br. arachnol. Soc.; 2: 11 - 12.
- THALER, K. (1969): Über einige wenig bekannte Zwergspinnen aus Tirol (Arachn., Araneae, Erigonidae). – Ber. nat.-med. Ver. Innsbruck, 57: 195 - 219.
- (1970): Über einige wenig bekannte Zwergspinnen aus den Alpen (Arachn., Araneae, Erigonidae). – Ibidem, 58: 255 - 276.
- (1971): Über drei wenig bekannte hochalpine Zwergspinnen (Arachn., Aranei, Erigonidae). – Mitt. schweiz. entom. Ges., 44: 309 - 322.
- (1972): Über einige wenig bekannte Zwergspinnen aus den Alpen, 2 (Arachnida: Aranei, Erigonidae). – Ber. nat.-med. Ver. Innsbruck, 59: 29 - 50.
- (1973): Über die Zwergspinnen Nordtirols (Österreich) (Aranei, Erigonidae). Proc.
 5th. internat. Congr. Arachn., Brno/Brünn: 239 249.
- (1976): Endemiten und arktoalpine Arten in der Spinnenfauna der Ostalpen (Arachnida: Araneae). – Ent. germ., 3: 135 - 141.
- (1978a): Die Gattung Cryphoeca in den Alpen (Arachnida: Aranei, Agelenidae). Zool.
 Anz., Jena, 200: 334 346.
- (1978b): Über wenig bekannte Zwergspinnen aus den Alpen V (Arachnida: Aranei, Erigonidae). – Beitr. Ent., Berlin, 28: 183 - 200.
- (1979): Fragmenta Faunistica Tirolensia 4. Veröff. Mus. Ferdinandeum Innsbruck, 59: 40-83.

- THALER, K. (1981): Neue Arachniden Funde in der nivalen Stufe der Zentralalpen Nordtirols (Österreich) (Aranei, Opiliones, Pseudoscorpions). – Ber. nat.-med. Ver. Innsbruck, 68: 99 - 105.
- (1981): Bemerkenswerte Spinnenfunde in Nordtirol (Österreich) (Arachnida: Aranei). –
 Veröff, Mus, Ferdinandeum Innsbruck, 59: 105 150,
- WIEHLE, H. (1956): Spinnentiere oder Arachnoidea (Araneae). 28 Familien: Linyphiidae-Baldachinspinnen. – Tierwelt Deutschlands, Jena, 44: 8, 1 - 337.
- (1960): Spinnentiere oder Arachnoidea (Araneae) 11: Micryphantidae-Zwergspinnen. Ibidem, 47: 11, 1 - 620.
- WIEHLE, H. & H. FRANZ (1954): Araneae. In: FRANZ, H. Die Nordost-Alpen im Spiegel ihrer Landtierwelt, Innsbruck: 473 - 557.
- WILLIAMS, S.A. & G.H. LOCKET (1982): The occurence of Apostenus fuscus Westring in Britain. Bull. Brit. arachnol. Soc., 6: 408 - 409.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: <u>Berichte des naturwissenschaftlichen-medizinischen</u> <u>Verein Innsbruck</u>

Jahr/Year: 1984

Band/Volume: 71

Autor(en)/Author(s): Murphy John, Murphy Frances

Artikel/Article: <u>An English collection of Tyrolean spiders (Arachnida: Aranei).</u> 83-96