

An annotated checklist of the Orthoptera (Saltatoria) of Cyprus

Josef Tumbrinck

Abstract

For the first time a critical, annotated checklist of the Orthoptera of Cyprus is published. All relevant literature was evaluated and data from other sources, in particular specimens gathered by Jos Tilmans (IX-X.2005), as well as my own data (V.2002) were included. Altogether 86 species have been reported from Cyprus. Twenty of these were deleted because of doubtful or wrong data. Three species are reported here for the first time for Cyprus: *Oecanthus dulcisonans*, *Chorthippus bornhalmi* and *Dociostaurus (Kazakia) jagoi*. The 66 species of Cyprus contain one endemic genus (*Exodrymadusa*), eleven endemic species and four endemic subspecies. It is argued that *Modicogryllus cyprius* is a valid species, based on the morphology of the epiphallus and analysis of song. For the first time an illustration of the epiphallus of *Pyrgomorpha cypria* is published.

Zusammenfassung

Erstmalig wird mit der vorliegenden Arbeit eine kommentierte Checkliste der Heuschrecken von Zypern veröffentlicht. Dafür wurde die gesamte Fachliteratur ausgewertet. Die Heuschreckenfunde von Jos Tilmans (IX-X.2005) und meine eigene Funde (V.2002) sind in die Auswertung einbezogen worden. Insgesamt 86 Arten sind für Zypern bislang publiziert worden. Davon wurden zwanzig Arten wegen zweifelhafter oder falscher Angaben verworfen. Drei Arten werden erstmalig für Zypern nachgewiesen: *Oecanthus dulcisonans*, *Chorthippus bornhalmi* und *Dociostaurus (Kazakia) jagoi*. Unter den 66 Arten von Zypern finden sich eine endemische Gattung (*Exodrymadusa*), elf endemische Arten und vier endemische Unterarten. Basierend auf der Morphologie des Epiphallus und der Analyse des Gesangs wird die Auffassung vertreten, dass es sich bei *Modicogryllus cyprius* um eine gültige Art handelt. Erstmalig wird eine Zeichnung des Epiphallus von *Pyrgomorpha cypria* veröffentlicht.

Introduction

After an excursion to the island in May 2002 I decided to investigate the neglected grasshopper fauna of Cyprus more thoroughly. The last species list was published by GEORGHIOU (1977), as part of his comprehensive work "The Insects and Mites of Cyprus". His list was unsatisfactory and contains many errors. In this paper the literature data are critically evaluated. Together with my own data (263 individuals) and information provided by others this resulted in a new annotated species list for Cyprus.

Investigation area

Cyprus covers 9251 km² and is the third biggest island in the Mediterranean Sea after Sicily and Sardinia. It is situated 65 km south of the coast of Turkey and 100 km west of the Syrian coast and extends over 224 km in a SSW-NNE direction and over 96 km in NS direction. The easternmost and northernmost point is cape Ajios Andreas (35°24' N 34°36' E); the westernmost point lies close to Cape Arnauti (35°04' N 32°17' E); the southernmost point is Cape Gata in the SE of the peninsula Akrotiri (34°33' N 33°03' E). Circa 25 million years ago the island was lifted from the sea and reached its current size approximately 2 million years ago.

The island can be arranged geomorphologically as follows: the mountain chain in the north, running from the west to east, the Kyreneia Mountains, rising in the extreme west up to 1024 m above sea level. Only a small strip of land separates these mountains from the sea in the north. In the south a broad, central plain, the Mesaoria, is situated. The Troodos Mountains occupy the centre of the SW-part of the island, which is almost surrounded by foothills. These mountains reach up to 1953 m above sea level in the Olympos, the highest altitude on the island. To the south and the west the foothills of Troodos level to the coastal interior of the south and west.

The climate is mediterranean with a strong continental component, i.e. the summers are particularly hot and dry. Only 5% of the annual precipitation falls between May and September. Two thirds of the precipitation of the year falls between December and February.

In ancient times the island was strongly deforested. Extensive logging, forest fires and the dropping of Turkish incendiary bombs in the year 1974 devastated most of the remaining forest. The most common habitats today are maquis in the west and garrigue in the hills. Since the year 1982, large parts of the mountainous regions, especially Troodos, have been reforested.

The plains are used agriculturally to a large extent and due to the small amount of precipitation they are not irrigated much. In the hills grazing with sheep and goats continues to play a large role.

Biogeographically Cyprus belongs to Asia, but it is closely connected with the European continent by history and culture. The south of the political divided island joined the European Union in 1.5.2004 as Republic of Cyprus. The northern part belongs to Turkey.

Methods

During my excursion between 2.-23.V.2002 twenty sites in the southern part of the island were visited (table 1). In total 263 specimens were caught. The specimens are kept largely in my collection. The following specimens were transferred to the Museum König in Bonn:

Tylopsis lilifolia, 1 ♂ 19.V.2002, Polis;

Platycleis intermedia mesopotamica, 1 ♀ + 1 ♂ 19.V.2002, Polis;

Modicogryllus cyprius, 1 ♂, 7.V.2002, Troodos;

Paratettix meridionalis, 1 ♀ + 1 ♂, 8.V.2002, Lagoudera;
Uvarovitettix depressus, 1 ♀ + 1 ♂, 12.V.2002, Pera Pedi;
Xya pfaendleri, 1 Ex., 6.V.2002, Saittas; 3 Ex. 20.V.2002, Avagas (Canyon);
Calliptamus barbarus, 1 ♂, 20.V.2002, Avagas (Canyon);
Truxalis eximia cypria, 1 ♀, 20.V.2002, Avagas (Canyon); 1 ♂ 21.V.2002, Milou;
Chorthippus bornhalmi, 1 ♀, 5.V.2002, Stavrovouni; 1 ♂ 12.V.2002, Pera Pedi;
Dociostaurus maroccanus 1 ♀ + 1 ♂ 8.V.2002, Alassa;
Ochrilidia pruinosa, 1 ♀, 10.V.2002, Limassol;
Acrotylus insubricus, 1 ♀ + 1 ♂ 22.V.2002, Agios Georgios;
Acrotylus patruelis, 1 ♀ 9.V.2002, Mandria; 1 ♂ 8.V.2002, Alassa;
Aiolopus strepens, 1 ♀ + 1 ♂ 23.V.2002, Akrotiri (Salt lake shore);
Aiolopus thalassinus, 1 ♀ + 1 ♂ 17.V.2002, Agios Georgios;
Duroniella lucasii, 1 ♀ + 1 ♂ 4.V.2002, Larnaka;
Oedipoda miniata, 1 ♀ + 1 ♂ 19.V.2002, Polis;
Sphingoderus carinatus, 1 ♀ + 1 ♂ 22.V.2002, Agios Georgios;
Pyrgomorpha cognata, 1 ♀ 23.V.2002 + 1 ♂ 10.V.2002, Akrotiri (Salt lake shore);
Pyrgomorpha cypria, 1 ♀, 19.V.2002 + 1 ♂ 15.V.2002, Kritou Tera.

Table 1: List of investigated localities in the year 2002.

Community	Location	Altitude	Latitude	Longitude	Date
Agios Georgios	Cultivated land near the sea	0	34°53'47"N	32°19'11"E	17.+22.V.2002
Akrotiri	Maquis	20	34°35'51"N	32°56'51"E	23.V.2002
Akrotiri	Salt lake shore	0	34°36'26"N	32°57'17"E	10.+23.V.2002
Alassa	Border of the Limenatis	238	34°45'58"N	32°56'09"E	8.V.2002
Asomatos	Salt lake (Phragmites)	0	34°37'36"N	32°57'06"E	23.V.2002
Avagas	Canyon	50	34°55'N	32°20'E	20.V.2002
Avagas	Barrier beach	0	34°55'07"N	32°19'53"E	20.V.2002
Kathikas	Canyon	270	34°54'06"N	32°25'01"E	21.V.2002
Kato Akourdaleia	Cultivated land	400	34°57'00"N	32°27'00"E	19.V.2002
Kidasi	Valley of Diarizos	838	34°48'48"N	32°42'56"E	13.V.2002
Stavrovouni	Monastery Stavrovouni	640	34°53'14"N	33°26'14"E	5.V.2002
Kritou Tera	Brook valley	425	34°57'10"N	32°25'02"E	14.V.2002
Lagoudera	Cultivated land, reservoir	900	34°58'N	33°01'E	8.V.2002
Larnaka	Hala Sultan Tekkesi, salt lake	0	34°52'50"N	33°36'37"E	4.,5.,22.,23.V.2002
Limassol	Ladys Miles Beach	0	34°38'04"N	33°00'29"E	10.V.2002
Mandria	Cultivated land	640	34°51'42"N	32°50'16"E	9.V.2002
Milou	Cultivated land	300	34°56'18"N	32°27'23"E	21.V.2002
Pera Pedi	Brookside	865	34°52'23"N	32°51'57"E	12.V.2002
Perivoglia	Coast	0	34°50'N	33°36'E	3.+4.V.2002
Polis	barrier beach	0	35°03'N	32°27'E	14.,16.,19.,22.V.2002
Saittas	Gardens and riverside	650	34°52'23"N	32°55'09"E	6.V.2002
Troodos	Olympos	1816	34°55'53"N	32°51'45"E	7.V.2002

Jos Tilmans collected 259 Saltatoria from 26.IX.-7.X.2005 (table 2). All collected specimens are deposited in his collection, except:

2 ♂♂ *Oecanthus dulcisonans* from 10 km S.E. Lazanias (sent to B. Odé);
 1 ♂ *Oecanthus dulcisonans* from 5 km E. Stavros tis Psokas (sent to B. Odé);
 1 ♀ + 1 ♂ *Chorthippus cypriotus* 10 km S.E. Lazanias (sent to F. Willemse);

1 ♀ + 1 ♂ *Glyptobothrus bornhalmi* from 3 km N.W. Plateia Troodous (sent to F. Willemse).

Table 2: List of investigated localities by Tilmans in the year 2005.

Location	Habitat	Altitude	Latitude	Longitude	Date
Agia Anna, 2 km N	Stony grasslands	250	34°57.139'N	33°29.140'E	5.X.2005
Germasogeia, 4 km N of (West Site Germasogeia Damm)	Cultivated land	50	34°45.427'N	33°05.103'E	4.X.2005
Kathikas, 6 km WSW	Maquis	450	34°53.636'N	32°22.859'E	29.IX.2005
Lazanias (Machairas Forest), 10 km SE	Conifer forest with rockrose and oaks	1100	34°54.949'N	33°11.519'E	2.X.2005
Meneou Beach	Coastal saline	0	34°51.320'N	33°37.650'E	5.X.2005
Neo Chorio, 6 km WSW	Stony conifer forest with sandy sites	250	35°00.881'N	32°19.791'E	29.IX.2005
Neo Chorio (Koudounas), 10 km WSW	Maquis near coast with single conifers	50	35°00.751'N	32°18.408'E	29.IX.2005
Pano Lefkara, 4 km N of (1 km E Lefkara Damm)	Maquis	800	34°53.770'N	33°18.075'E	2.X.2005
Pedoulas	Stony cultivated land	1100	34°58.404'N	32°50.194'E	3.X.2005
Pera Pedi, 1 km WNW	Maquis with single oaks	800	34°51.890'N	32°51.351'E	26.IX-7.X.2005
Plateia Troodous, 3 km NW	Summit Mt. Olympos	1800	34°55.974'N	32°52.064'E	26.IX.2005
Stavros tis Psokas (Selladi tou Skotomenou) 5 km E	Conifer forest with rockrose and oaks	1100	35°02.136'N	32°38.350'E	28/30.IX/6.X.2005
Zakaki	Cultivated land near harbour	0	34°38.796'N	33°00.145'E	4.X.2005
Zakaki, Lady's-Miles Beach, 1 km N	Coastal saline vegetation	0	34°38.551'N	33°00.270'E	4/7.X.2005

Furthermore occasional records from Klaus-Gerhard Heller, Josef Szijj and Katrin Zickendrath were included. In the context of this study time was too limited to study different museum collections.

All available literature on the Orthoptera of Cyprus was studied critically and records were either rejected or accepted for inclusion in the checklist. References of which the actual paper could not be retrieved and studied are marked with an * in the literature list.

Checklist

The nomenclature follows the Orthoptera Species files (<http://osf2.orthoptera.org>, date of access 9.2.2006). Species which have been reported for Cyprus, but which I eliminate from the species list have been put between square brackets. Where appropriate other names (synonyms, other genus-species combinations, typographical errors) for the species have been mentioned, only those which have been found in the literature regarding Cyprus are cited. The data for general distribution for the Grylloidea are taken from the works of HARZ (1969b and 1975) and GOROCHOV & LLORENTE (2001) and additionally with data of NASKRECKI & ÜNAL (1995). The information on phenology concerns adults only.

The following abbreviations are used for the museums:

BMNH = British Museum of Natural History, London;

MNCN = Museo nacional de Ciencias Naturales de Madrid;

MNHN = Muséum national d'Histoire Naturelle, Paris;

NHMW = Naturhistorisches Museum, Vienna;

ZISP = Zoological Institute St. Petersburg;

ZMHB = Museum für Naturkunde der Humboldt Universität zu Berlin.

TETTIGONIOIDEA

Tettigoniidae

Conocephalinae

***Conocephalus (Anisoptera) fuscus cyprius* Ramme, 1951**

Holotype ♂: Zakaki, 17.VI.1930, leg. Mavromoustakis (ZMHB).

Other names:

Conocephalus discolor Thunberg, 1815

Conocephalus fuscus turanicus Semenov, 1915

Xiphidion fuscum turanicum

Conocephalus fuscum turanicum

Conocephalus turanicus

Conocephalus cyprius Ramme, 1951

RAMME described *Conocephalus cyprius* (locus typicus: Zakaki) in 1951. After examining a series of 19 specimens from the type locality HARZ (1969a) arranges it as a subspecies of *C. fuscus*. He states the possibility of a separate species and suggests further investigation of more specimens from different years. The series examined by him are obviously from the same year. Their average dimensions deviate from the nominate form: body, pronotum and ovipositor are shorter. Semenov described the subspecies *Conocephalus fuscus turanicus* from Transkaspia. UVAROV (1949) mentioned this taxon for Cyprus, but HARZ (1969a) synonymised the species with *C. fuscus*.

General distribution: Endemic subspecies on Cyprus.

Published localities: Akhelia, Lake of Famagusta, Kouklia, Kyrenia, Limassol, Yeroskipos, Zakaki.

Phenology: 24.V. to 20.VII.

***Ruspolia nitidula* (Scopoli, 1786)**

Other names:

Homorocoryphus nitidulus

General distribution: Southern and Southeastern Europe, Africa, Asia.

Published localities: GEORGHIOU (1977) lists the species for Cyprus, with only the year 1952. There is no further material available, but the occurrence on Cyprus is

quite likely, in the light of the presence in large parts of southern Europe, Africa and Asia.

Phenology: Unknown.

Phaneropterinae

***Acrometopa syriaca* Brunner von Wattenwyl, 1878**

General distribution: Middle East to the east up to Iraq.

Published localities: Bellapais, Boghazi, Stavrovouni, Trikomo.

New records:

Acamas peninsula (Szijj per mail).

Phenology: 10.VI. to 3.VII.

[*Isophya major* Brunner von Wattenwyl, 1878]

Besides the type from the Taurus Mountains BRUNNER VON WATTENWYL (1878) describes a female from Cyprus, which he places "with some uncertainty" with *Isophya major*. UVAROV (1936) assumes that the female belongs to *Isophya mavromoustakisi*. AZAM (1901) indicates *Isophya major* can be found near Larnaka, but this is probably also wrong. The species is therefore removed from the checklist.

***Isophya mavromoustakisi* Uvarov, 1936**

Holotype ♂: Amathies, 20.V.1935, leg. Mavromoustakis (BMNH).

General distribution: Endemic on Cyprus.

Published localities: Amathies, between Ayios Epikitos and Karakomi, Kaloyeros, near Kykou, Kyrenia, Limassol, Liveras, Mia Milea, Platraes. Found from the coast up to 1200 m.

New records:

1 ♀ + 1 ♂, 12.V.2000, Girne: Besparmak Daghlari, 35°18'N 33°27'E, leg. H. Sevgili (Coll. Heller);

1 ♂, 26.IV.2001, Chandria, 34°57'N 33°00'E, leg. Heller.

Phenology: 26.IV. to 20.V.

[*Poecilimon spec.*]

UVAROV (1949) mentions a specimen from Kykko (15.-17.VII.1939). The animal could not be found in the British museum (Heller per mail). The genus *Poecilimon* is not known from Cyprus and therefore the identification is questionable.

[*Odontura spec.*]

KIND (1867) reports from the publication of UNGER & KOTSCHY (1865) about a new "*Odontura*" on the hills of the Mesaoria plain (at the end of May 1862). It is not clear what Kind meant and this taxon is not included on the checklist.

***Phaneroptera nana* Fieber, 1853**

Other names:

Phaneroptera quadripunctata Brunner von Wattenwyl, 1878.

General distribution: Southern and Southeastern Europe, Turkey, North Africa.

Published localities:

Athalassa, Ayios Theodoros, Bellapais, Kouklia, Kythrea, Stavros, Larnaka.

All localities come from UVAROV (1949), except Larnaka (AZAM 1901).

New records:

Paphos (Szijj per mail).

Phenology: 4.VI. to 19.VII.

[*Phaneroptera sparsa* Stål, 1857]

Other names:

Phaneroptera nana sparsa

GEORGHIOU (1977) mentions *Phaneroptera nana sparsa* (as well as *Phaneroptera nana*) from Cyprus without providing further data. RAGGE (1980) raised this taxon to the species level. It occurs in Africa and southern Spain. HELFERT & SINGER (1990) confirmed the diagnosis by cross breeding experiments. Outside the record of Georghiou no other records from Cyprus are available. Considering the distribution pattern an occurrence on Cyprus is not impossible. However, until proof is found the species is excluded from the checklist.

***Tylopsis lilifolia* (Fabricius, 1793)**

General distribution:

South Europe and Mediterranean area, in the east as far as Iran.

Published localities: The species is common on Cyprus up to the forelands, with records from numerous localities.

New records:

At the beginning of July 1992 Paphos (Szijj per mail);

1 ♂, 23.V.2002. Akrotiri (salt lake shore) (Tumbrinck);

1 larva, 21.V.2002, Milou (Tumbrinck);

1 ♀ + 4 ♂♂ (2 larvae), 19.V.2002, Polis (Tumbrinck);

1 ♀, 26.IX.2005, Pera Pedi (Tilmans);

3 larvae, 18.IV. – 3.V.2006, Cape Greco, region of Protaras (Zickendrath).

Phenology: 19.V. to 26.IX. The first adult individuals occur in the middle of May (DEMPSTER 1957).

Tettigoniinae

***Bucephaloptera cypria* Ramme, 1933**

Holotype ♀: Akrotiri, 19.X.1929, leg. Mavromoustakis (ZMHB).

General distribution: Endemic on Cyprus.

Published localities: Akrotiri, Zakaki.

New records:

1 ♂, 28.IX.2005, Stavros tis Psokas (Tilmans);

1 ♀, 6.X.2005, Stavros tis Psokas (Tilmans).

Phenology: 28.IX. to 19.X.

[*Eupholidoptera chabrieri* (Charpentier, 1825)]

Other names:

Pholidoptera chabrieri.

Published localities: Athalassa, Ayios Hilarion, Ayios Theodoros, Boghazi, Galata, Kouklia, Kykko, Lapithos, salamis, Yeroskipos.

UVAROV (1949) is the only one who mentions *E. chabrieri*. The specimens probably belong to *Eupholidoptera cypria*, which was not yet described at that time. The species is therefore excluded from the checklist.

***Eupholidoptera cypria* Ramme, 1951**

Holotype ♀: Agias Joannis, IX.1930, leg. Mavromoustakis (ZMHB).

HARZ (1969b) was not sure if *E. cypria* was a valid species, leaving open the possibility that the distinguishing characters were the result of aberrant preparation. SALMAN (1983) described the male after a series of animals near Girne of Aylos Andreas. MASSA (1994) gives further characters, based on two males from Troodos (1600 m) and one female from Polis.

General distribution: Endemic on Cyprus.

Published localities: Aylos Andreas, Polis, Troodos.

This is probably the only *Eupholidoptera*-species on Cyprus, the records of *E. chabrieri* and *E. smyrnensis* probably all refer to *E. cypria*.

New records:

1 ♂, 24.IV.2001, Farangi Avgas, 34°55'N 32°22'E, leg. Heller;

2 ♀♀, 26.IV.2001, Chandria, 34°57'N 33°00'E, leg. Heller;

1 ♀ + 1 ♂, 26.IV.2001, Polis, Umg. Neo Chorio, 35°01'N 32°20'E, leg. Heller;

1 ♂ (larva), 28.IV.2001, Anarita, 34°45'N 32°32'E leg. Heller;

1 ♀ (larva), 19.V.2002, Kato Akourdaleia (Tumbrinck);

1 ♀ (larva) + 1 ♂ (larva), 13.V.2002, Kidasi (Tumbrinck);

1 ♀ (larva) + 2 ♂♂ (larvae), Milou (Tumbrinck);

1 ♀ + 1 ♂, 3.X.2005, Pera Pedi (Tilmans);

1 ♂, 4.X.2005, Pera Pedi (Tilmans).

Phenology: 24.IV. to 4.X.

[*Eupholidoptera smyrnensis* (Brunner von Wattenwyl, 1882)]

HARZ (1969b) claims to have seen one specimen on Cyprus from the Kyrenia area. It is quite probable that it concerned *Eupholidoptera cypria*. Until evidence is provided the species is removed from the checklist.

***Parapholidoptera signata* (Brunner von Wattenwyl, 1861)**

Other names:

Pholidoptera signata.

General distribution: Southeastern Turkey, Syria.

Published localities: The species is listed by BRUNNER VON WATTENWYL (1882) for Cyprus (NHMW). WERNER (1936) mentions it from the collection of Brunner von Wattenwyl. Also HARZ (1969b) lists this species for Cyprus. All data refer to Brunner von Wattenwyl. Unfortunately it was not possible to examine the collected specimens. Further records are not known. For now the species is kept on the checklist.

Phenology: Unknown.

***Platycleis (Platycleis) affinis* Fieber, 1853**

General distribution: South and Southeastern Europe, North Africa, in the east as far as Central Asia.

Published localities: AZAM (1901) reports the species near Larnaka, WERNER (1936) from Famagusta and Platraes. The species is kept on the checklist, but confirmation is needed.

Phenology: Unknown.

***Platycleis (Platycleis) escalerae* Bolívar, 1899**

General distribution: Southeastern Europe to Western Asia.

New records:

1 ♂, 28.IV.2001, Anarita, 34°45'N 32°32'E, leg. Heller;

1 ♂, 23.V.2002, Larnaka (Tumbrinck);

1 ♀, dried specimen from 2001, Saittas (Tumbrinck);

1 ♀, 4.X.2005, Pera Pedi (Tilmans).

Phenology: 28.IV. to 4.X.

[*Platycleis (Platycleis) albopunctata grisea* (Fabricius, 1781)]

Other names:

Platycleis grisea.

GEORGHIOU (1977) mentions this species for the year 1951. This record is questionable and the species is removed from the checklist.

***Platycleis (Platycleis) intermedia mesopotamica* Ramme, 1927**

General distribution: Middle East as far as Iran.

Published localities: HARZ (1969b) mentions this taxon for Cyprus.

New records:

- 1 ♀ + 1 ♂, 28.IV.2001, Anarita, 34°45'N 32°32'E, leg. K.-G. Heller;
3 ♀♀, 22.V.2002, Agios Georgios (Tumbrinck);
1 ♂, 23.V.2002, Akrotiri (Maquis) (Tumbrinck);
2 ♀♀, 23.V.2002, Akrotiri (salt lake shore) (Tumbrinck);
3 ♀♀ + 3 ♂♂, 19.V.2002, Polis (Tumbrinck);
1 ♀, 5.X.2005, Agia Anna (Tilmans).

Phenology: 28.IV. to 5.X.

***Platycleis (Tessellana) incerta* Brunner von Wattenwyl, 1882**

Other names:

Tessellana incerta.

General distribution: Southeastern Europe to Syria.

Published localities: Georghiou (1977) mentions a record from the year 1952.

New records:

- 1 ♀ (larva), 22.V.2002, Agios Georgios (Tumbrinck);
2 ♀♀ (larvae), 23.V.2002, Akrotiri (salt lake shore) (Tumbrinck);
1 ♂ (larva), 23.V.2002, Asomatos (Tumbrinck);
2 ♂♂, 23.V.2002, Larnaka (Tumbrinck).

The two males from Larnaka are macropterous, which was not known in this species.

Phenology: The only dates from Cyprus are 22. and 23.V.

[*Platycleis (Tessellana) tessellata* (Charpentier, 1825)]

Other names:

Tessellana tessellata.

GEORGHIOU (1977) mentions a record from the year 1954. This is questionable, and therefore the species is deleted from the checklist.

***Decticus albifrons* (Fabricius, 1775)**

General distribution: Mediterranean area and Canary Islands, North Africa, in the east as far as Southwestern Asia.

Published localities: WALOFF (1953) stated the species is widespread and common. Occasionally it causes damage in agricultural areas. In the Troodos this species goes up to 1000 m.

New records:

- 1 ♂, 28.IV.2001, Anarita, 34°45'N 32°32'E, leg. K.-G. Heller;

Several ind. (larvae), 20.V.2002, Avagas (canyon) (Tumbrinck);
Several ind. (larvae), 18.V.2002, Kritou Tera (Tumbrinck);
Several ind. (larvae), 21.V.2002, Milou (Tumbrinck);
1 ♀ larva, 14.V.2002, Polis (Tumbrinck);
Several ind. (larvae), 18.IV.-3.V.2006, Cape Greco, region of Protaras (Zicken-drath).

Phenology: 28.IV. to 20.VII. The species overwinters in the egg stage (WALOFF 1953). The first adults appear at the beginning of May (DEMPSTER 1957).

***Exodrymadusa inornata* (Uvarov, 1936)**

Holotype ♀: Limassol, VI.1919, leg. Mavromoustakis (BMNH).

Other names:

Drymadusa inornata.

So far only female specimens are known. If the males prove to be micropterous, it would be logical to arrange this taxon as a subgenus of *Drymadusa* (HARZ 1969b).

General distribution: Endemic on Cyprus.

Published localities: Beside the holotype only a few specimens are known:

1 ♀, 1 ♀ (larva), 25.V.1937, Staurovouni Mt. 2400 ft (Karabag, 1961);
1 ♀, 23.VII.1937, Pera-Pedi 2500 ft, leg. Mavromoustakis (Karabag, 1961);
2 Ex., 30.VI.1939 Stavrovouni, leg. Lindberg (Uvarov 1949).

Phenology: 30.VI. to 23.VII.

[*Tettigonia caudata* (Charpentier, 1842)]

HARZ (1969b) mentions this species for Cyprus. Possibly he refers to a note of WERNER (1936), who stated to have seen a female between Nikosia and Larnaka. This is a questionable record and the species is therefore deleted from the checklist.

***Tettigonia viridissima* Linnaeus, 1758**

Other names:

Locusta viridissima.

General distribution: Holopalaearctic.

Published localities: The species is widespread (DEMPSTER 1957).

New records:

1 ♀ (larva) + 1 ♂ (larva), 19.IV.2001, Prastio bei Aghios Savvas, 34°47'N 32°42'E, leg. Heller;
Several ind. (singing), 17.V.2002, Agios Georgios (Tumbrinck);
1 ♂ (+ several larvae), 8.V.2002, Alassa (Tumbrinck);
1 ♂, 21.V.2002, Kathikas (Tumbrinck);
Several ind. (singing), 21.V.2002, Kritou Tera (Tumbrinck);

Several ind. (singing), 4.V.2002, Larnaka (Tumbrinck);
Several ind. (larvae), 9.V.2002, Mandria (Tumbrinck);
Several ind. (singing), 21.V.2002, Milou (Tumbrinck);
Several ind. (singing), 14.V.2002, Polis (Tumbrinck);
Several ind. (adults + larvae), 18.IV. – 3.V.2006, Cape Greco, region of Protaras (Zickendrath).

Phenology: 18.IV. to 19.VII. According to DEMPSTER (1957) adults appear in the middle of April to beginning of May (DEMPSTER 1957).

GRYLLOIDEA

Gryllidae

Gryllinae

***Acheta domesticus* (Linnaeus, 1758)**

Other names:

Gryllus domesticus.

General distribution: Cosmopolitic.

Published localities: AZAM (1901) indicates this species for the area around Larnaka. GEORGHIOU (1977) found the species in 1933 (det. Uvarov).

New records:

1 ♂ (singing), 5.V.2002, Perivoglia (in town) (Tumbrinck).

Phenology: Only the record from 5.V. is known.

***Gryllus bimaculatus* De Geer, 1773**

Other names:

Liogryllus bimaculatus.

General distribution: Canary Islands, Mediterranean area, North Africa, Madagascar, in the east as far as Central Asia and the Indo-Malaysian area.

Published localities: BURR (1913), mentions a female in the collection Brunner von Wattenwyl, WERNER (1936) and GEORGHIOU (1977) refer to an identification of Uvarov in the year 1929-30. OZERSKII (1995) mentions the species for Paphos in 1975 (leg. G. Kamper).

New records:

Several ind. (singing), 8.V.2002, Alassa (Tumbrinck);
Several ind. (singing), 4.V.2002, Larnaka (Tumbrinck);
Several ind. (singing), 9.V.2002, Mandria (Tumbrinck);
Several ind. (singing), 21.V.2002, Milou (Tumbrinck);
Several ind. (singing), 14.V.2002, Polis (Tumbrinck).

Phenology: 4.V. to 21.V.

***Melanogryllus desertus* (Pallas, 1771)**

Other names:

Gryllus desertus.

General distribution: Mediterranean area, North Africa, in the east as far as Central Asia.

Published localities: AZAM (1901) indicates this species for the area around Larnaka. GEORGHIOU (1977) found the species in 1928-29 (det. Uvarov).

***Modicogryllus (Eumodicogryllus) burdigalensis* (Latreille, 1804)**

Other names:

Gryllus burdigalensis;
Gryllulus burdigalensis.

General distribution: Mediterranean area and Eastern Europe, North Africa, in the east as far as Central Asia and India.

Published localities: Platraes (29.V.1935), Larnaka.

New records:

2 ♀♀, 23.V.2002, Asomatos (Tumbrinck).

Phenology: 23.V. to 29.V.

[*Modicogryllus (Modicogryllus) frontalis* (Fieber, 1844)]

BURR (1913) mentions one female and one male, identified by Brunner von Wattenwyl (Coll. Selys Longchamps). BRUNNER VON WATTENWYL (1882) does not mention these specimens. According to NASKRECKI & ÜNAL (1995) the species is spread from Central and Eastern Europe to Western Asia. There is also material from Turkey. It is unclear whether the species occurs in Cyprus or if it is conspecific with *Modicogryllus cyprius*. Until further notice the species is deleted from the checklist.

***Modicogryllus (Modicogryllus) cyprius* (Saukassure, 1877)**

Syntyps 2 ♀♀ + 2 ♂♂: Cyprus, leg. Kotschy (NHMW).

Other names:

Gryllus cyprius;
Gryllulus cyprius.

General distribution: Endemic on Cyprus.

Published localities: 1 ♀, V.1970, Kykkon, leg. Mavromustakis, det. Gorochoy (ZMHB).

New records:

1 ♂, 26.IV.2001, Polis, Umgebung Neo Chorio, 35°01'N 32°20'E, leg. Heller;
1 ♂, 7.V.2002, Avagas (Canyon) (Tumbrinck);
1 ♂, 14.V.2002, Kritou Tera (Tumbrinck);

1 ♂, 19.V.2002, Polis (Tumbrinck);
 1 ♀ + 1 ♂, 7.V.2002, Trodoos (Tumbrinck).

Morphology: HARZ (1969b) indicates the missing genital of the male type (leg. Kotschy). Harz himself made a drawing of the genital of another male from the collection of Brunner von Wattenwyl (a type as well?). This illustration differs very much from the drawing of CHOPARD (1969). Thus Harz points out the necessity to study the range in variation of the male genital. Figure 1 shows the overview and lateral view of the copulation organ of a male from Avagas. It is very similar to the drawing of Harz. Comparison with the drawing of *M. frontalis* (HARZ 1969b) shows that *M. cyprius* and *M. frontalis* are closely related. Figure 2 shows for the first time a frontal view of the head and the left tegmen of two male specimens from Kritou Tera and Polis (fig. 3). These support the view that both species are closely related.

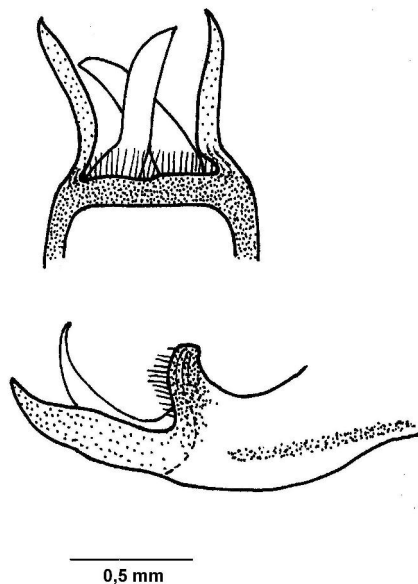


Fig.1: Copulation organ of *Modicogryllus cyprius*, ♂ Avagas.

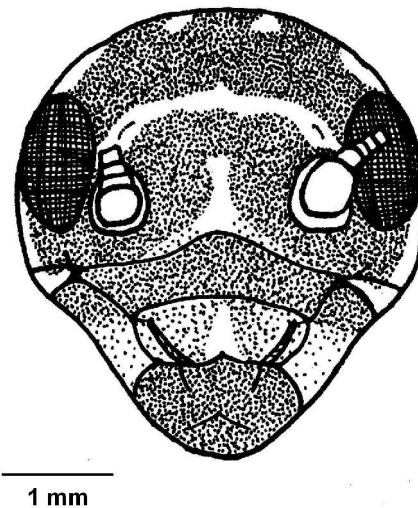


Fig.2: *Modicogryllus cyprius*, ♂ Kritou Tera.

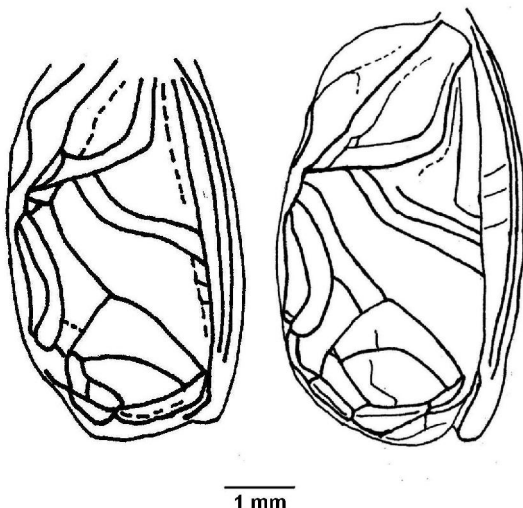


Fig. 3:
Modicogryllus cyprius, elytron ♂♂ from Polis (left) and Kritou Tera (right).

The following measurements were taken from three male specimens (Kritou Tera, Polis, Avagas):

Body length 11,8 mm (10,8-12,9), pronotal plate length 2,2 mm (2-2,4), pronotal plate width 3,5 mm (3,1-3,9), length of tegmen 5,4 mm (5-5,8), postfemur length 7,4 mm (all 7,4).

One female from Mt. Olympos had the following measurements: Body length 12,9 mm, pronotal plate length 2,5 mm, pronotal plate width 3,6 mm, tegmen length 3,9 mm, postfemur length 7,9 mm, ovipositor length 7,7 mm.

The ovipositor of the female is remarkably short, even shorter than the length of the postfemur. HARZ (1969b) states in his key that the length of the ovipositor (8,5 mm) is only little longer than the length of the postfemur (7,9-8,1 mm). Further measurements are necessary.

Song data: temperature 23.5 °C; 5 min continuous recording; 51 chirps; interval between chirps 5.9 s (median 5.7 s); duration of chirp 391 ± 32 ms, range 339-495 ms; number of syllables per chirp 31, range 27-37; duration of a single syllable (= pulse) including interval (period of syllable) 12.3 ms ($n = 100$), syllable repetition rate 81 Hz; carrier frequency 6.1 kHz, in the last part of chirp additional a strong 4.1 kHz component (artefact?). The song is similar to that of *Modicogryllus frontalis*. For comparison here a sequence of an outdoor recording of this species is reproduced where a few males sang from a crevice in the ground. Song data: locality: UKRAINE: Dnepropetrovsk, biological station between Kocherezhki and Bulakhovka (estuary Samara - Volchya) (48°39'N, 35°38'E), 12-16.VI.1996; temperature 23.5 °C; 1 chirp analysed: duration 328 ms, number of syllables 29; duration of a single syllable including interval (period of syllable) 11.4 ms (syllable repetition rate 88 Hz); carrier frequency 6.9 kHz; available at <http://www.biologie.uni-ulm.de/systax/daten/index.html> (date of access: 25.6.06). More song data of this species can be found in ZHANTIEV & DUBROVIN (1974).

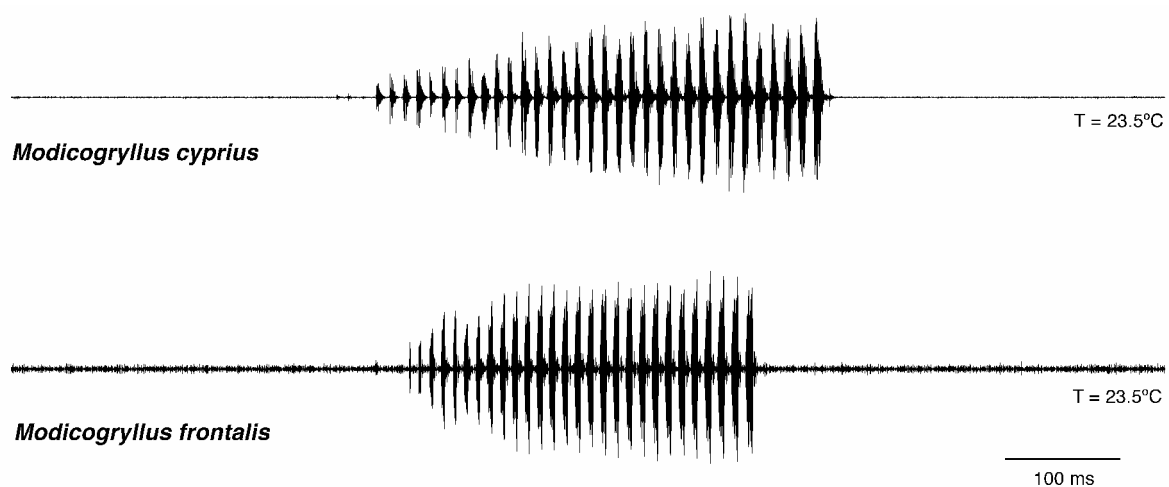


Fig. 4: Comparison of the songs of *Modicogryllus cyprius* and *Modicogryllus frontalis*.

However, the comparison of two single individuals is not enough. Further examinations are necessary.

The *Modicogryllus* specimens found on Cyprus don't belong to *Modicogryllus algirus*, which occurs in North Africa and Sicilia. The ovipositor of *M. algirus* is much longer and the copulation organ differs from the description of HARZ (1969).

After these results the studied specimens can be comfortably arranged in the genus *Modicogryllus*. It is closely related to *M. frontalis*. Further examinations with a higher number of examined specimens may show whether it can be maintained as an independent species or that it should be treated as a subspecies of *M. frontalis*.

Phenology: 26.IV. to 19.V.

***Modicogryllus (Svercus) palmetorum* (Krauss, 1902)**

Other names:

Svercus (Modicogryllus) palmitorum.

General distribution: Portugal, Spain, Sicilia, North Africa.

Published localities: SCHMIDT & HERRMANN (2000) as well as GOROCHOV & LLORENTE (2001) indicate the presence of the species in Cyprus. The authors could not track the source of this record (pers. comm. Gorochov and Schmidt). Because of its distribution area the species is likely to appear in Cyprus and the species is kept on the checklist.

Phenology: Unknown.

***Gryllodinus kerkennensis* (Finot, 1893)**

General distribution: Spain, North Africa, Middle East to the southeastern desert areas of Central Asia

Published localities: HARZ (1969b) mentions the species for Cyprus without an exact location.

New records:

1 ♀ + 1 ♂, 4.V.2002, Larnaka (Tumbrinck).

Many individuals could be found under stones at this dried out salt lake. Their chirping was detectable even at day time.

Phenology: Only the record from 4.V. is known.

Trigonidiinae

***Trigonidium cicindeloides* Rambur, 1839**

General distribution: Canary Islands, Mediterranean area, Africa, Madagascar, in the in the east as far as China, Japan and Korea.

Published localities: WERNER (1936) mentions the occurrence on Cyprus (Ebner in litt.). GEORGHIOU (1977) mentions the species for the year 1951-52 without further data.

Phenology: Unknown.

Oecanthinae

[*Oecanthus pellucens* (Scopoli, 1763)]

GEORGHIOU (1977) provides records from 1929-52 (det. Uvarov). It seems clear that *O. dulcisonans* is present on Cyprus and not *O. pellucens*. Further studies are needed to clarify the situation. For now the species is deleted from the checklist.

***Oecanthus dulcisonans* Gorochov, 1993**

General distribution: The species spreads from the Canary Islands to the Mediterranean area and the Arabian peninsula.

Published localities: In his description of the species GOROCHOV (1993) indicates a male without precise data for Cyprus (Museum St. Petersburg).

New records:

- 1 ♀, 5.X.2005, Agia Anna (Tilmans);
- 2 ♀♀ + 2 ♂♂, 2.X.2005, Lazanias (Tilmans);
- 1 ♂, 6.X.2005, Stavros tis Psokas (Tilmans).

Phenology: 2. to 6.X.

Gryllotalpidae

***Gryllotalpa gryllotalpa* (Linnaeus, 1758)**

Other names:

Gryllotalpa vulgaris Latreille, 1807.

General distribution: Europe and North Africa.

Published localities: AZAM (1901) mentions the species for the area around Larnaka. WERNER (1936) says: "I saw a specimen near Platraes but can not say if it was the var. *cophtha* Haan". GEORGHIOU (1977) records the species for the year 1938-50 (det. Uvarov).

I myself was able to catch a ♂ (Polis) and a ♀ (Pera Pedi). It is not possible for me to say whether this is *G. gryllotalpa* or one of the other species described for the Mediterranean area.

Phenology: Only two records, from 22.V. and 12.V.

Mogoplistidae

***Arachnocephalus vestitus* Costa, 1855**

General distribution: Canary Islands, Mediterranean area, North Africa, Eastern Europa, Turkey.

Published localities: WERNER (1936) provides a record (VI.1935 near Larnaka) of the often overlooked but well recognisable species. Further records are not available.

TETRIGOIDEA

Tetrigidae

***Paratettix meridionalis* (Rambur, 1839)**

General distribution: Southern Europe, North Africa, in the east as far as Turkey and Israel.

Published localities: Galata, Kannaviou Limassol, Livadia, Yeroskipos.

New records:

7 ♀♀ + 3 ♂♂, 8.V.2002, Lagoudera (Tumbrinck);
1 ♀, 12.V.2002, Pera Pedi (Tumbrinck).

Phenology: 8.V. to 20.VII. It is likely that the adults overwinter, like in other mediterranean regions.

***Tetrix bolivari* Saulcy, 1901**

Other names:

Tetrix bolivari raggei Karaman, 1965.

The subspecies *Tetrix bolivari raggei* that KARAMAN (1965) described from Cyprus, was synonymised with the nominate form by HARZ (1971).

General distribution:

South and Southeastern Europe, in the east as far as Turkey.

Published localities: Limassol, Mandria, Zakaki.

Phenology: 26.V to XI. It is likely that the adults overwinter.

[*Tetrix ceperoi* (Bolívar, l., 1887)]

Other names:

Acridium ceperoi.

BOLÍVAR (1887) states he saw specimens of this species from Cyprus in the collection of Brunner von Wattenwyl. WERNER (1936) mentions the species from the museum of Vienna. UVAROV (1942) advises to arrange the specimens as *Tetrix bolivari*. Thus there is no definite proof for the occurrence of *T. ceperoi*.

Tetrix bolivari is widespread in Turkey (Landeck and Lehmann in prep.). Confusion of *T. ceperoi* and *T. bolivari* is common in museum collections. Probably the southeastern border of the range of *T. ceperoi* runs through northern Greece (Lehmann, pers. comm.). The species is therefore deleted from the checklist.

***Depressotetrix depressa* (Brisout de Barneville, 1848)**

Other names:

Tetrix depressa.

General distribution:

South and Eastern Europe, North Africa, in the east as far as Iran.

Published localities: HARZ (1975, fig. 132, 133) mentions specimens of Cyprus. UVAROV (1949) indicates the species for Troodos.

New records:

2 ♀♀ + 1 ♂ (+ larvae in all instars), 8. + 12.V.2002, Alassa (Tumbrinck);

1 ♀, 14.V.2002, Kritou Tera (Tumbrinck);

1 ♀, 8.V.2002, Lagoudera (Tumbrinck);

1 ♀, 9.V.2002, Mandria (Tumbrinck);

4 ♀♀ (2 larvae) + 1 ♂, 12.V.2002, Pera Pedi (Tumbrinck).

Phenology: 8.V. to 14.V.

TRIDACTYLOIDEA

Tridactylidae

Tridactylinae

[*Xya variegata* (Latreille, 1809)]

Other names:

Tridactylus variegatus.

GEORGHIOU (1977) provides a record from the year 1927 (det. Uvarov). It is likely that with the identification *Xya pfaendleri* was not taken into account. The species is deleted from the checklist.

***Xya pfaendleri* Harz, 1970**

General distribution: Central and Southern Europe to Middle East, Africa, India.

Published localities: HARZ (1975) mentions the species for Cyprus.

New records:

11 Ex., 20.V.2002, Avagas (Canyon) (Tumbrinck);

11 Ex., 12.V.2002, Pera Pedi (Tumbrinck);

8 Ex., 6.V.2002, Saittas (Tumbrinck).

Phenology: 6.V. to 20.V.

ACRIDOIDEA

Acrididae

Acridinae

[*Acrida bicolor* (Thunberg, 1815)]

GEORGHIOU (1977) provides a record from the year 1964 for this species.

DIRSH & UVAROV (1953) synonymise *Acrida pellucida cypria* Dirsh, 1949 with *A. bicolor*. According to HARZ (1975) this African species is closely related to *Acrida ungarica*. It is very doubtful that the specimens from Cyprus belong to this South African species. The species is deleted from the checklist.

Acrida ungarica ungarica (Herbst, 1786)

Other names:

Acrida pellucida cypria Dirsh, 1949.

HARZ (1975) synonymises *Acrida pellucida cypria* Dirsh, 1949 (Holotype ♂: Limassol, 26.IX.1919, BMNH) with *A. ungarica*.

General distribution: Southern and Eastern Europe.

Published localities: Chermes, Germasoyia, Larnaca.

New records:

2 ♂♂, 4.X.2005, Germasogeia (Tilmans);

2 ♂♂, 29.IX.2005, Neo Chorio (Tilmans);

3 ♀♀ + 6 ♂♂, 26.IX-7.X.2005, Pera Pedi (Tilmans);

1 ♂, 4.X.2005 Zakaki (Tilmans).

Phenology: 16.VIII. to 7.X.

[*Acrida turrita* Linnaeus, 1758]

This species is known from Sicilia and Lipary Islands (HARZ 1975). WERNER (1936) lists young larvae near Larnaka. GEORGHIOU (1977) mentions the species for 1964-67. The provided evidence is doubtful. The species is deleted from the checklist.

[*Truxalis nasuta* (Linnaeus, 1758)]

Other names:

Acrida unguiculata Rambur, 1839;

Acridella nasuta;

Acridiella nasuta.

Published localities:

Athalassa, Boghazi, Famagusta, Galata, Kouklia, Larnaka, Mil Milea, Nicosia.

Probably only *T. eximia cypria* is present on Cyprus because all data for *T. nasuta* are from the year of description of *T. eximia cypria* (1951) or earlier.

The question of synonymisation (as seen below) can not be resolved at this moment. The species is deleted from the checklist.

***Truxalis eximia cypria* (Dirsh, 1951)**

Holotype ♀: Lakkovounera Forest, 10.V.1949 (BMNH).

BEY-BIENKO & MISHCHENKO (1951) synonymised *T. eximia* Eichwald, 1830 with *T. nasuta*. DIRSH (1951) treated *T. eximia* and *T. nasuta* separately but did not know the work of Bey-Bienko & Mishchenko. The distinguishing characters which Dirsh gives are not useful for identification (more slender habitus, straighter and narrower elytron and colouration of the wing in female), because both species are very variable. Here I follow HARZ (1975) who chooses to ignore the synonymisation by Bey-Bienko & Mishchenko. Further studies are necessary.

General distribution: Endemic subspecies on Cyprus.

Published localities: Geunyali in Nicosia District, Kaloyeros, Kythrea, Larnaka, Limassol, Liveras, Mia Milea.

New records:

- 1 ind., 20.IV.2001, Kourion, 34°40'N 32°52'E, leg. Heller;
- 1 ♂, 22.V.2002, Agios Georgios (Tumbrinck);
- 1 ♀ + 1 ♂, 20.V.2002, Avagas (canyon) Tumbrinck);
- 1 ♂, 5.V.2002, Kloster Stavrovouni (Tumbrinck);
- 1 ♂, 21.V.2002, Milou (Tumbrinck);
- 1 ♀ + 2 ♂♂, 14., 16. + 22.V.2002, Polis (Tumbrinck).

Phenology:

20.IV to 26.VI. Adults can be found from the middle of March (DEMPSTER 1957).

Calliptaminae

***Calliptamus barbarus barbarus* (Costa, 1836)**

Other names:

- Caloptenus siculus* Burmeister, 1838;
- Calliptamus siculus palaestinensis*;
- Calliptamus barbarus pallidipes* Chopard, 1943.

General distribution: South and Southeastern Europe to Southwest Asia.

Published localities:

The species is fairly common on Cyprus. There are records of many locations.

HARZ (1975) examined all specimens (Famagusta) that were classified by WERNER (1936) as *Calliptamus siculus palaestinensis* and identified them as *C. barbarus*.

New records:

- Paphos, Anfang July 1992 (Szijj by letter);
- 1 ♀, 23.V.2002, Akrotiri (Maquis) (Tumbrinck);
- 3 ♂♂, 20.V.2002, Avagas (canyon + barrier beach) (Tumbrinck);
- 1 ♀ (larva) + 1 ♂ (larva), 22.V.2002, Larnaka (Tumbrinck);

1 ♂ larva, 19.V.2002, Polis (Tumbrinck);
 3 ♂♂, 5.X.2005, Agia Anna (Tilmans);
 1 ♂, 2.X.2005, Lazanias (Tilmans);
 1 ♀, 29.IX.2005, Neo Chorio (Tilmans);
 1 ♀ + 1 ♂, 2.X.2005, Pano Lefkara (Tilmans);
 1 ♀ + 2 ♂♂, 3.X.2005, Pedoulas (Tilmans);
 2 ♂♂, 26.IX.2005 + 4.X.2005, Pera Pedi (Tilmans);
 4 ♀♀ + 5 ♂♂, 28/30.IX. + 6.X.2005, Stavros tis Psokas (Tilmans);
 Several ind., 17.X. – 31.X.2005 and 1.5.2006, Cape Greco, region of Protaras (Zickendrath).

Phenology: 1.V. to 31.X. Usually the species overwinters in the egg stage, but incidentally adults can overwinter. The first larvae might be seen at the beginning of April. Adults appear in the middle of May (DEMPSTER 1957).

[*Calliptamus italicus* (Linnaeus, 1758)]

WERNER (1936) mentions a record from the Museum of Vienna. GEORGHIOU (1977) cites the species from the works of MORRIS (1937) and GENTRY (1965). From Cyprus a lot of records exist for this genus, but until now no evidence for *C. italicus* has been provided. The species is therefore deleted from the checklist.

Catantopinae

***Pezotettix cypria* Dirsh, 1949**

Holotype ♂: Stroumbi, 21.IX.1946, leg. Mavromoustakis (BMNH).

General distribution: Endemic on Cyprus.

Published localities: Kyrenia-Karavas Road, Pera-Pedi Hills, Pola madea Nelli, Stroumbi. The species goes up to 180-900 m (HARZ 1975).

New records:

Paphos, beginning of July 1992 (Szijj by letter);

11 ♀♀ + 9 ♂♂, 26.IX.2005-7.X.2005, Pera Pedi (Tilmans).

Phenology:

VII. to XII. The first adults will appear at the end of May (DEMPSTER 1957).

Cyrtacanthacridinae

***Anacridium aegyptium* (Linnaeus, 1764)**

Other names:

Acridium aegyptium (Linnaeus, 1764).

General distribution: South and Southeastern Europe, North Africa, in the east as far as Southwest Asia.

Published localities: Akholia, Kaloyeros, Kouklia, Kyrenia, Larnaka, Mesaoria, Mesopotamos, Nicosia, Trikomo.

New records:

Acamas, Anfang July 1992 (Szijj by letter);

1 ♀, 4.V.2002, Perivoglia (Tumbrinck);

3 ind., 18.IV. – 3.V.2006, Cape Greco, region of Protaras (Zickendrath).

Phenology: Adult specimens can be found during the whole year. Overwintering individuals lay their eggs in spring (April) (WALOFF 1953).

***Schistocerca gregaria* (Forskål, 1775)**

Other names:

Acrydium tartaricum Latreille, 1804.

General distribution: Africa and Southwest Asia.

Published localities: For this species various plagues are mentioned for Cyprus. Possibly it was *S. gregaria* in the year 1353 (Lycosthenes, 1557 cited in HOFMEIER 1953), which appeared again in 1862 (Unger & Kotschy 1865, cited in KIND 1867) and the last time in 1915 (STEBBING 1917). Stebbing also reports eradication methods.

Phenology: Unknown.

Eyprepocneminae

***Eyprepocnemis plorans* (Charpentier, 1825)**

General distribution: Mediterranean area, Africa, in the east as far as West Asia.

Published localities: WERNER (1936) mentions the species from Cyprus (Ebner in litt.). UVAROV (1949) indicates an individual from Akhelia (20.VII.1939 3 Ex., leg. Lindberg). GEORGHIOU (1977) mentions the species for the years 1950-54.

Phenology: Only one record, from 20.VII.

***Heteracris adspersa* (Redtenbacher, 1889)**

Other names:

Thisoicetrus adspersus.

General distribution: Southern Spain, North Africa, Southwest Asia.

Published localities: GEORGHIOU (1977) mentions the species without further data. HARZ (1975) shows figures of two males from Zakaki (8.VII.1935 and VIII.1955, leg. Mavromoustaki) from the British Museum.

New records:

1 ♀, 5.X.2005, Meneou Beach (Tilmans);

6 ♀♀ + 28 ♂♂, 4. + 7.X.2005, Zakaki, Lady's-Miles Beach (Tilmans).

Phenology: 8.VII. to 7.X.

***Heteracris littoralis* (Rambur, 1838)**

Other names:

Heteracris similis (Brunner von Wattenwyl, 1861);

Thisoicetrus littoralis;

Thisoicetrus littoralis asiaticus Uvarov, 1933.

General distribution: Egypt, Middle East as far as Pakistan.

Published localities: AZAM (1901) mentions the species from the surroundings of Larnaka. UVAROV (1949) indicates two specimens from Akhelia (20.VII.1939), WALOFF (1953) lists one female near Leonarisso, Karpas and GEORGHIOU (1977) mentions it for the years 1964-67.

New records:

1 ♀ + 3 ♂♂, 4.X.2005, Germasogeia (Tilmans);

1 ♀, 4.X.2005, Zakaki (Tilmans).

Phenology: 20.VII. to 4.X.

Gomphocerinae

***Chorthippus cypriotus* Uvarov, 1936**

Holotype ♂: Mt. Troodos, VII.1935, leg. Mavromoustakis (BMNH).

General distribution: Endemic on Cyprus.

Published localities: Besides the paratypes of the same date as the holotype, another male is available, found at 9.VIII.1937 at Mt. Troodos (1500-1800 m) in the British Museum. This specimen was used by HARZ (1975) as model for his drawings.

New records:

2 ♀♀ + 4 ♂♂, 2.X.2005, Lazanias (Tilmans);

1 ♂, 26.IX.2005, Plateia Troodos (Tilmans);

Several ind., 18.IV.-3.V.2006, Cape Greco, region of Protaras, Plateau of Rayies (Zickendrath).

Phenology: 18.IV. to 2.X.

***Chorthippus bornhalmi* (Harz, 1971)**

Various individuals of *Chorthippus bornhalmi* from different localities are available, starting from the plain until the Olympos in the Troodos Mountains. This is the first record for Cyprus. The identification is confirmed by Fer Willemse, based on morphology and song (Willemse et al., in prep.).

General distribution: Coming south from North Italy along the coast of the Adriatic Sea to the Southern Balkan, Aegean Islands, Crete, West- and South Anatoly. Further distribution to the east is not exactly known yet (Willemse by letter).

New records:

1 ♀, 22.IV.2001, Phasoula, 34°46'N 33°02'E, leg. Heller;

1 ♀, 22.V.2002, Agios Georgios (Tumbrinck);

1 ♀ + 1 ♂, 8.V.2002, Alassa (Tumbrinck);
 1 ♂, 20.V.2002, Avagas (barrier beach) (Tumbrinck);
 2 ♀♀ + 2 ♂♂, 5.V.2002, monastery Stavrovouni (Tumbrinck);
 2 ♂♂, 14. + 19.V.2002, Kritou Tera (Tumbrinck);
 2 ♀♀ + 1 ♂, 8.V.2002, Lagoudera (Tumbrinck);
 3 ♀♀ + 1 ♂, 9.V.2002, Mandria (Tumbrinck);
 1 ♀ + 1 ♂, 21.V.2002, Milou (Tumbrinck);
 1 ♀ + 3 ♂♂, 12.V.2002, Pera Pedi (Tumbrinck);
 1 ♀ + 1 ♂, 4.V.2002, Perivoglia (Tumbrinck);
 1 ♀ + 1 ♂, 6.V.2002, Saittas (Tumbrinck);
 2 ♂♂, 7.V.2002, Troodos (Tumbrinck);
 2 ♀♀ + 2 ♂♂, 4.X.2005, Germasogeia (Tilmans);
 2 ♂♂, 29.IX.2005, Kathikas (Tilmans);
 1 ♀ + 1 ♂, 2.X.2005, Pano Lefkara (Tilmans);
 3 ♀♀ + 9 ♂♂, 3.X.2005, Pedoulas (Tilmans);
 18 ♀♀ + 29 ♂♂, 26.IX-7.X.2005, Pera Pedi (Tilmans);
 7 ♀♀ + 10 ♂♂, 26.IX.2005, Plateia Troodos (Tilmans);
 Some ind., 18.IV. – 3.V.2006, Cape Greco, region of Protaras, Plateau of Rayies (Zickendrath).

Phenology: 18.IV. to 7.X. The adults can appear early in the year, as the record from April by Heller shows.

[*Chorthippus brunneus* (Thunberg, 1815)]

Other names:

Stauroderus bicolor (Obenberger, 1926).

WERNER (1936) mentions the species as the only locust in the woody Troodos Mountains. GEORGHIOU (1977) lists this species without additional data.

These records probably refer to *C. bornhalmi*. The species is deleted from the checklist.

[*Dociostaurus (Dociostaurus) brevicollis* (Eversmann, 1848)]

Other names:

Dociostaurus crucigerus brevicollis.

Only WERNER (1936) mentions this species (leg. Kotschy). Given the eastern range the presence of this species on Cyprus is not impossible. Because the differences with *D. genei* are very subtle the identification by Werner is questionable. UVAROV (1946) mentions only *D. genei* (later interpreted as *D. jagoi*, see below) from Cyprus. Therefore *D. brevicollis* is deleted from the checklist.

[*Dociostaurus (Kazakia) genei* (Ocskay, 1832)]

General distribution: Southern Europe, Northern Africa, West Asia.

Published localities: UVAROV (1949) indicates Athalassa, Episkopi and Limassol . Dempster lists Mia Milea.

Phenology: 24.VI. to 3.VII.

SOLTANI (1978) lists *Dociostaurus (Kazakia) jagoi jagoi* for Cyprus. Uvarov did not know yet about this species, which was described in 1978. Therefore *D. (Kazakia) genei* is deleted from the checklist until proof is provided.

***Dociostaurus (Kazakia) jagoi jagoi* Soltani, 1978**

General distribution:

North Africa, Southeastern Mediterranean area, in the east as far as Iran.

Published localities:

SOLTANI (1978) lists Famagousta, Liatis Hapithon and Zakak.

New records:

2 ♀♀ + 3 ♂♂, 5.X.2005, Agia Anna (Tilmans);

1 ind., 17.X.-31.X.2005, Cape Greco, region of Protaras (Zickendrath).

Remarks of Jos Tilmans: The specimens that I collected belong to *D. jagoi jagoi*: the lower outer kneelobe of the hind femur is completely light coloured (see WILLEMSE 1985).

Phenology: All records are from June (16.) and October (after 17.).

***Dociostaurus (Dociostaurus) maroccanus* (Thunberg, 1815)**

Other names:

Stauronotus cruciatus (Charpentier, 1825);

Stauronotus maroccanus.

General distribution:

Canary Islands, Southern Europe, North Africa, in the east as far as Central Asia.

Published localities: This species is widespread and common. GEORGHIOU (1977) describes it as most important locust for Cyprus. For WALOFF (1953) this is the most widespread species. MERTON (1959) provides a map for the distribution for the years 1912 and 1948-1955. Single individuals were found at the top of Olympos (Unger & Kotschy 1865, cited in KIND 1867). It is said to have caused a plague in 1411 (Unger & Kotschy 1865, cited in KIND 1867).

New records:

1 ♂, 10.V.2002, Akrotiri (shore of salt lake) (Tumbrinck);

4 ♀♀ + 5 ♂♂, 8.V.2002, Alassa (Tumbrinck);

3 ♂♂, 13.V.2002, Kidasi (Tumbrinck);

Several ind., 18.V.2002, Kritou Tera (Tumbrinck);

Several ind., 21.V.2002, Milou (Tumbrinck);

Several ind., 17.X.-31.X.2005, Cape Greco, region of Protaras (Zickendrath).

Phenology: 5.IV. to X. The species overwinters in the egg stage. According to DEMPSTER (1957) the first adults appear at the beginning of April.

***Ochrilidia pruinosa* Brunner von Wattenwyl, 1882**

Other names:

Platypterna pruinosa.

General distribution: Aegean Islands, Turkey, Palaestina.

Published localities: Arolyos forest, Athalassa, Kaloyeros, Larnaka (near sea-shore), Triкомо.

New records:

1 ♂, 10.V.2002, Akrotiri (salt lake shore) (Tumbrinck);

3 ♀♀ + 1 ♂, 10.V.2002, Limassol (Tumbrinck);

1 ♂, 4.X.2005, Germasogeia (Tilmans);

1 ♀ + 1 ♂, 2.X.2005, Pano Lefkara (Tilmans).

Phenology: According to DEMPSTER (1957) the first adults can be found from November to February. There was also material collected in March, April, May, June and October.

***Xerohippus azami* (Bolívar, 1901)**

Holotype ♀: Larnaka, leg. Azam (MNHM).

Other names:

Stenobothrus azami;

Eremippus azami.

General distribution: Endemic on Cyprus.

Published localities: UVAROV (1942) has not seen the type but describes three individuals from Asomatos (peninsula Akrotiri), which agree quite well with the description. HARZ (1975) provides drawings of a female from Limassol (25.IX.1930, leg. Staudinger) from the Museum of Vienna, which WERNER (1936) already identified as this species.

Phenology: So far there are only records from September.

***Xerohippus cyprius* Uvarov, 1942**

Holotype ♀: Limassol, 19.V.1925 (BMNH).

HARZ (1975) indicates the need for a revision of the three *Xerohippus*-species from Cyprus, using more specimens from more localities.

Tilmans writes: I fully agree with Harz. For the time being I place the material that I collected near Agia Anna (some 17 km W. of Larnaka were the type material of *Xerohippus azami* was collected!) under *Xerohippus cyprius* on the basis of the form of the epiproct and the penis. But the form of the valvae of the ovipositor is slender like in *Xerohippus azami* and *Xerohippus sinuosus*.

General distribution: Endemic on Cyprus.

Published localities: Athalassa, Kaloyeros, Kythrea, Limassol, Mia Milea.

New records:

The work of SZIJJ (2004) includes three figures without location.

1 ♂, 19.V.2002, Polis (Tumbrinck);
10 ♀♀ + 5 ♂♂, 5.X.2005, Agia Anna (Tilmans).

Phenology: 29.IV. to 5.X. DEMPSTER (1957) indicates that adults appear between the middle of April and beginning of May.

***Xerohippus sinuosus* Uvarov, 1942**

Holotype ♀: Mandria, Pera Pedi Hills, 2500-2800 ft, 21.-28.IX.1937, leg. Mavroumoustakis (BMNH).

General distribution: Endemic on Cyprus.

Published localities: Besides the paratypes that were found at the same date there is one male from 13.VI.1937 in the British Museum from the same location, as well as an individual from 19. and 20.V.1925 from Limassol.

Phenology: 13.IV. to 28.IX.

Oedipodinae

***Acrotylus insubricus* (Scopoli, 1786)**

General distribution: Southern and Southeastern Europe, Canary Islands, Africa, in the east as far as Central Asia.

Published localities: A range of localities, predominantly near the coast.

New records:

3 ♀♀ + 1 ♂, 22.V.2002, Agios Georgios (Tumbrinck);
1 ♀ + 1 ♂, 20.V.2002, Avagas (barrier beach) (Tumbrinck);
1 ♀, 13.V.2002, Kidasi (Tumbrinck);
2 ♂♂, 4.X.2005, Germasogeia (Tilmans).

Phenology: 10.IV. to XI. WALOFF (1953) states that adults overwinter while DEMPSTER (1957) indicates that the first adults appear between middle of April and end of May. In the south of its range the adult overwinters.

***Acrotylus patruelis* (Herrich-Schaeffer, 1838)**

General distribution: Southern Europe, Africa, Southwest Asien.

Published localities: Akhelia, Famagusta, Kaloyeros, Yeroskipos.

New records:

Paphos, beginning of July 1992 (Szijj by letter);
2 ♀♀ + 3 ♂♂, 8.V.2002, Alassa (Tumbrinck);
2 ♀♀, 9.V.2002, Mandria (Tumbrinck);
4 ♀♀, 5.X.2005, Agia Anna (Tilmans);
2 ♀♀ + 1 ♂, 2.X.2005, Pano Lefkara (Tilmans);
Several ind., 17.X.-31.X.2005, Cape Greco, region of Protaras (Zickendrath).

Phenology: 24.V. to XI.

[*Aiolopus simulatrix* (Walker, 1870)]

GEORGHIOU (1977) lists the species for October 1964. HARZ (1975) mentions it for Cyprus. Until prove is provided, the species is removed from the checklist.

***Aiolopus strepens* (Latreille, 1804)**

Other names:

Epacromia strepens.

General distribution: Southern and Southeastern Europe, Canary Islands, Western and Northern Africa, in the east as far as Iran.

Published localities: The species is known from many localities.

New records:

Paphos, beginning of July 1992 (Szijj by letter);

2 ♀♀ + 1 ♂, 23.V.2002, Akrotiri (Salzsee) (Tumbrinck);

1 ♂, 8.V.2002, Alassa (Tumbrinck);

1 ♀, 5.V.2002, Larnaka (Tumbrinck);

1 ♂, 14.V.2002, Polis (Tumbrinck);

2 ♀♀, 5.X.2005, Meneou Beach (Tilmans).

Phenology: 5.IV. to 5.X.

***Aiolopus thalassinus* (Fabricius, 1781)**

Other names:

Aiolopus savignyi (Krauss, 1890).

General distribution: Central and Southern Europe, Africa, in the east as far as to Southwest Asia.

Published localities: GEORGHIOU (1977) lists this species for 1930 (det. Uvarov). UVAROV (1949) indicates one individual from Kythrea (12.VI.1939).

New records:

2 ♀♀ + 2 ♂♂, 17. + 22.V.2002, Agios Georgios (Tumbrinck);

1 ♀, 5.V.2002, Larnaka (Tumbrinck);

2 ♀♀, 3. + 4.V.2002, Perivoglia (Tumbrinck);

2 ♀♀ + 4 ♂♂, 4.X.2005, Germasogeia (Tilmans).

Phenology: So far material was found in May, June and October.

[*Duroniella laticornis* (Krauss, 1909)]

WERNER (1936) mentions the species from 24.V.1935, as quite common near the lake of Famagusta. HARZ (1975) has not seen the species. Confusion with *Duroniella lucasii* is not unlikely and therefore the species is not listed for Cyprus until further proof is provided.

***Duroniella lucasii* (Bolívar, 1881)**

Other names:

Duroniella lucasi.

General distribution: North Africa and West Africa, Syria, Iran, Afghanistan.

Published localities: WALOFF (1953) indicates the species as widespread, with many localities: Kaloyeros, Lakkovounera forest, Limassol, Mammari, Mesaoaria plain, Mia Milea, Nikosia and Troodos (up to 1100 m). HARZ (1975) mentions Zakaki.

New records:

5 ♀♀ + 4 ♂♂, 4.V.2002, Larnaka (Tumbrinck).

Phenology: The species overwinters as nymph (WALOFF 1953). The first adults can be seen from the middle of March (DEMPSTER 1957). A late record is from 31.X.

***Locusta migratoria* Linnaeus, 1758**

General distribution: South and Southeast Europe, Africa, Asia.

Published localities: The species was collected all over the island, always in the solitaria-phase. Nothing is known about plagues or damage the species has caused.

New records:

1 ♂ (larva), 22.V.2002, Agios Georgios (Tumbrinck).

Phenology: 19.IV. to 12.VII.

***Mioscirtus wagneri rogenhoferi* (Saussure, 1888)**

General distribution: Caucasus, Turkey, Iran, Afghanistan and Israel.

Published localities: In a short note Ebner indicates the presence of this species on Cyprus (HARZ 1975). UVAROV (1949) mentions one individual from Larnaka (23.VI.-1.VII.1939, leg. Lindberg) but does not refer to the subspecies.

Phenology: Unknown.

***Oedipoda caerulescens* (Linnaeus, 1758)**

Other names:

Oedipoda coerulescens (Seoana, 1878).

General distribution: Central, East and South Europe, Azores, North Africa, in the east as far as Western Asia.

Published localities:

Agios Neophytos, Halevga pr. Pendactylos, Lapithos, Limassol.

New records:

1 ♂, 29.IX.2005, Kathikas (Tilmans);

1 ♂. 4.X.2005, Pera Pedi (Tilmans).

Phenology: 13.VI. to 4.X. DEMPSTER (1957) indicates that the adults appear at the beginning of May.

***Oedipoda miniata* (Pallas, 1771)**

Other names:

Oedipoda gratiosa Serville, 1839.

General distribution:

Mediterranean area, North Africa, in the east as far as to Central Asia and Iraq.

Published localities: The species is widespread and partly numerous (DEMPSTER 1957). There are records for many localities.

New records:

Paphos, the beginning July 1992 (Szijj by letter);

1 ♀, 17.V.2002, Agios Georgios (Tumbrinck);

1 ♀ + 4 ♂♂, 23.V.2002, Akrotiri (Maquis + salt lake) (Tumbrinck);

1 ♂, 20.V.2002, Avagas (barrier beach) (Tumbrinck);

3 ♀♀ + 3 ♂♂, 14., 19. + 22.V.2002, Polis (Tumbrinck);

Several ind., 17.X. – 31.X.2005, Cape Greco, region of Protaras (Zickendrath).

Phenology: 9.V. to X. DEMPSTER (1957) indicates that the first adults appear between end of April and beginning of May.

***Sphingoderus carinatus* (Saussure, 1888)**

Other names:

Sphingonotus carinatus;

Sphingonotus mecheriae (Krauss, 1893).

General distribution: Südeuropa, North Africa, Turkey, Central Asia.

Published localities:

Athalassa, Famagusta, Kykko, Larnaka, Limassol, Trikomo, Zakaki.

New records:

2 ♀♀ + 5 ♂♂, 17. + 22.V.2002, Agios Georgios (Tumbrinck);

2 ♀♀, 4.X.2005, Zakaki (Tilmans);

Several ind., 17.X. – 31.X.2005 and 18.IV. – 3.V.2006 (larvae), Cape Greco, region of Protaras (Zickendrath).

Phenology: 22.V. to X.

***Sphingonotus caerulans insularis* Uvarov, 1936**

Holotype ♂: Akroanda, 29.VII.1925, (BMNH).

Other names:

Sphingonotus insularis Uvarov, 1936.

General distribution: Endemic subspecies on Cyprus.

Published localities: The species is known from a lot of localities starting from the plain and going up until the Olympos.

New records:

2 ♀♀ + 6 ♂♂, 29.IX.2005, Neo Chorio (Tilmans).

Phenology: 5.IV. to 29.IX. WALOFF (1953) assumes overwintering as adult.

***Sphingonotus eurasius cyprius* Mishchenko, 1937**

Holotype ♀: Limassol, 28.VIII.-2.IX.1927, leg. Mavromoustakis (BMNH).

Other names:

Sphingonotus azurescens cyprius;

Sphingonotus turcicus.

HARZ (1975) synonymises *Sphingonotus eurasius* with *Sphingonotus azurescens*, without giving precise reasons. DEMIRSOY (1979) synonymises *Sphingonotus eurasius eurasius* and *Sphingonotus eurasius cyprius* with *Sphingonotus turcicus* from Turkey, after comparison of material from North Africa and Cyprus. LA GRECA (1993) re-instates *S. eurasius* as a valid species, separate from both *S. azurescens* and *S. turcicus*. SCHMIDT & LILGE (1996) synonymises *S. eurasius cyprius* and *Sphingonotus azurescens*, obviously with a wrong interpretation of the publication of LA GRECA (1993). Here the original view, as defended by La Greca, is followed.

General distribution: Endemic subspecies on Cyprus.

Published localities: Larnaka, Limassol, Mia Milea, Pissouri.

Phenology: 25.VI. to 2.IX. DEMPSTER (1957) assumes adults to occur at the middle to end of June.

***Sphingonotus rubescens* (Walker, 1870)**

General distribution: Mediterranean area, North Africa, in the east as far as to Central and Southwest Asia.

Published localities: WERNER (1936), UVAROV (1949) and HARZ (1975) mention the following localities: Ammos, Limassol, pass between Nikosia and Kerynia, Nikosia (in the dry bed of the Pedias), Trikomo.

Phenology: 26.V. to 7.VII.

Tropidopolinae

***Tropidopola graeca* Uvarov, 1926**

Other names:

Tropidopola longicornis graeca;

Tropidopola longicornis greca;

Tropidopola longicornis graece.

General distribution: Greece, West- and South-Turkey.

Published localities: WERNER (1936) lists the species for Cyprus. UVAROV (1949) mentions three individuals from Limassol (2.VII.1939, leg. Lindberg). HARZ (1975) provides an illustration (Nr. 1484) of a female from Zakaki (19.X.1929).

New records:

1 ♀, 23.V.2002, Asomatos (Tumbrinck). This specimen was definitely not *T. longicornis* (Fieber, 1853), but *T. graeca*.

1 ♂, 4.X.2005, Zakaki (Ex larva. Imago: 9.X.2005) (Tilmans).

Phenology: 23.V. to 19.X.

Pamphaginae

***Orchamus gracilis* (Brunner von Wattenwyl, 1882)**

Holotype ♀: Cyprus (NHMW).

Other names:

Pamphagus gracilis.

Brunner von Wattenwyl describes the species on the basis of individuals from Cyprus. MASSA (1995) provides characters to separate it from *Orchamus yersini*.

General distribution: Cyprus and Libanon.

Published localities: Halevga pr. Pentadactylos, Mesopotamos, Nikosia, Trodoos. MASSA (1995) mentions two individuals from Cyprus from the collection of the Zoological Museum Turin, which Giglio-Tos identified as *Orchamus yersini*. Maybe the species is endemic on Cyprus. The only records outside Cyprus are two specimens from the collection in Vienna with the location Beirut (HARZ 1975). In Libanon *Orchamus yersini* (BRUNNER VON WATTENWYL 1882) occurs and it would be valuable to check if the Libanese specimens of *O. gracilis* do not belong to *O. yersini*.

New records:

Larva, Acamas, beginning of July 1992 (Szijj by letter);

1 ♂, 5.V.2002, Kloster Stavrovouni (Tumbrinck);

1 ♀, 30.IX.2005, Stavros tis Psokas (Tilmans).

Phenology: 5.V. to 30.IX. Szijj (by letter) found a larva at the beginning of July.

Pyrgomorphidae

***Pyrgomorpha conica* (Olivier, 1791)**

General distribution: Southern Europe, North Africa and West Africa, Western Asia.

Published localities: WERNER (1936) indicates the species for Famagusta and Larnaka. UVAROV (1949) mentions one individual from Boghazi. Further records are not available. It would be valuable to confirm the presence of this species by re-identifying the material. For now the species remains on the checklist.

Phenology: 23.V. to 5.VI.

***Pyrgomorpha cognata* Krauss, 1877**

General distribution: Malta, North Africa, Arabia, Turkey.

Published localities:

Ammos, Athalassa, Famagusta, Kyrenia, Larnaka, Perivoglia, Salamis, Trikomo.

New records:

5 ♀♀ + 3 ♂♂, 10. + 23.V.2002, Akrotiri (salt lake) (Tumbrinck);
1 ♀, 20.V.2002, Avagas (barrier beach) (Tumbrinck);
1 ♂, 10.V.2002, Limassol (Tumbrinck);
1 ♂, 16.V.2002, Polis (Tumbrinck);
5 ♀♀ + 1 ♂, 5.X.2005, Agia Anna (Tilmans);
1 ♀ + 1 ♂, 5.X.2005, Meneou Beach (Tilmans);
1 ♀, 2.X.2005, Pano Lefkara (Tilmans);
Several ind., 17.X.-31.X.2005 and 18.IV.-3.V.2006, Cape Greco, region of Protaras (Zickendrath).

Phenology: 3.V. to the end of October (after 17.).

***Pyrgomorpha cypria* Bolívar, 1901**

Holotype ♂: Surroundings of Larnaka (assumption of HARZ 1975) (MNCN).

In the Orthoptera Species Files Azam is mentioned as author for this species. But in his publication Azam explicitly indicates Bolívar as the author ("On y trouvera deux espèces nouvelles, *Stenobothrus azami* et *Pyrgomorpha cypria*, décrites par M. I. Bolivar, de Madrid."). After article 50.1.1. of the International Rules for Zoological nomenclature (KRAUS 2000) Bolivar is maintained as the author.

Other names:

Pyrgomorpha cypriaca Steinmann, 1967.

General distribution: Endemic on Cyprus.

Published localities: The species is widespread on Cyprus and evidence is provided for many sites from the plain to Olympos. In April it is the most common orthopteran (WALOFF 1953).

Morphology: Two colour varieties (green and olive-brown or grey) are reported for females, while male green individuals were not found (WALOFF 1953). In the field both sexes of the species can be distinguished from the two other *Pyrgomorpha*-species by the forehead which advances in front of the eyes, seen from above. Fig. 5 shows the first illustration of the epiphallus. The epiphallus of the other two European species is shown in HARZ (1975).

New records:

1 ♀, 1 ♂, 1.IV.2001, Lemesos/Paphos, leg. Heller;
1 ♂, 22.IV.2001, Pissouri Beach, 34°58'N 32°43'E, leg. Heller;
1 ♀, 22.IV.2001, Phasoula near Limassol, 34°46'N 33°02'E, leg. Heller;
1 ♀, 8.V.2002, Alassa (Tumbrinck);
2 ♀♀ + 1 ♂, 21.V.2002, Kathikas (Tumbrinck);
1 ♀, 5.V.2002, Kloster Stavrovouni (Tumbrinck);
9 ♀♀ + 9 ♂♂, 14., 15. + 19.V.2002, Kritou Tera (Tumbrinck);

2 ♀♀, 19.V.2002, Mandria (Tumbrinck);
1 ♀ + 1 ♂, 14. + 19.V.2002, Polis (Tumbrinck).

Phenology: The species overwinters as larva or adult (Waloff 1953).

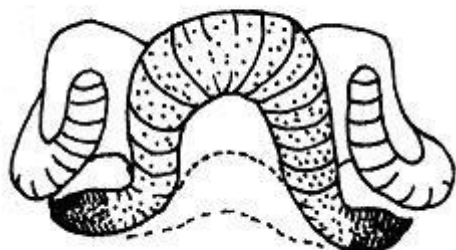


Fig. 5:
Epiphallus of *Pyrgomorpha cypria* (Kritou Tera).

Discussion

In the available literature 86 species have been reported for Cyprus. Two genera without species indication have not been taken in consideration because of the doubtful information. In this study 20 of the 86 species were removed from the checklist because of wrong or questionable information. Further studies will have to prove if some of these taxa should be put back in the list. Now 66 species remain, containing one endemic genus (*Exodrymadusa*), 11 endemic species and 4 endemic subspecies. The status of some endemic species and one endemic genus (*Exodrymadusa*) is not clear yet. New species for Cyprus presented here are: *Oecanthus dulcisonans*, *Dociostaurus (Kazakia) jagoi*, *Chorthippus bornhalmi*. The number of endemic taxa (15) is comparable to that of Crete (WILLEMSE 1984). The relatively small amount of endemic taxa is probably influenced by the short distance between Cyprus and the mainland. Of the 66 species 13 have a eastern mediterranean or eastern distribution and no species have an African distribution. This is not surprising, in view of the geographical position of the island.

Further research

Several questions and problems remain. These are listed here.

1. For the following species which were included in the species list new material should be gathered or collection specimens should be studied to confirm their presence: *Ruspolia nitidula*, *Platycleis affinis*, *Modicogryllus (Svercus) palmetorum*, *Arachnocephalus vestitus*, *Sphingonotus rubescens*, *Pyrgomorpha conica*, *Parapholidoptera signata*.
2. For the following species which were deleted from the list new information could provide reason to recall the decision: *Isophya major* (Is the ♀ in NHMW *I. mavromoustakisi*?), *Phaneroptera sparsa*, *Platycleis albopunctata grisea*, *Platycleis (Tessellana) tessellata*, *Tettigonia caudata*, *Oecanthus pellucens* (Are the specimens from BMNH *O. dulcisonans*?), *Tetrix ceperoi*, *Xya varie-*

gata (Are the specimens from BMNH *Xya pfaendleri*?), *Calliptamus italicus* (Are the specimens from NHMW and BMNH *Calliptamus barbarus*?), *Dociostaurus* (*Dociostaurus*) *brevicollis*, *Dociostaurus* (*Kazakia*) *genei* (Are the specimens from BMNH *Dociostaurus* (*Kazakia*) *jagoi*?), *Aiolopus simulatrix*, *Duroniella laticornis*.

3. There are no male individuals for *Exodrymadusa inornata* available so far. Maybe the status of the species and genus must be revised when male specimens become available.
4. More material is needed to establish the status of *Modicogryllus cyprius* and *M. frontalis*.
5. The status of *Gryllotalpa*-specimens from Cyprus should be included in a revision of the genus in the mediterranean area.
6. Further studies of longer series shall have to prove whether *Truxalis eximia cypria* is conspecific with *T. nasuta*.
7. A revision of the genus *Xerohippus* is needed.
8. Examination of the Libanese specimens of *Orchamus gracilis* will have to prove if *O. gracilis* is endemic on Cyprus.

Acknowledgements

I thank Axel Hochkirch, Arne Lehmann and Fer Willemse for their comments on the manuscript. Karin Zickendraht for supply of data. Klaus-Gerhard Heller for supply of data and comments on the song of *Modicogryllus cyprius*. My special thanks goes to Jos Tilmans, who provided many data and gave useful comments on the manuscript. Finally I thank Susann Richter for her translation of the manuscript into English and Roy Kleukers for his extensive comments and corrections.

Author:
Josef Tumbrinck
Naturparkweg 4
D-48144 Wegberg
E-Mail: J.Tumbrinck@t-online.de

Literature

The literature cited was adjusted with the excellent work of INGRISCH & WILLEMSE (2004).

* = references not seen.

AZAM, J. (1901): Orthoptères recueillis dans l'Île de Chypre. - Bull. Soc. Ent. France, 1901: 188-191.

BEY-BIENKO, G.YA. & MISHCHENKO, L.L. (1951): Locust and grasshoppers of the USSR and adjacent countries 1-2. 38 + 40: 1-378 + 379-667 S. Moscow-Leningrad, Acad. Sci. USSR Publ.

- BOLIVAR, I. (1887): Essai sur les Acridiens de la tribu des Tettigidae. - Ann. Soc. Entomol. Belg. 31: 175-313.
- BRUNNER VON WATTENWYL, C. (1878): Monographie der Phaneropterinen. - Wien, Brockhaus, 401 S.
- BRUNNER VON WATTENWYL, C. (1882): Prodomus der europäischen Orthopteren. - Leipzig, Verlag von Wilhelm Engelmann, 466 S.
- BURR, M. (1913): Orthoptères. Collection Zoologique du Baron Edm. de Selys Longchamps: Catalogue systématique et descriptif. Band II. - ii +35 S. Bruxelles.
- CHAPMAN, E. (1951): Vegetation on Locust Habitats. - Anti-Locust Bulletin, 10: 2-18.
- CHOPARD, L. (1961): Les divisions du genre *Gryllus* basées sur l'étude de l'appareil copulateur. - Eos 37: 267-287.
- DEMIRSOY, A. (1979): Beiträge zur Kenntnis der Caeliferafauna Anatoliens: Neue Arten, Unterarten und Synonyme sowie für die Türkei neu festgestellte Arten. - Entomol. Mitt. zool. Mus. Hamburg, 6 (106): 267-285.
- DEMPSTER, J.P. (1957): The Population Dynamics of the Moroccan Locust (*Docostaurus maroccanus* Thunberg) in Cyprus. - Anti-Locust Bulletin 27: 1-60.
- DIRSH, V.M. (1949a): Revision of western palaearctic species of the genus *Acrida* Linne (Orthoptera, Acrididae). - Eos 25: 15-47.
- DIRSH, V.M. (1949b): Two new species of *Pezotettix* Burmeister, 1840 (Orthoptera: Acrididae). - Proc. R. Entomol. Soc. London (B) 18 (9-10): 177-179.
- DIRSH, V.M. (1951): Revision of the group *Truxalis* (Orthoptera, Acrididae). - Eos (Tomo extraord., 1950): 119-247.
- EADES, D.C., OTTE, D. & NASKRECKI, P.: Orthoptera Species File Online. Version 2.3 (9.2.2006). <http://osf2.orthoptera.org>.
- * GENTRY, J.W. (1965): Crop insects of Northeast Africa - Southwest Asia. - (= U.S. Dept. of Agric., Agr. Handbook), 210 S.
- GEORGHIOU, G.P. (1977): The Insects and Mites of Cyprus. - Kiphissia, Athens, 347 S.
- GOROCHOV, A.V. (1993): Grylloidea (Orthoptera) of Saudi Arabia and Adjacent Countries. - Fauna of Saudi Arabia 13: 79-97.
- GOROCHOV, A.V. & LLORENTE, V. (2001): Estudio taxonómico preliminar de los Grylloidea de España (Insecta, Orthoptera). - Graellsia 57 (2): 95-139.
- HAITLINGER, R. (1993): Acari (Arachnida) and Anoplura (Insecta) collected on small mammals, reptiles and insects in Greece and Cyprus. - Biologia Gallo-Hellenica 20 (1): 83-88.
- HAITLINGER, R. (1999): Three new species of larval Chyzeriidae associated with Orthoptera (Insecta) from Cyprus, Crete and Peru, with description of the new subfamily Perumaroptinae and three new genera *Napassenia*, *Cretessenia* and *Perumaroapta* (Acari Prostigmata). - Bolletino della Societas Entomologica Italiana 131 (1): 3-13.
- HARZ, K. (1969a): Vorläufige Revision der Gattung *Conocephalus* im Bereich der Paläarktis. - Berichte der Naturwissenschaftlichen Gesellschaft Bayreuth 13: 97-118.
- HARZ, K. (1969b): Die Orthopteren Europas Vol. 1. - Series Entomologica 5, Den Haag, Dr. W. Junk; 749 S.
- HARZ, K. (1975): Die Orthopteren Europas Vol. 2. - Series Entomologica 11, Den Haag, Dr. W. Junk; 939 S.
- HELFERT, B. & SÄNGER, K. (1990): Fortpflanzung und Fortpflanzungsbarrieren bei *Phaneroptera nana* Fieb. (1853) und *Phaneroptera sparsa* Stål (1857) (Orthoptera: Tettigoniioidea). - Zoologische Jahrbücher, Abteilung für Systematik, 117: 109-116.

- HOFMEIER, H.K. (1953): Heuschrecken als Pestbringer in der Vorstellung des mittelalterlichen Menschen. - Anzeiger für Schädlingkunde 26: 152-153.
- INGRISCH, S. & WILLEMSE, F. (2004): Bibliographia Systematica Orthopterorum Saltatoriorum. - Sofia, Pensoft Publishers, 536 S.
- KARABAG, T. (1961): Revision of *Drymadusa* Stein and related genera (Orthoptera: Tettigoniidae). - Bull. Br. Mus. Nat. Hist. (Entomol.) 11 (1): 1-41.
- KARAMAN, M.S. (1965): Beitrag zur Systematik der Familie Tetrigidae (Orthoptera) Europas. - Acta Entomol. Mus. Natn. Pragae 36: 403-408.
- KEVAN, D.K.MCE. & HSIUNG, C.C. (1989): The Palaearctic Species of *Pyrgomorpha* Audinet-Serville, 1938, other than the *P. conica*-Group (Orthoptera: Acridoidea: Pyrgomorphidae: Pyrgomorphini) II. - Biscosme Mésogéen 6 (3): 117-152.
- KIND, D. (1867): Die Heuschrecken auf der Insel Cypern. - Natur (Halle a. d. Saale) 9 (Ergänzungsheft): 21-24.
- KRAUS, O. (2000): Internationale Regeln für die Zoologische Nomenklatur. - Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg (NF), 34: 1-232.
- LA GRECA, M. (1993): Ortotteri italiani nuovi o poco noti. - Mem. Soc. ent. ital. 72: 211-220.
- LYCOSTHENIS, C. & HEROLD, J. (1557): Wunderwerk oder Gottes unergründliches vorbilden, das er inn seinen geschöpffen allen so Geystlichen... . Heinrich Petri; Basel.
- MASSA, B. (1994): Su alcuni ortotteri poco noti delle isole mediterranee. - Naturalista Siciliano (IV), 18: 239-253.
- MASSA, B. (1995): Note sulle specie del Gen. *Orchamus* Stål 1876 (Insecta Orthoptera Pamphagidae). - Naturalista Siciliano (IV) 19 (3-4): 299-305.
- MERTON, L. F.H. (1959): Studies in the Ecology of Moroccan Locust (*Dociostaurus maroccanus* Thunberg) in Cyprus. - Anti-Locust Bulletin 34: 1-123.
- MISHCHENKO, L. (1937): Revision of palaearctic species of the genus *Sphingonotus* Fieber (Orth., Acrid.). - Eos 12 (1-2) [1936]: 65-282.
- * MORRIS, H.M. (1937): Injurious insects of Cyprus. - Agr. Dept. Cyprus, Bull. (Ent. Ser.) 4: 1-21.
- NAKRECKI, P. & ÜNAL, M. (1995): The Orthoptera of Hatay Province, S. Turkey. - Beit. Ent. 45 (2): 393-419.
- OZERSKII, P.V. (1995): Comparisons of two geographically isolated populations of the cricket *Gryllus bimaculatus* by female selectivity to temporal parameters of the male song. - Journal of Evolutionary Biochemistry and Physiology 31 (3): 152-157.
- OZERSKII, P. V. & POPOV, A.V. (1998): A comparative analysis of calling songs in *Gryllus bimaculatus* (Orthoptera, Gryllidae). - Zoologicheskij zhurnal 75 (11): 1631-1643.
- * PELAGHIAS, C.G. (1929): Injurious insects of Cyprus. - Agr. Dept. Cyprus, Bull. (Ent. Ser.), 1: 1-21.
- * PELAGHIAS, C.G. (1931): Species of locusts and grasshoppers found in Cyprus. - Cyprus Agric. J. 25 (1): 28ff.
- RAGGE, D. (1980): A review of the African Phaneropterinae with open tympana (Orthoptera: Tettigoniidae). - Bull. Br. Mus. Nat. Hist. (Entomol.) 40: 67-192.
- RAMME, W. (1927): Die Dermapteren und Orthopteren Siziliens und Kretas. - Eos, 3: 111-200.
- RAMME, W. (1933): Beiträge zur palaearktischen Orthopterenfauna (Tettigon. et Acrid.) II. - Mitteilungen aus dem zoologischen Museum in Berlin 18: 416-434.
- RAMME, W. (1951): Zur Systematik, Faunistik und Biologie der Orthopteren von Südost-Europa und Vorderasien. - Mitteilungen aus dem zoologischen Museum in Berlin 27: 1-431.

- RANDELL, L.R. (1964): The Male Genitalia in Gryllinae (Orthoptera: Gryllidae) and a Tribal Revision. - Can. Ent. 96: 1565-1607.
- SALMAN, S. (1983): Turkish bush-cricket of the genus *Eupholidoptera* (Decticinae). - Systematic Entomology 8: 313-338.
- SAUSSURE, H. DE (1877): Mélanges orthoptérologiques. 5me fascicule. Gryllides (1re partie). - Mém. Soc. Phys.Hist. Nat. Genève 25 (1): 1-352.
- SCHMIDT, G.H. & HERRMANN, M. (2000): Occurrence and distribution of Orthopteroidea, Dityopteroidea, Phasmatodea, and Dermaptera in Sardinia/Italy. - Boll. Soc. Sarda Sci. Nat. 32: 83-128.
- SCHMIDT, G.H. & LILGE, R. (1997): Geographische Verbreitung der Oedipodinae (Orthopteroidea, Caelifera, Acrididae) in Europa und Randgebieten mit Hinweisen zur Ökologie und Biologie. - Verlag Dr. Kovac, Hamburg, 149 S..
- SEMENOV TIAN-SHANSKIJ, A. (1915): Uvarov, B. Ueber die Orthopterenfauna Transkaspens. - Horae Societatis Entomologicae Rossicae 40 (3) (1912). 54 S. Russk. Entomol. Obozr. 15: 449-455.
- SOLTANI, A.A. (1978): Preliminary synonymy and description of new sp. in the genus *Dociostaurus* Fieber, 1853 (Orthoptera. Acridoidea; Acrididae, Gomphocerinae) with a key to the species in the genus. - J. Entomol. Soc. Iran Suppl. 2: 1-93.
- STEBBING, W.P.D. (1917): The Locust in Cyprus. - Annals of applied biology (Cambridge) 4 (3): 119-122.
- STEINMANN, H. (1967): New Palaearctic *Atractomorpha* Sauss. and *Pyrgomorpha* Serv. species (Orthoptera, Acrididae). - Acta Entomol. Mus. Natn. Pragae 37: 565-575.
- SZIJJ, J. (2004): Die Springschrecken Europas. - Die Neue Brehm-Bücherei, Bd. 652. Hohenwarsleben, Westarp Wissenschaften, 176 S.
- * UNGER, F. & KOTSCHY, T. (1845): Die Insel Cypern, ihre physischen und organischen Natur nach, mit Rücksicht auf ihre frühere Geschichte. - Wien.
- UVAROV, B.P. (1936): New Orthoptera from Cyprus. - Ann. Mag. Nat. Hist. (10) 18: 505-515.
- UVAROV, B.P. (1942): New and less known southern palaearctic Orthoptera. - Trans. Amer. Entomol. Soc. 67 [1941]: 303-361.
- UVAROV, B.P. (1949): On the insect fauna of Cyprus. Results of the expedition of 1939 by Harald Håkon and P.H. Lindberg. IV Tettigoniidae and Acrididae. - Commentationes Biologicae (Helsingfors) 10: 1-6.
- UVAROV, B.P. (1951): Cyprus Locust Research Scheme. - Anti-Locust Bulletin 10: 1-2.
- WALOFF, N. (1951): Observations on Locust Hoppers. - Anti-Locust Bulletin 10: 18-36.
- WALOFF, N. (1953): Notes on the Orthoptera in Cyprus, April 1950. - Proc. Roy. entomol. Soc. London (A) 28: 24-30.
- WATERSTON, A.R. (1951): Observations on Adult Locusts. - Anti-Locust Bulletin, 10: 36-53.
- WERNER, F. (1936): Zur Kenntnis der Orthopterenfauna von Cypern. Zoologischer Anzeiger 114 (1/2): 14-19.
- WILLEMSE, F. (1984): Catalogue of the Orthoptera species of Greece. - Fauna Graeciae (Athens) 1: 1-275.
- WILLEMSE, F. (1985): Catalogue of the Orthoptera species of Greece. - Fauna Graeciae (Athens) 2: 1-288.
- ZHANTIEV, R.D. & DUBROVIN, N.N. (1974): Acoustic signals of crickets (Orthoptera, Oecanthidae, Gryllidae). - Zoologiceskij Zurnal 53: 345-358.

