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Records of Thysanoptera Species in Greece

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ABSTRACT

Aiming to the registration of Thysanoptera species, thrips collections had taken place from field, greenhouse crops and weeds in 16 regions of Greece during 1991 and 1994. In total, 26 Thysanoptera species were found in 34 different crops and weeds, belonging to the families Aeolothripidae, Thripidae and Phlaeothripidae. Among the species collected, *Tenothrips frici* is recorded for first time in Greece.

Introduction

Thrips (Thysanoptera) constitute a large group of phytophagous, predatory and omnivorous species; many of them are of great economic importance as they seriously infest a number of cultivated plants. The infestation can cause quantity and quality degradation of agricultural products. They are more abundant in the tropics and about 6000 species have been recorded from all over the world (Ananthakrishnan 1979).

A number of Greek and foreign authors have published reports on certain thrips species existing in Greece. Part of these works report lists of Thysanoptera [Pelekassis 1962, Priesner 1964, (Jacot – Guillardmod 1970, 1971, 1974, 1975, 1978), Argyriou et al. 1976, zur Strassen 1977, 1979, Argyriou and Mourikis 1983, Schliephake 1983, Argyriou and Kourmadas 1985, Jenser and Tzanakakis 1985, Roditakis 1991]. Another part deals with damages caused by thrips in different crops (Katsoyannos 1992, Kyparissoudas and Alexandrakis 1993a, 1993b, Tsitsipis et al. 1997), while others studied the control of these insects (Stathopoulos 1963, 1964, 1965, Kourmadas et al. 1982, Stathopoulos and Calambuca-Fimiani 1985, Roditakis et al. 1993, Roditakis, Lykours-

sis et al. 1993, Alexandrakis 1995, Amri and Michelakis 1995, Zartaloudis 1995).

During the last ten years, thrips infestation in Greece seems to present a notable increase causing more damage to field and greenhouse crops.

The present work aims at the registration of Thysanoptera species in Greece.

Materials and Methods

This work took place in 16 regions of Greece and lasted 4 years (1991-1994). A number of 34 different field and greenhouse crops and weeds were examined.

The samples consisting of leaves, flowers and fruits were placed in plastic bags labeled with the region and the date of collection and brought to the laboratory for further examination. The separation of insects from the samples was realized with the aid of stereoscope or by shaking (Hightower and Martin 1956) depending every time on the nature of the plant parts. In order to make microscopic preparations of the thrips found, the Palmer and Mound (1990) method was followed. The identification of the species was made partly by the author in the laboratory using the relevant keys (Bhatti 1980, Bonnemaïson and Bournier 1964, Bournier and Bournier 1987, Melis 1959, 1960, 1961, Mound et al. 1976, Palmer 1990, Pitkin 1976, Sakimura 1986, Yakhontov 1964, and Zawirska 1970) and partly by Dr. L.A. Mound of the British Museum of Natural History.

Results and Discussion

As shown in Table 1, a total of 2681 Thysanoptera adults corresponding to 26 thrips species, belonging to the families Aeolothripidae, Thripidae and Phlaeothripidae, were found during this work in 16 regions of Greece. These species were collected from 34 different field and greenhouse crops and also weeds. Among them, *Tenothrips frici*, is reported for first time in Greek fauna. The other 25 species of the study are known from various works which have been published in different periods by Greek and foreign researchers [Pelekas 1962, Priesner 1964, (Jacot – Guillaumod 1970, 1971, 1974, 1975, 1978), Argyriou et al. 1976, zur Strassen 1977, 1979, Argyriou and Mourikis 1983, Schliephake 1983, Argyriou and Kourmadas 1985, Jenser and Tzanakakis 1985, Roditakis 1991]. Two species, *Melanthrips fuscus* and *Thrips fuscipennis* were detected exclusively in greenhouse crops (Table 1).

From the total number of the collected adult species of thrips, 1026 adults (about 38,3%) are *F.*

occidentalis, 600 adults (about 22,4%) *T. tabaci*, 236 adults (about 8,8%) are *F. intonsa* and 203 adults (about 7,6%) *T. angusticeps*. These four species represent about 77,1% of the total number of species found and about 22,9% belongs to the other species. As also shown in table 1, *F. occidentalis* and *T. tabaci* were found in the most of regions and plant-hosts studied and therefore constitute common species of the Greek fauna. Besides *T. tabaci* is one of the most cosmopolitan species of thrips. On the contrary, polyphagous *F. occidentalis*, found for the first time in Crete (Roditakis 1991), today occurs all over Greece.

Thrips species are predatory usually feeding on small insects. From the above species reported (Table 1), *Aeolothrips intermedius* and *Karnyothrips flavipes* prefer to feed on thrips, mites, whiteflies (Priesner 1964b, Bournier et al. 1978). Most thrips are also virus vectors, infecting many crops with the Tomato Spotted Wilt Virus (TSWV). Between the known vectors are *Frankliniella occidentalis* and *Thrips tabaci* (Cho et al. 1987).

TABLE 1: Species of Thysanoptera found in open field and greenhouse crops and weeds in various regions of Greece.

Plant type	Date	Number of adults	Region	
Family: Aeolothripidae				
<i>Aeolothrips intermedius</i> Bagnall				
<i>Cucumis sativus</i> L.	25/6/91	12♀ 5♂	Marathon, Attiki	o.f *
<i>Cucumis sativus</i>		25♀ 18♂	Marathon, Attiki	g.h *
<i>Gossypium hirsutum</i> L.	2/6/93	9♀ 5♂	Messorachi, Larissa	o.f
<i>Gossypium hirsutum</i>	11/7/93	6♀ 2♂	Thiva, Viotia	o.f
<i>Gossypium hirsutum</i>	12/7/94	8♀ 1♂	Messorachi, Larissa	o.f
<i>Lycopersicon esculentum</i> Mill.	25/6/91	10♀ 2♂	Marathon, Attiki	o.f
<i>Lycopersicon esculentum</i>	12/5/92	8♀ 6♂	Marathon, Attiki	g.h
<i>Lycopersicon esculentum</i>	11/7/93	7♀ 2♂	Thiva, Viotia	o.f
<i>Melanthrips fuscus</i> (Sulzer)				
<i>Lycopersicon esculentum</i>	3/7/92	16♀	Koropi, Attiki	g.h
Family: Thripidae				
<i>Anaphothrips obscurus</i> (Müller)				
<i>Cucumis sativus</i>	11/6/91	8♀	Athens, Attiki	g.h
<i>Cucumis sativus</i>	10/5/92	10♀	Megara, Attiki	g.h
<i>Lycopersicon esculentum</i>	11/6/91	6♀	Athens, Attiki	g.h
<i>Lycopersicon esculentum</i>	10/5/92	5♀	Megara, Attiki	g.h
<i>Sorghum</i> sp.	9/11/94	7♀	Athens, Attiki	o.f
<i>Bregmatothrips dimorphus</i> (Priesner)				
<i>Malva sylvestris</i> L.	15/1/92	5♂	Athens, Attiki	o.f
<i>Ceratothrips discolor</i> (Karny)				
<i>Pyrus amygdaliformis</i> Vill.	22/2/92	12♀	Stymfalia, Korinthia	o.f
<i>Ceratothrips pallens</i> Priesner				
<i>Erica manipuliflora</i> Salisb.	17/1/93	25♀	Pelion, Magnissia	o.f

Chirothrips manicatus Haliday

<i>Amaranthus lividus</i> L.	20/6/93	5♀	Tyrnavos, Larissa	o.f
<i>Hordeum murinum</i> L.	16/7/92	11♀ 4♂	Fracto, Drama	o.f
<i>Lycopersicon esculentum</i>	24/7/91	14♀ 8♂	K. Souli, Attiki	o.f
<i>Lycopersicon esculentum</i>	3/7/92	27♀ 25♂	Koropi, Attiki	g.h
<i>Lycopersicon esculentum</i>	22/7/92	15♀ 3♂	Thiva, Viotia	o.f
<i>Quercus coccifera</i> L.	25/9/92	6♀	Filoti, Naxos	o.f
<i>Trifolium</i> sp.	20/6/93	3♀	Tyrnavos, Larissa	o.f

Drepanothrips reuteri Uzel

<i>Lycopersicon esculentum</i>	22/7/92	8♀	Thiva, Viotia	o.f
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Frankliniella intonsa (Trybom)

<i>Cucumis melo</i> L.	15/7/94	7♀	Farkadona, Trikala	o.f
<i>Dianthus</i> sp.	24/5/91	8♀	Agrinio, Aitolokarnania	g.h
<i>Dianthus</i> sp.	15/6/92	12♀ 5♂	Megara, Attiki	g.h
<i>Dianthus</i> sp.	20/6/92	8♀	K. Souli, Attiki	o.f
<i>Dianthus</i> sp.	8/7/92	7♀	K. Lechonia, Magnissia	g.h
<i>Dianthus</i> sp.	12/8/93	10♀ 4♂	Monastiraki, Argolida	g.h
<i>Dianthus</i> sp.	30/6/94	9♀ 2♂	Chalki, Larissa	g.h
<i>Fragaria vesca</i> L.	24/5/91	5♀	Agrinio, Aitolokarnania	g.h
<i>Fragaria vesca</i>	20/6/92	11♀	K. Souli, Attiki	g.h
<i>Fragaria vesca</i>	8/7/92	7♀	Velestino, Magnissia	g.h
<i>Fragaria vesca</i>	12/8/93	5♀	Monastiraki, Argolida	g.h
<i>Fragaria vesca</i>	15/7/94	12♀ 3♂	Elassona, Larissa	g.h
<i>Gossypium hirsutum</i>	2/6/93	7♀	Messorachi, Larissa	o.f
<i>Gossypium hirsutum</i>	12/7/94	12♀ 3♂	Messorachi, Larissa	o.f
<i>Gossypium hirsutum</i>		8♀	Velestino, Magnissia	o.f
<i>Rosa</i> sp.	24/5/91	10♀	Agrinio, Aitolokarnania	g.h
<i>Rosa</i> sp.	15/6/92	18♀ 7♂	Megara, Attiki	g.h
<i>Rosa</i> sp.	20/6/92	6♀ 2♂	K. Souli, Attiki	o.f
<i>Rosa</i> sp.	8/7/92	13♀ 5♂	K. Lechonia, Magnissia	g.h
<i>Rosa</i> sp.	12/8/93	7♀	Monastiraki, Argolida	g.h
<i>Rosa</i> sp.	30/6/94	11♀ 4♂	Armenio, Larissa	g.h
<i>Solanum melongena</i> L.	20/6/92	8♀	K. Souli, Attiki	o.f

Frankliniella occidentalis (Pergande)

<i>Amaranthus lividus</i>	5/6/93	4♀ 1♂	K. Souli, Attiki	g.h
<i>Amaranthus lividus</i>	26/6/93	2♀	Elassona, Larissa	g.h
<i>Amaranthus lividus</i>	7/7/93	2♀	K. Lechonia, Magnissia	g.h
<i>Capsicum annuum</i> L.	16/6/91	10♀	Megara, Attiki	g.h
<i>Capsicum annuum</i>	30/5/92	7♀	Koropi, Attiki	g.h
<i>Capsicum annuum</i>	12/8/94	2♀	Heraklion, Crete	g.h
<i>Citrullus lanatus</i> (Thunb) Mans.	10/6/93	9♀	Megara, Attiki	g.h
<i>Citrullus lanatus</i>	20/6/93	9♀	Gastouni, Iliia	g.h
<i>Citrullus lanatus</i>	18/7/94	8♀ 1♂	Thiva, Viotia	o.f
<i>Cucumis melo</i>	30/7/92	10♀	Megara, Attiki	g.h
<i>Cucumis melo</i>	20/6/93	6♀	Gastouni, Iliia	g.h
<i>Cucumis melo</i>	12/8/94	3♀	Heraklion, Crete	g.h
<i>Cucumis sativus</i>	30/5/91	457♀ 25♂	K. Souli, Attiki	g.h
<i>Cucumis sativus</i>	25/1/93	8♀	Heraklion, Crete	g.h
<i>Cucumis sativus</i>	20/5/93	20♀	Aghialos, Magnissia	g.h
<i>Cucumis sativus</i>	2/5/94	12♀ 2♂	Ierapetra, Crete	g.h
<i>Cucurbita pepo</i> L.	16/6/91	21♀ 8♂	Megara, Attiki	g.h
<i>Dianthus</i> sp.	16/6/91	98♀ 7♂	Megara, Attiki	g.h
<i>Dianthus</i> sp.	21/6/92	18♀ 6♂	Agrinio, Aitolokarnania	g.h
<i>Dianthus</i> sp.	15/6/93	10♀ 2♂	Monastiraki, Argolida	g.h
<i>Fragaria vesca</i>	21/6/92	12♀	Agrinio, Aitolokarnania	o.f
<i>Fragaria vesca</i>	20/6/93	10♀	Gastouni, Iliia	g.h
<i>Fragaria vesca</i>	26/6/93	8♀	Elassona, Larissa	g.h
<i>Fragaria vesca</i>	20/5/94	8♀	Aghialos, Magnissia	g.h
<i>Gossypium hirsutum</i>	2/6/93	5♀	Messorachi, Larissa	o.f
<i>Gossypium hirsutum</i>	12/7/94	6♀	Messorachi, Larissa	o.f
<i>Lycopersicon esculentum</i>	30/5/92	11♀	Koropi, Attiki	g.h
<i>Lycopersicon esculentum</i>	15/7/92	10♀ 2♂	Kiato, Korinthia	o.f

<i>Lycopersicon esculentum</i>	30/7/92	6♀	Megara, Attiki	g.h
<i>Lycopersicon esculentum</i>	20/5/93	9♀	Aghialos, Magnissia	g.h
<i>Lycopersicon esculentum</i>	12/6/93	9♀	Kiato, Korinthia	g.h
<i>Lycopersicon esculentum</i>	15/6/93	21♀ 3♂	Monastiraki, Argolida	g.h
<i>Lycopersicon esculentum</i>	20/6/93	11♀ 2♂	Gastouni, Ilia	g.h
<i>Lycopersicon esculentum</i>	26/6/93	10♀	Melissochori, Larissa	g.h
<i>Lycopersicon esculentum</i>	2/5/94	3♀	Ierapetra, Crete	g.h
<i>Lycopersicon esculentum</i>	20/7/94	14♀ 3♂	K. Souli, Attiki	o.f
<i>Malva sylvestris</i>	7/7/93	2♀	K. Lechonia, Magnissia	g.h
<i>Malva sylvestris</i>	10/12/94	5♀	Athens, Attiki	g.h
<i>Phaseolus vulgaris</i> L.	5/6/93	6♀	K. Souli, Attiki	g.h
<i>Phaseolus vulgaris</i>	20/7/94	9♀ 3♂	K. Souli, Attiki	o.f
<i>Rosa</i> sp.	21/6/92	30♀ 4♂	Agrinio, Aitolokarnania	g.h
<i>Rosa</i> sp.	5/6/93	8♀	K. Souli, Attiki	g.h
<i>Solanum melongena</i>	16/6/91	12♀ 5♂	Megara, Attiki	g.h
<i>Trifolium</i> sp.	12/9/92	6♀ 2♂	Athens, Attiki	g.h
<i>Trifolium</i> sp.	10/10/93	3♀	Velestino, Magnissia	g.h

Kakothrips robustus (Uzel)

<i>Nicotiana tabacum</i> L.	30/6/91	8♀	Agrinio, Aitolokarnania	o.f
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Limothrips angulicornis Jablonowski

<i>Ballota acetabulosa</i> (L.) Benth.	31/5/92	8♀	Loutraki, Korinthia	o.f
<i>Cucumis sativus</i>	3/7/91	10♀	Koropi, Attiki	o.f
<i>Cucumis sativus</i>	27/5/93	9♀	Marathon, Attiki	g.h
<i>Cucumis sativus</i>	8/6/93	4♀	Athens, Attiki	g.h
<i>Lycopersicon esculentum</i>	3/7/91	8♀	Koropi, Attiki	o.f
<i>Lycopersicon esculentum</i>	27/5/93	3♀	Marathon, Attiki	g.h
<i>Lycopersicon esculentum</i>	8/6/93	2♀	Athens, Attiki	g.h
<i>Triticum durum</i> Desf.	28/6/92	12♀	Polyneri, Larissa	o.f

Limothrips cerealium Haliday

<i>Nicotiana tabacum</i>	17/4/92	7♀	Agrinio, Aitolokarnania	o.f
<i>Trifolium</i> sp.	22/9/94	6♀	Elassona, Larissa	o.f

Limothrips denticornis Haliday

<i>Hordeum murinum</i>	16/7/92	9♀	Fracto, Drama	o.f
<i>Trifolium</i> sp.	22/9/94	4♀	Elassona, Larissa	o.f

Mycterothrips salicis (Reuter)

<i>Platanus orientalis</i> L.	22/2/92	6♀	Stymfalia, Korinthia	o.f
<i>Prunus avium</i> L.		4♀	Stymfalia, Korinthia	o.f

Tenothrips discolor (Karny)

<i>Pyrus amigdaliformis</i>	10/2/91	8♀	Panarititis, Argolida	o.f
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Tenothrips frici (Uzel)

<i>Lycopersicon esculentum</i>	22/9/92	7♀	Thiva, Viotia	o.f
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Thrips angusticeps Uzel

<i>Amaranthus lividus</i>	16/6/92	8♀ 1♂	Athens, Attiki	g.h
<i>Amaranthus lividus</i>	14/5/93	3♀	Skala, Lakonia	g.h
<i>Amaranthus lividus</i>	30/6/94	2♀	Chalki, Larissa	g.h
<i>Amaranthus lividus</i>	20/7/94	6♀	Elassona, Larissa	o.f
<i>Gossypium hirsutum</i>	2/6/93	21♀ 7♂	Messorachi, Larissa	o.f
<i>Gossypium hirsutum</i>	12/7/94	5♀ 2♂	Messorachi, Larissa	o.f
<i>Gossypium hirsutum</i>	18/7/94	9♀	Thiva, Viotia	o.f
<i>Lactuca sativa</i> L.	30/5/91	12♀ 5♂	K. Souli, Attiki	g.h
<i>Lactuca sativa</i>	14/5/93	7♀ 1♂	Skala, Lakonia	g.h
<i>Lactuca sativa</i>	30/6/94	5♀	Chalki, Larissa	g.h
<i>Lycopersicon esculentum</i>	30/5/91	20♀ 8♂	K. Souli, Attiki	g.h
<i>Lycopersicon esculentum</i>	14/5/93	5♀ 2♂	Skala, Lakonia	g.h
<i>Lycopersicon esculentum</i>	26/6/93	8♀ 3♂	Elassona, Larissa	g.h

<i>Malva sylvestris</i>	24/6/92	3♀ 1♂	Megara, Attiki	g.h
<i>Malva sylvestris</i>	14/5/93	3♀	Skala, Lakonia	g.h
<i>Malva sylvestris</i>	26/6/93	3♀	Elassona, Larissa	g.h
<i>Medicago sativa</i> L.	24/6/92	4♀	Megara, Attiki	g.h
<i>Medicago sativa</i>	14/5/93	1♀	Skala, Lakonia	g.h
<i>Medicago sativa</i>	26/6/93	3♀	Elassona, Larissa	g.h
<i>Parietaria diffusa</i> Mert. & Koc.	16/6/92	8♀	Athens, Attiki	g.h
<i>Parietaria diffusa</i>	14/5/93	3♀	Skala, Lakonia	g.h
<i>Parietaria diffusa</i>	30/6/94	4♀	Chalki, Larissa	g.h
<i>Parietaria diffusa</i>	20/7/94	5♀	Elassona, Larissa	o.f
<i>Senecio vulgaris</i> L.	17/2/92	10♀ 5♂	Athens, Attiki	o.f
<i>Trifolium</i> sp.	20/7/94	8♀ 2♂	Elassona, Larissa	o.f

Thrips atratus Haliday

<i>Amaranthus lividus</i>	9/3/92	4♀	Chania, Crete	o.f
<i>Euphorbia</i> sp.		5♀	Chania, Crete	o.f

Thrips brevicornis Priesner

<i>Abies cephalonica</i> Loudon	6/12/92	8♀	Elati, Trikala	o.f
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Thrips fuscipennis Haliday

<i>Cucumis sativus</i>	11/6/91	20♀	Athens, Attiki	g.h
<i>Cucumis sativus</i>	14/10/92	8♀	Athens, Attiki	g.h

Thrips major Uzel

<i>Capsicum annuum</i>	10/6/91	5♂	Oropos, Attiki	o.f
<i>Capsicum annuum</i>	25/6/91	8♀ 5♂	Marathon, Attiki	g.h
<i>Capsicum annuum</i>	20/5/93	4♀	Aghialos, Magnissia	g.h
<i>Citrus sinensis</i> (L.) Osbeck	17/6/92	9♀ 2♂	Gastouni, Ilia	o.f
<i>Cucumis melo</i>	17/6/92	8♀	Gastouni, Ilia	o.f
<i>Cucumis sativus</i>	25/6/91	14♀ 9♂	Marathon, Attiki	g.h
<i>Cucumis sativus</i>	20/5/93	7♀	Aghialos, Magnissia	g.h
<i>Eriobotrya japonica</i> (Th.) Lind.	16/2/92	7♂	Egio, Achaia	o.f

Thrips physapus L.

<i>Lycopersicon esculentum</i>	28/3/92	3♀	Thiva, Viotia	o.f
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Thrips tabaci Lindeman

<i>Amaranthus lividus</i>	30/5/91	5♀	K. Souli, Attiki	g.h
<i>Amaranthus lividus</i>	26/6/93	5♀	Elassona, Larissa	g.h
<i>Amaranthus lividus</i>	20/5/94	4♀	Aghialos, Magnissia	g.h
<i>Amaranthus lividus</i>	18/7/94	4♀	Elassona, Larissa	o.f
<i>Capsicum annuum</i>	16/6/91	20♀	Megara, Attiki	g.h
<i>Capsicum annuum</i>	22/6/92	4♀	Skala, Lakonia	g.h
<i>Capsicum annuum</i>	2/3/93	19♀ 3♂	Heraklion, Crete	g.h
<i>Capsicum annuum</i>	14/4/94	3♀	Ierapetra, Crete	g.h
<i>Citrullus lanatus</i>	12/6/92	17♀ 4♂	Amaliada, Ilia	g.h
<i>Cucumis melo</i>	30/5/91	10♀	K. Souli, Attiki	g.h
<i>Cucumis melo</i>	12/6/92	12♀	Amaliada, Ilia	g.h
<i>Cucumis melo</i>	20/7/94	6♀	K. Souli, Attiki	o.f
<i>Cucumis sativus</i>	14/5/91	25♀ 2♂	Athens, Attiki	g.h
<i>Cucumis sativus</i>	22/6/92	12♀	Skala, Lakonia	g.h
<i>Cucumis sativus</i>	14/4/94	15♀ 2♂	Ierapetra, Crete	g.h
<i>Cucumis sativus</i>	6/5/94	24♀ 6♂	Heraklion, Crete	g.h
<i>Cucumis sativus</i>	16/7/94	11♀	K. Lechonia, Magnissia	g.h
<i>Cucurbita pepo</i>	16/6/91	8♀	Megara, Attiki	g.h
<i>Cucurbita pepo</i>	20/7/94	8♀	K. Souli, Attiki	o.f
<i>Dianthus</i> sp.	16/6/91	10♀	Megara, Attiki	g.h
<i>Dianthus</i> sp.	28/5/92	12♀ 2♂	Monast/aki, Aitolok/ania	g.h
<i>Fragaria vesca</i>	20/5/94	2♀	Aghialos, Magnissia	g.h
<i>Gossypium hirsutum</i>	2/6/93	18♀	Messorachi, Larissa	o.f
<i>Gossypium hirsutum</i>	12/7/94	10♀ 2♂	Messorachi, Larissa	o.f
<i>Gossypium hirsutum</i>	16/7/94	9♀	Ag. Georgios, Magnissia	o.f
<i>Lactuca sativa</i>	30/5/91	8♀	K. Souli, Attiki	g.h

<i>Lactuca sativa</i>	20/7/94	5♀	K. Souli, Attiki	o.f
<i>Lycopersicon esculentum</i>	22/6/91	21♀ 2♂	Koropi, Attiki	g.h
<i>Lycopersicon esculentum</i>	30/5/92	35♀ 6♂	Epidavros, Argolida	g.h
<i>Lycopersicon esculentum</i>	12/6/92	21♀ 3♂	Amaliada, Ilia	g.h
<i>Lycopersicon esculentum</i>	22/6/92	10♀	Skala, Lakonia	g.h
<i>Lycopersicon esculentum</i>	2/3/93	7♀	Heraklion, Crete	g.h
<i>Lycopersicon esculentum</i>	26/6/93	13♀ 6♂	Elassona, Larissa	g.h
<i>Lycopersicon esculentum</i>	14/4/94	12♀	Ierapetra, Crete	g.h
<i>Lycopersicon esculentum</i>	14/5/94	11♀	Nemea, Korinthia	g.h
<i>Lycopersicon esculentum</i>	16/7/94	7♀	K. Lechonia, Magnissia	g.h
<i>Malva sylvestris</i>	14/5/91	6♀	Athens, Attiki	g.h
<i>Malva sylvestris</i>	26/6/93	4♀	Elassona, Larissa	g.h
<i>Malva sylvestris</i>	20/5/94	4♀	Aghialos, Magnissia	g.h
<i>Medicago sativa</i>	14/5/91	4♀	Athens, Attiki	g.h
<i>Medicago sativa</i>	29/1/93	8♀	Kiato, Korinthia	o.f
<i>Medicago sativa</i>	26/6/93	7♀	Elassona, Larissa	g.h
<i>Parietaria diffusa</i>	14/5/91	4♀	Athens, Attiki	g.h
<i>Parietaria diffusa</i>	18/7/94	6♀	Elassona, Larissa	o.f
<i>Phaseolus vulgaris</i>	30/5/91	13♀	K. Souli, Attiki	g.h
<i>Rosa</i> sp.	16/6/91	24♀ 5♂	Megara, Attiki	g.h
<i>Rosa</i> sp.	30/5/92	14♀	Epidavros, Argolida	g.h
<i>Senecio vulgaris</i>	17/2/92	5♀ 1♂	Athens, Attiki	o.f
<i>Solanum melongena</i>	16/6/91	12♀ 3♂	Megara, Attiki	g.h
<i>Solanum melongena</i>	22/6/92	8♀	Skala, Lakonia	g.h
<i>Trifolium</i> sp.	14/5/91	5♀	Athens, Attiki	g.h
<i>Trifolium</i> sp.	20/5/94	3♀	Aghialos, Magnissia	g.h
<i>Trifolium</i> sp.	18/7/94	3♀	Elassona, Larissa	o.f

Family: Phlaeothripidae

<i>Haplothrips flavicinctus</i> Karny				
<i>Lycopersicon esculentum</i>	14/7/91	7♀	Skala, Lakonia	o.f
<i>Lycopersicon esculentum</i>	30/5/92	12♀	Koropi, Attiki	g.h

<i>Karnyothrips flavipes</i> (Jones)				
<i>Olea europaea</i> L.	22/2/92	7♀	Kiato, Korinthia	o.f

* g.h: in greenhouse, o.f.: on open field

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References

Alexandrakis, B., 1997. Diminution of chemical treatments in the context of integrated control of insects pests: the case of citrus insect pests. Proceedings 6th Panhellenic Entomol. Conference, Chania Crete, Oct. 1-Nov. 3 1995, pp. 363-371 (in Greek).

Amri, A. and S. Michelakis, 1997. Alternative methods of control of the newly introduced western flower thrips [*Frankliniella occidentalis* (Pergande)]. Proceedings 6th Panhellenic Entomol. Conference, Chania Crete, Oct. 1-Nov. 3 1995, pp. 483-484 (in Greek).

Ananthakrishnan, T.N., 1979. Biosystematics of Thysanoptera. Ann. Rev. Entomol., 24: 159-183.

Argyriou, L.C. and A.L. Kourmadas, 1985. On some thrips (Thysanoptera) of Greece. Biologia Gallo-Hellenica 10: 315-318.

Argyriou, L.C. and P.A. Mourikis, 1983. Thrips infestation

in cultivated plants in Greece. 1st Pan Hellenic Congress on plant diseases and pests. Athens, 5-7 October 1983, p.47.

Argyriou, L.C., E.G. Stavraki and P.A. Mourikis, 1976. A list of recorded entomophagous insects of Greece. Benaki Phytopath. Inst., p.73.

Bhatti, J.S., 1980. Species of the genus *Thrips* from India (Thysanoptera). Systematic Entomol., 5: 109-166.

Bonnemaïson, L. et A. Bournier, 1964. Les Thrips du lin *Thrips angusticeps* Uzel et *Thrips linarius* Uzel (Thysanoptères). Ann. Epiphyties 15: 97-169.

Bournier, A. et J. Bournier, 1987. L'introduction en France d'un nouveau ravageur: *Frankliniella occidentalis*. Phytoma 388: 14-17.

Bournier, A., A. Lacasa and Y. Pivot, 1978. Biologie d'un thrips prédateur *Aeolothrips intermedius* (Thysan.: Aeolothripidae). Entomophaga, 23: 403-410.

Cho, J.J., W.C. Mitchell, R.F.L. Mau and K. Sakimura, 1987. Epidemiology of tomato spotted wilt virus disease on crisphead lettuce in Hawaii. Plant Dis. 71: 505-508.

Hightower, B.G. and D.F. Martin, 1956. Ecological studies of thrips found on cotton in central Texas. J. Econ. Ent. 49: 423-424.

Jacot-Guillarmod, C.F., 1970. Catalogue of the Thysanoptera of the world, Part 1. Ann. Cape Prov.

- Mus. (Nat. Hist.) 7: 1-216.
- Jacot-Guillarmod, C.F., 1971. Catalogue of the Thysanoptera of the world, Part 2. Ann. Cape Prov. Mus. (Nat. Hist.) 7: 217-515.
- Jacot-Guillarmod, C.F., 1974. Catalogue of the Thysanoptera of the world, Part 3. Ann. Cape Prov. Mus. (Nat. Hist.) 7: 517-976.
- Jacot-Guillarmod, C.F., 1975. Catalogue of the Thysanoptera of the world, Part 4. Ann. Cape Prov. Mus. (Nat. Hist.) 7: 977-1255.
- Jacot-Guillarmod, C.F., 1978. Catalogue of the Thysanoptera of the world, Part 5. Ann. Cape Prov. Mus. (Nat. Hist.) 7: 1251-1556.
- Jenser, G. and M.E. Tzanakakis, 1985. Records of Thysanoptera from Northern Greece. Entomologia Hellenica 3: 59-61.
- Katsoyannos, P., 1992. The "Californian Thrips". New pest of crops in continental Greece too. Agriculture Crop and Animal Husbandry 5: 32-35 (in Greek).
- Kourmadas, A.L., T.H. Zestas and L.C. Argyriou, 1982. Timing of spraying for control of Thrips in nectarine trees. Annls Inst. Phytopath. Benaki (N.S.) 13: 120-127.
- Kyparissoudas, D.S. and B. Alexandrakis, 1993a. New cotton pest in Northern Greece. The "Californian Thrips". Agricultural Crop and Animal Husbandry 6: 16 (in Greek).
- Kyparissoudas, D.S. and B. Alexandrakis, 1995. New pest of asparagus (*Asparagus officinalis* L.) in Greece. *Thrips tabaci* Lind. (Thysanoptera: Thripidae). Proceedings 5th Panhellenic Entomol. Conference, Athens, Nov. 8-10 1993, pp. 155-157 (in Greek).
- Melis, A., 1959. Italiana Thysanotteri. I Terebrantia. Parte I. I-Nozioni generali sui Tisanotteri. Appendice, Redia 44: 1-184.
- Melis, A., 1960. I Italiana Thysanotteri. I Terebrantia. Parte II. Sistematica, corologia ed etologia. Appendice, Redia 45: 185-330.
- Melis, A., 1961. I Italiana Thysanotteri. I Terebrantia. Parte II. Sistematica, corologia ed etologia. Appendice, Redia 46: 331-530.
- Mound, L.A., G.D. Morison, B.R. Pitkin and J.M. Palmer, 1976. Thysanoptera. Handbooks for the identification of British Insects 1(11), 79pp. London. Royal Entomological Society of London.
- Palmer, J.M., 1990. Identification of the common thrips of Tropical Africa (Thysanoptera: Insecta). Tropical Pest Management 36: 27-49.
- Palmer, J.M. and L.A. Mound, 1990. Thysanoptera, 241-242 in D. Rosen (Editor), The Armored Scale Insects, Their Biology, Natural Enemies and Control, vol., B.
- Pelekassis, C.E.D., 1962. Catalogue of the more important insects and other animals harmful to the agricultural crops of Greece during the last thirty year period. Annls Inst. Phytopath. Benaki (N.S.) 5: 1-104.
- Pitkin, B.R., 1976. A Revision of the Indian species of *Haplothrips* and related genera (Thysanoptera: Phlaeothripidae). Bull. Br. Mus. (Nat. Hist.) Entomol. 34: 223-280.
- Priesner, H., 1964. Ordnung Thysanoptera in Bestimmungsbücher zur Boden Fauna Europas. Akademie-Verlag, Berlin, pp 242.
- Priesner, H., 1964b. A monograph of the Thysanoptera of the Egyptian deserts. Publs Inst. Désert Egypte 13: 1-549.
- Roditakis, N.E., 1991. First record of *Frankliniella occidentalis* in Greece. Entomologia Hellenica 9: 77-79.
- Roditakis, N.E., K. Mploukidis and D. Sfakianakis, 1995. Evaluation of insecticide methiocarb in "Californian Thrips" *Frankliniella occidentalis* (Pergande) (Thysanoptera: Thripidae) in greenhouse cucumber. Proceedings 5th Panhellenic Entomol. Conference, Athens, Nov. 8-10 1993, pp. 172-173 (in Greek).
- Roditakis, N.E., D. Lykouressis and N. Gkolfinopoulou, 1995. Chromotropism of thrips, *Frankliniella occidentalis* (Pergande) (Thysanoptera: Thripidae) and captures with traps in greenhouse cucumber. Proceedings 5th Panhellenic Entomol. Conference, Athens, Nov. 8-10 1993, p.213 (in Greek).
- Sakimura, K., 1986. Thrips in and around the coconut plantations in Jamaica, with a few Taxonomical notes (Thysanoptera). Florida Entomologist 69: 348-363.
- Schliephake, G., 1983. Beitrag zur Kenntnis mediterran. Thripina. Dt. Entom. N.F. 30, 1-3: 123-171.
- Stathopoulos, D.G., 1963. Study on the insects and mites of cotton pests. Annual Report, Plant Prot. Agric. Res. Stat. of Thessaloniki Greece, 1: 25-33.
- Stathopoulos, D.G., 1964. Studies on the identification and bioecology of Aphis spp., *Thrips tabaci* Lind., *Bemisia tabaci* Genn., *Empoasca* sp. and *Tetranychus telarius* L., cotton pests I. Annual Report Plant Prot. Agric. Res. Stat. of Thessaloniki Greece, 2: 39-49.
- Stathopoulos, D.G., 1965. Studies on the identification and bioecology of Aphis spp., *Thrips tabaci* Lind., *Bemisia tabaci* Genn., *Empoasca* sp. and *Tetranychus urticae* Koch. (T. telarius L.) cotton pest. II. Annual Report Plant Protection Agricultural Research Station of Thessaloniki Greece, 3: 41-49.
- Stathopoulos, D.G. and E. Calambuca-Fimiani, 1991. Chemical control against Aphids and Thrips on cotton by seed coating with systemic insecticides. Proceedings 1st Panhellenic Entomol. Conference, Athens, 1985, pp 217-228. (in Greek).
- Tsitsipis, I.A., I. Vaggelas, G. Jenser and G. Michalopoulos, 1997. Serious indications that the scarring of Corinthian sultana grapes is due to thrips infestation. Agricultural Crop and Animal Husbandry 5: 60-64.
- Yakhontov, V.V., 1964. Order Thysanoptera (Physopoda, 1119-1160, in Keys to the Insects of the European USSR, 1, editor G. Ya. Bei-Bienko.
- Zartaloudis, Z.D., 1997. Study on the bioecology and control of Thrips, *Frankliniella occidentalis* (Thysanoptera: Thripidae) as a new pest of vineyard in Kavala Greece. Proceedings 6th Panhellenic Entomol. Conference, Chania Crete, Oct. 1-Nov. 3 1995, pp. 84-91 (in Greek).
- Zawirska, I., 1970. Studien an Chirothrips-Arten der manicatus-Gruppe (Thysanopt.: Thripidae). Teil II. Zur Artsberechtigung von Chirothrips ambulans Bagnall. Bull. Entomol. Pologne XL: 267-286.
- zur Strassen, R., 1977. Thysanopterologische Notizen (4). Senckenbergiana biol. 3/4: 185-202.
- zur Strassen, R., 1979. Thysanopterologische Notizen (5). Senckenbergiana biol., 60.: 3/4: 191-202.

KEY WORDS: Thrips species, Greece.

Είδη Θυσανόπτερων στην ελληνική πανίδα

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ΠΕΡΙΛΗΨΗ

Στοχεύοντας στην καταγραφή των ειδών της Τάξης Thysanoptera, συλλογές θριπών έλαβαν χώρα από καλλιέργειες αγρού και θερμοκηπίων καθώς και από αυτοφυή φυτά σε 16 περιοχές της Ελλάδας κατά τα έτη 1991 και 1994. Συνολικά βρέθηκαν 26 είδη Thysanoptera, που ανήκουν στις οικογένειες Aelothripidae, Thripidae και Phlaeothripidae. Από τα 26 αυτά είδη, το *Tenothrips frici* αναφέρεται για πρώτη φορά στην ελληνική πανίδα.