

## Studies on the Thysanoptera of Antalya II. Thripidae Stephens (Part 1)\*

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### Summary

In the second part of the study 28 species from family Thripidae are discussed. Three of them are new for turkish fauna.

### Introduction

The information related to the material and methods, and other particulars were given in the part I. In the present part data relevant to 28 species belong to Thripidae is provided. A study based on the material deposited in Forschungsinstitut Senckenberg (Frankfurt am Main, Deutschland) revealed that previously reported (Tunç, 1990) species *Ceratothripioides dianthi* (Priesner) is *Ceratothripioides nigritiventris* (Pelikan) and *Aptinothrips karnyi* John is *Aptinothrips rufus* F. stiyligera Priesner. I thank to Dr. R. zur Strassen of the institute mentioned for his kind attention which made possible these corrections.

### Thripidae

#### *Anaphothrips obscurus* Müller

**Material examined:** Korkuteli, 1female (mac.), *Triticum aestivum* (pre-ear.), 13. IV.1988-Göynük, 2females (mac.), *Zea mays*, 27.V.1988- Tekirova, 1female (mac.), *Zea mays*, 4VIII. 1988 - Hacıveliler, 1female (mac.), *Ranunculus* sp, 24.III. 1989-Gündoğmuş, 4females (mac.), 3females (brac.), *Triticum aestivum* (ears); 1female (mac.), *Malus communis*, both 27.IV.1989 - Aksu, 1female (mac.), *Triticum aestivum* (ears), 27.VI. 1989- Akyar, 1female (brac.) cereal, 4.V.1989- Bozova, 1female (mac.), cereal, 4.V.1989- Bahtılı, 2females (mac.), *Zea mays*, 11.V.1989-Gökpınar, 1female (mac.).

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*Triticum aestivum* (ears), 25.V.1989-Gökçam, 2females (brac.) grass, 9.1.1990- Koyunlar, 1female (brac.), *Avena sativa*, 25.1.1990.

**Habitat:** Graminivorous,

**Distribution:** Semi-Cosmopolitan. Central Anatolia and Black Sea regions of Turkey.

**Remarks:** In coastal areas of Antalya in the period of January-May.

*Anaphothrips sudanensis* Trybom

**Material examined:** Aşağıkocayatak, 1male, *Sesamum indicum*, 21.VII. 1988 - Tekirova, 1female (mac.), *Zea mays*, 4.VIII. 1988- Belek, 1male, *Arachis hypogaea*, 18.VIII.1988 - Çenger, 3males, 4females (mac.), *Zea mays*, 18.VIII.1988 - Yurtpınar, 1female (mac.), *Olea europaea*; 1female (mac.), *Gossypium hirsutum*, both 8.IX.1988- Adrasan, 2females (mac.), *Zea mays*; 1female (mac.), *Sesamum indicum*, both 15.IX.1988- Turunçova, 1male, *Celosia* sp; 1female (mac.), , *Musa paradisi*, both 15.IX.1988- Mahmutlar, 1female (mac.), *Solanum nigrum*, 10.IX.1988 - Güzelloba, 1female (mac.), *Apium graveolens* var *dulce*, 5.1.1989 - Bereket, 1female (mac.), *Oryza sativa*, 27.VII.1989- Koyunlar, 1female (mac.) *Paspalum* sp, 17.VIII.1989- Adrasan, 1female (mac.), 7females (brac.), *Menta* sp, 14.IX.1989 - Kovancık, 1female (mac.), *Zea mays*, 30.X.1989 - Yenidumanlar, 1female (mac.), cereal, 21.XII.1989.

**Habitat:** Graminivorus

**Distrubution:** Tropics and Subtropics. Mediterranean region of Turkey.

**Remarks:** Only in coastal areas of Antalya, between July and January.

*Aptinothrips rufus* (Haliday)

**Material examined:** Korkuteli, 2females, *Triticum aestivum* (pre-ear.), 13.IV.1988 - Yenice, 1female, *Hordeum* sp; 4females, *Anthemis* sp, both 5.V.1988-Yenice, 2females *Triticum aestivum*, 13.IV.1989 - Finike, 2females, *Euphorbia* sp, 20.IV.1989 - Macar, 1female, *Zea mays*, 1.VI.1989- Bahtılı, 1 female, grass, 7.XII.1989- Kızılarık, 9female, *Asphodelus* sp, 21.II.1990.

**Habitat:** Graminivorous

**Distribution:** Cosmopolitan. Probably all over Turkey although recorded only in Central Anatolia, Aegean and Mediterranean regions.

*Aptinothrips rufus f.styligera* Priesner

**Material examined:** Bahtılı, 1female, *Calendula officinalis*, 7.XII,1989.

**Habitat:** Graminivorous.

**Distribution:** Mediterranean. First record for Turkey.

*Ceratothripoides nigritiventris* (Pelikan)

**Material examined:** Sulekler, 1female, *Avena sativa*, 11.VII.1989.

**Habitat:** Flowers of Fabaceae, turf.

**Distribution:** Central Europe. First record for Turkey.

*Ceratothrips anatolicus* (Priesner)

**Material examined:** Duraliler, 1male, *Nerium oleander* (flowers), 26.V.1988-Kaş, 1male, 4females, *Bougainvillea glabra* (flowers), 16.VI.1988-Düzlerçamı, 2males, 1female, *Vitex agnus-castus*; 1female, *Pinus brutia*, both 30.VI.1988-Geyikbayırı, 1female, *Cheiranthus* sp, 23.II.1989-Hatipler, 1female, *Anemone* sp. 23.II.1989 - Maarif, 4females, *Triticum aestivum*, 24.III.1989- Belel, 1male, *Anthemis* sp, 20.IV.1989- Korkuteli, 1female, *Malus communis* (leaves), 4.V.1989- Akyar, 1female, cereal, 4.V.1989- Yeşilbayır, 5males, 5females, *Crepis* sp; 1male, *Triticum aestivum* (ears), both 18.v.1989-Varsak, 1female, *Populus* sp, 18.V.1989- Finike, 1female, *Onobrychis* sp, 22.VI.1989- Cevizli, 2female, *Verbascum* sp, 29.VI.1989 - Geriş. 1female, *Myrtus communis*, 29.VI.1989-Ibradı, 1female, *Juglans regia*, 28.IX.1989- Çağlayan, 1female, *Apium graveolens* var *dulce*, 30.X.1989.

**Habitat:** Preferably Labiateae.

**Distribution:** Turkey and Greece. Central and Southeastern Anatolia regions of Turkey.

*Ceratothrips croceicollis* (Costa)

**Material examined:** Kumluca, 2males, 10females, *Asphodelus* sp. 23.III.1988- Akçapınar, 2females *Asphodelus* sp, 17.III.1989- Perge, 3females, *Asphodelus* sp, 21.II.1990.

**Habitat:** *Asphodelus*

**Distribution:** Mediterranean. Aegean and Mediterranean regions of Turkey.

**Remarks:** Only in coastal areas in Antalya.

*Ceratothrips discolor* (Karny)

**Material examined:** Campus, 8males, 5females, *Crepis* sp, 27.V.1988- Pera-kende, 2females *Myrtus communis*, 23.VI.1988-Düzlerçamı, 1male, 1female, *Vitex agnus-castus*, 30.VI.1988- Yukarıkocayatak, 8females, *Vitex agnus-castus*, 14.VII. 1988-Murtıç, 1female, *Myrtus communis*; 2females, *Vitex agnus-castus*, both 14.VII.1988- Güzelbağ, 3females, *Sesamum indicum*, 21.VII.1988-Güney, 3females, *Vitex agnus-castus*; 1males, 2females, *Amygdalus communis*, both 21.VII.1988- Göynük, 1female, *Citrus nobilis deliciosa*; 1female, *Vitex agnus-castus*, both 4.VIII.1988- Havaalanı, 1male, 1female, *Gossypium hirsutum*; 1male, 4female, *Sesamum indicum* both 18.VIII.1988- Töngülü, 1female, *Gossypium hirsutum*, 18.VIII.1988- Yurtpınar, 1female, *Gossypium hirsutum*, 8.IX.1988- İhsaniye, 1female, *Zea mays*; 1female, *Lytrum* sp, both 8.IX.1988-

Kısalar, 2females, herb, 8.8.IX.1988- Çeltikçi, 1female, *Olea europaea*, 13.X.1988- Mavikent, 11males, 1female, *Solidago* sp; 1male *Paspalum* sp, both 27.X.1988- Hurma, 1female, *Phlomis armeniaca*, 10.III.1989- Karaçalı, 1female, *Calycotome villosa*, 17.III.1989- Finike, 1female, *Morus alba* (flowers), 20.IV.1989- Bahtılı, 1female, *Punica granatum* (flowers), 11.V.1989- Kovanlık, 1female, *Amydalus communis*, 18.V.1989-Yeşilöz, 2females, *Thymus* sp, 1.VI.1989 *Amgdalus communis*, 18.V.1989- Yeşilöz, 2females *Thymus* sp, 1.VI.1989- Düzlerçami, 2females, *Vitex agnus-castus*; 2females, *Verbascum* sp, both 16.VI.1989- Ekşili, 3females, *Vitex agnus-castus*; 1male, *Nerium oleander*, 16.VII.1989- Kurşunlu, 1female, *Hibiscus esculentus*; 2females, *Zea mays*, both 6.VII.1989-Oymapınar, 1male, 2females, *Helianthus annuus*, 6.VII.1989- Bucakşeyhler, 1female, *Vitex agnus - castus*, 6.VII.1989-Oymapınar, 1male, 2females, *Helianthus annuus*, 6.VII.1989- Bucakşeyhler, 1female, *Vitex agnus-castus*, 6.VII.1989-Yenice, 1male, *Nerium oleander*; 1male, 1female, *Vitex agnus-castus*; 3males, *Capparis spinosa*, all 11.VII.1989-Gedik, 2females, *Sesamum indicum*, 27.VII.1989-Mamalar, 1female, *Myrtus communis*; 1male, *Olea europaea*; 3females, *Arachis hypogaea*; 1male, 2females, *Rubus fructicosus*; 1male, 2females, *Gossypium hirsutum*, all 27.VII.1989- Yeşilköy, 1female, *Vitex agnus-castus*, 27.VII.1989- Yenice, 1male, 1female, *Genista* sp, 3.VIII.1989- Doyran, 4males, *Verbascum* sp; 1male, 2females, *Vitex agnus-castus*, both 10.VIII.1989- Hurma, 1male, *Sesamum indicum* 10.VIII.1989- Varsak, 1female, grass, 17.VIII. 1989 - Akbaş, 2males, 7females, *Vitex agnus-castus*; 2females, *Myrtus communis*, both 17.VIII.1989- Kocaoğlanlı, 1male, 2females, *Vitex agnus-castus*, 7.IX.1989- Mahmurlar, 1female, *Musa paradisi*, 7.IX.1989-Göynük, 2female, *Populus* sp, 14.IX.1989-Adrasan, 5females, *Vitex agnus-castus*, 14.IX.1989- Çankaya, 1male, 2females, *Bellis perennis*, 30.X.1989- Kemerağızı, 2females, *Vitex agnus-castus*, 30.X.1989-Duraliler, 2females, *Conyza canadensis*, 10.XI.,1989.

**Habitat:** Preferably on Compositae.

**Distribution:** Turano-Mediterranean. All over Turkey except east.

**Remarks:** In coastal and transitional (very rare) areas of Antalya, very frequently on *Vitex agnus-castus*, in the period of March-November.

*Ceratothrips ericae* (Haliday)

**Material examined:** Varsak, 4females, *Erica* sp, 27.0XI.1989-Güzeloba, 1female, *Zea mays*, 27.XI.1989.

**Habitat:** Ericaceae, particularly *Calluna* and *Erica*.

**Distrubution:** Euro-Siberian. Marmara region of Turkey.

*Ceratothrips pallidivestis* (Priesner)

**Material examined:** Korkuteli, 6females, *Taraxacum* sp; 1female, *Pyrus communis* (flowers), 1female, *Pyrus communis* (flowers), all 13.IV.1988- Yazır (Korkuteli), 2females, *Prunus persica* (flowers), 13.IV.1988- Yenice, 1female, *Calycotome villosa* (flowers), 13.IV.1988-Çobanisa, 1female, *Malus communis* (flowers), 5.V.1988- Varsaklı, 1female, *Phaseolus vulgaris*, 23.VI.1988-Koyunlar,

1female, *Solanum melongena*, 23.VI.1988- Güzelbağ, 1female, *Amygdalus communis*, 2.VII.1988- Çandır, 1female, *Allium cepa*, 10.III.1989 - Gebiz, 1female, *Taraxacum* sp, 17.III.1989-Korkuteli, 1female, *Prunus persica* (flowers), 1female, *Malus communis* (flowers), 6females, *Taraxacum* sp; 1female, *Juglans regia* (flowers), all 13.IV.1989- Oküzgözü, 5females, *Amygdalus communis* (leaves); 1female, *Prunus cerasus*, both 13.IV.1989- Kavak, 1male, *Anchusa* sp, 20.IV.1989- Karaağaç, 1female, *Triticum aestivum* (ears), 11.V.1989- Yeşilbayır, 3males, 7females, *Crepis* sp; 1female *Triticum aestivum* (ears), both 18.V.1989- Kurşunlu, 1female, *Amygdalus communis* (leaves), 18.V.1989- Akseki, 1male, *Amygdalus communis*; 1female, *Prunus domestica*, both 29.VI.1989- Cevizli, 1female, *Verbascum* sp, 29.VI.1989-Geriş, 1female, *Vitis vinifera*, 29.VI.1989- Odabaşı, 1female, *Olea europaea*, 6.VII.1989- Kurşunlu, 1female, *Zea mays*, 6.VII.1989-Çalış, 1female, *Gossypium hirsutum*; 6.VII.1989-Bereket, 1female, *Oryza sativa*, 27.VII.1989- Mamalar, 1female, *Gossypium hirsutum*, 27.VII.1989- Gömbe, 1male, *Menta* sp, 31.VIII.1989-Göynük, 1male, *Menta* sp, 31.VIII.1989-Göynük, 1male, *Vigna sinensis*, 14.IX.1989-Kızılıpinar, 1female, *Juglans regia*, 21.IX.1989-Gömüşkaya, 9males, 3females, *Taraxacum* sp, 21.IX.1989- Korkuteli, 1female, *Prunus domestica*, 23.X.1989-Kovanlık, 1male, 3females, *Couyza canadensis*, 30.X.1989-Alaylı, 2males, *Taraxacum* sp, 21.XII.1989.

**Habitat:** Particularly Compositae with yellow flowers.

**Distribution:** Mediterranean and Black Sea countries. All regions of Turkey.

**Remarks:** In coastal areas between March-December, in inland between April-October.

***Chirothrips aculeatus* Bagnall**

**Material examined:** Bekirler, 1female, *Quercus cerris*; 1female, *Prunus persica*, both 9.VI.1988. Bucakşeyhler, 1female, *Sesamum indicum*, 6.VII.1989.

**Habitat:** Graminivorous.

**Distribution:** West Palaearctic. Mediterranean region of Turkey,

**Remark:** Only in coastal areas in Antalya.

***Chirothrips kurdistanus* zur Strassen**

**Material examined:** Kuzdere, 1female, *Myrtus communis*, 15.IX.1988-Hurma, 2males, *Myrtus communis*; 1male, 3females, *Panicum* sp, both 10.VIII.1989- Kovanlık, 2females, *Sorghum vulgare*, 30.X.1989.

**Habitat:** Graminivorous

**Distribution:** Turkey and Israel. Eastern Anatolia and Mediterranean regions in Turkey.

**Remarks:** Only coastal areas of Antalya.

***Chirothrips manicatus* Haliday**

**Material examined:** Elmalı, 4females, *Triticum aestivum* (pre-ear.), 5.V.1980- Bekirler, 1female, *Zea mays*, 9.VI.1988-Kızılıot, 1female, *Amgdalus communis*; 4female, *Zea mays*, both 9.VI.1988-Koyunlar, 1female, *Diospyrus kaki*, 23.VI.1988-Öküzgözü, 1female, *Rosa canina*, 25.VIII.1988-Turunçova, 2females, *Zea mays*, 15.IX.1988-Elmalı, 1female, cereal, 13.IV.1989-Serik, 1female, *Triticum aestivum* (ears); 2females *Holcus lanatus*, both 27.IV.1989-Düzlerçamı, 1female, *Olea europaea*, both 11.V.1989-Finike, 1female, *Phaseolus vulgaris*, 22.VI.1989-Ekşili, 1female, *Lycopersicon esculentum*, 6.VII.1989-Bereket, 1female, *Oryza sativa*, 27.VII.1989-Göynük, 1female, *Rubus fructicosus*; 1female, *Vigna sinensis*, both 7.IX.1989

**Habitat:** Graminivorous

**Distribution:** Holarctic. Probably all regions of Turkey.

***Chirothrips meridionalis* Bagnall**

**Material examined:** Turunçova, 3females, *Musa paradisi*, 15.IX.1988-Mavikent, 1 male, 8females, *Paspalum* sp, 27.X.1988-Varsak, 3males, 6females, grass, 17.VIII.1989 Kovancık, 1male, *Sorghum vulgare*, 30.X.1989-Çakırlar, 1male, 1female, *Panicum* sp, 10.XI.1989-Bahtılı, 1female, *Calendula officinalis*, 7.XII. 1989.

**Habitat:** Graminivorous.

**Distribution:** India-Mediterranean-Ethiopia. Mediterranean region of Turkey.

**Remarks:** Only coastal areas of Antalya.

***Collembolothrips mediterraneus* Priesner**

**Material examined:** Beyler, 17females, *Triticum aestivum* (pre-ear.), 5.V.1988-Arif, 2females, cereal (pre-ear.), 24.III.1989-Eymir, 8females, cereal, 13.IV.1989.

**Habitat:** Graminivorous

**Distribution:** Turkey and Cyprus. Central Anatolia of Turkey,

**Remarks:** This apterous form apparently localized in certain areas in Elmalı county.

***Dendrothrips degeeri* Uzel**

**Material examined:** Ormana, 1male, *Amgdalus communis*; 1male, bush, both 28.IX.1989.

**Habitat:** Deciduous trees.

**Distrubution:** Europe, Transcaucasia, Anatolia (zur Strassen, 1987).

**Dendrothrips karnyi** (Priesner)

**Material examined:** Yukarıkocayatak, 2females, *Vitex agnus-castus*, 14.VII.1988-Bayatbademli, 1female, *Capsicum annuum*, 21.IX.1989.

**Habitat:** *Vitex agnus-castus*.

**Distribution:** Very rare, to the author's knowledge known only from Yugoslavia. First record for Turkey.

**Dendrothrips phyllireae**

**Material examined:** Yenice, 1female, *Quercus coccifera*, 5.V.1988-Doyran, 21females, *Olea europaea* (leaves), 27.V.1988-Kaş, 1female, *Pistacia* sp; *Bougainvillea glabra* (flowers), both 16.VI.1988-Varsaklı, 4females, *Olea europaea*, 23.VI.1988-Akseki, 1female, *Amygdalus communis*, 14.VII.1988-Güzelbağ, 1female, *Amygdalus communis*, 21.VII.1988-Yenice, 2females, *Quercus* sp, 25.VIII.1988-Çolaklı, 1female, *Arachis hypogaea*, 13.X.1988-Kale, 13females, *Phyllirea* sp; 1female, *Olea europaea*, both 24.XI.1988-Çakırlar, 1female, *Nerium oleander*, 11.V.1989-Yeşilbayır, 2females, *Olea europaea*, 18.V.1989-Kovanlık, 1female, *Morus alba* (leaves); 1female, *Vitis vinifera*, both 18.V.1989-Eksili, 1female, *Nerium oleander*, 18.V.1989-Gaziler, 1male, 3females, *Olea europaea*; 2females, *Pistacia* sp, both 18.V.1989-Yukarıkaraman, 1female, *Populus* sp. 1female, *Solanum tuberosum* (flowers), 1female, *Zea mays*, all 25.V.1989-Macar, 1female, *Morus alba*, 1.VI.1989-Yenice, 7females, *Phyllirea* sp, 16.VI.1989-Geriş, 1female, *Vitis vinifera*, 29.VI.1989-Fersin, 1female, *Prunus domestica*, 29.VI.1989-Odabaşı, 1female, *Vitis vinifera*; 1male, 1female, *Olea europaea*, both 6.VII.1989-Eksili, 1male, *Nerium oleander*, 6.VII.1989-Hatipler, 1female, *Olea europaea* 6.VII.1989-İbradı, 1female, *Juglans regia*, 28.IX.1989-İbradı (600m), 4females, *Phyllirea* sp; 1female, *Juniperus* sp, both 28.IX.1989-Fersin, 1female, *Arbutus andrachne*, 28.IX.1989-Duraliler, 7females, *Olea europaea*, 10.XI.1989-Sütçüler, 2females, *Olea europaea*, 27.XI.1989.

**Habitat:** Oleaceae, particularly *Phyllirea*.

**Distribution:** Turano-Mediterranean. It's distribution in Turkey unknown to the author although mentioned to occur in this country.

**Remarks:** Mainly in the period of May-November in Antalya.

**Dendrothrips saltator** Uzel

**Material examined:** Demirciler, 1female, *Quercus* sp, 13.X.1988-Güneycik, 1male, *Cotinus* sp, 27.IV.1989-Gündoğmuş, 1female, *Amygdalus communis*, 27.IV.1989-Altinkaya, 1female, *Amygdalus communis* (leaves), 11.V.1989-Akseki, 1female, *Amygdalus communis*, 29.VI.1989-Bozova, 1female, *Vitis vinifera*; 1male, *Prunus persica*, both 3.VIII.1989-Kızılpinar, 1female, *Prunus domestica* 21.IX.1989-İbradı, 1female, *Juglans regia*; 1male, *Prunus persica*, both 28.IX.1989-İbradı (600m), 1male, *Juniperus* sp, 28.IXX.1989-Kemerağzı, 1female, *Petroselinum sativum*; 1female, *Pistacia* sp; 1female, *Ceratonia siliqua*, 30.X.1989.

**Habitat:** Deciduous trees.

**Distribution:** Euro-Siberian. Black Sea region of Turkey.

*Drepanothrips reuteri* Uzel

**Material examined:** Yenice, 1female, *Quercus* sp (flowers), 13.IV.1988-Yenice, 1female, *Quercus coccifera*; 5.V.1988-Göynük, 1male, 2females, *Vitis vinifera*, 27.V.1988-Kızılıot, 1female, *Vitis vinifera*; 1female, *Zea mays*, both 9.VI.1988-Koyunlu, 1female, *Capsicum annuum*, 23.VI.1988-Gölova, 2males, 4females, *Vitis vinifera*, 30.VI.1988-Elmalı, 1female, *Vitis vinifera*, 30.VI.1988-Murtıç, 1female, *Quercus* sp, 14.VII.1988-Akseki, 4males, 9females, *Vitis vinifera*, 14.VII.1988-Fersin, 1male, 2females, *Vitis vinifera* 14.VII.1988-Güzelbağ, 1male, 4females, *Vitis vinifera*; 1female, *Amygdalus communis*, 21.VII.1988-Yenice, 2females, *Quercus* sp, 25.VIII.1988-Korkuteli, 1female, *Zea mays*, 25.VIII.1988-Gölova, 2males, 1female, *Vitis vinifera*, 25.VIII.1988-Çolaklı, 1female, *Phaseolus vulgaris*; 10females, *Vitis vinifera*, both 27.IV.1989-Gençler, 1female, *Cistus* sp, 27.IV.1989-Düzlerçamı, 1female, *Quercus* sp, 4.V.1989-Tatköy, 1female, *Malus communis* (leaves), 25.V.1989-Yenice, 1female, *Arbutus andrachne*; 2males, 1female, *Quercus* sp, both 16.VI.1989-Yazır (Korkuteli) 1male, 1female, *Pyrus elaeagrifolia*, 16.VI.1989-Gölova, 1female, *Vitis vinifera*, 16.VI.1989-Kale, 1female, *Pistacia* sp; 1female *Malus communis* (leaves); 1female *Zea mays*, all 22.VI.1989-Akseki, 1male, *Malus communis*; 1male, *Vitis vinifera*, both 29.VI.1989-Cevizli, 2female, *Quercus cerris*, 29.VI.1989-Geriş, 1female, *Vitis vinifera*, 29.VI.1989-Odabaşı, 1female, *Vitis vinifera*; 1female, *Olea europaea*, both 6.VII.1989-Mamalar, 1female, *Rubus fructicosus*, 27.VII.1989-Çobanisa, 1female, *Vitis vinifera*, 3.VIII.1989-Göynük, 1female, *Rubus fructicosus*, 14.IX.1989-Bayatbademli, 1female, *Vitis vinifera*, 21.IX.1989-Gölova, 20, *Vitis vinifera*, 21.IX.1989-Gölova, 2females, *Vitis vinifera*, 21.IX.1989-Ormana, 1male, *Vitis vinifera*; 1male, *Amygdalus communis*; 1female, *Juglans regia*, all 28.IX.1989-İbradı, 1female, *Prunus domestica*; 28.IX.1989-İbradı (600m), 3females, *Quercus* sp, 28.IX.1989-Bahtılı, 1male, *Eriobotrya japonica*, 7.XII.1989.

**Habitat:** Deciduous trees, Grape-vine pest.

**Distribution:** Palaearctic. Third important thrips species in the vineyards of Aegean region (Cengiz, 1974).

**Remarks:** In inland between May-September.

*Ephysothrips minozzi* Bagnall

**Material examined:** Güzelbag, 1female, *Amygdalus communis*, 21.VII.1988-Macar, 1female, *Zea mays*; 1female, *Prunus domestica*, both 1.VI.1989-Odabaşı, 1female, *Amygdalus communis*, 6.VII.1989-Kocaoğlan, 3females, *Prunus domestica*, 7.IX.1989.

**Habitat:** Gramineae, turf.

**Distribution:** Europe, Mediterranean, Mozambique, India. Central Anatolia in Turkey.

*Frankliniella intonsa* Trybom

Material examined: Hocalar, 1female, *Vicia faba* (flowers), 2.III.1988-Turunçova, 1female, *Matricaria chamomilla*, 6.IV.1988-Korkuteli, 1female, *Taraxacum* sp, 2females, *Pyrus communis* (flowers); 1female, *Capsella bursa-pastoris*; 2female, *Pyrus communis* (flowers); 1female, *Pyrus communis* (flowers), all 13.IV.1988-Serik, 1male, *Vicia sativa* (flowers), 20.IV.1988-İmrähör, 3female, *Malus communis*, 5.3V.1988-Duraliler, 4female, *Punica granatum*, 26.V.1988-Bekirler, 1female, *Quercus cerris*; 1male, *Lycopersicon esculentum*, both 9.IV.1988-Kızılıot, 8females, *Punica granatum*, 9.VI.1988-Akçay, 1female, *Pyrus communis* (leaves), 16.VI.1988-Varsaklı, 3females, *Medicago sativa*, 23.VI.1988-Koyunlu, 1female, *Solanum melongena*; 1female, *Capsicum annuum*, both 23.VI.1988-Boztepe, 1female, *Gossypium hirsutum*, 23.VI.1988-Akpınar, 1female, *Arachis hypogaea*; 1male, 5females, *Capsicum annuum*, 23.VI.1988-Sarıabalı, 1female, *Gossypium hirsutum*, 23.VI.1988-Perakende, 2females, *Cucumis melo*, 23.VI.1988-Korkuteli, 1female, *Phaseolus vulgaris*, 30.VI.1988-Turunçova, 1female, *Acacia karoo*, 30.VI.1988-Manavgat, 1male, *Sesamum indicum*, 14.VII.1988-Hacıvelilér, 1male, 5female *Sesamum indicum*, 4 VIII.1988-Havaalani, 1male, *Solanum melongena*, 8.VIII.1988-Kemerağzı, 3males, 1female, *Gossypium hirsutum*, 18.VIII.1988- Töngüçlü, 1male, 2females, *Gossypium hirsutum*, 18.VIII.1988-Karagöz, 1female, *Sesamum indicum*; 1female, *Arachis hypogaea*, 18.VIII.1988-Korkuteli, 2 males, *Phaseolus vulgaris*; 3males, 1female, *Vigna sinensis*, both 25.VIII.1988-Kuzköy, 2males, 4females, *Phaseolus vulgaris*; 4females, *Medicago sativa*; 3females, *Lycopersicon esculentum*, 25.VIII.1988-Yurtçınar, 2female, *Gossypium hirsutum*; 1female, *Gossypium hirsutum*, both 8.IX.1988-Ihsaniye, 1female, *Zea mays*; 2males, 2females, *Lytrum* sp, both 8.IX.1988-Dumanlar, 1female *Phaseolus vulgaris*; 1male, 10females, *Glycine soja*; 9males, 8female, *Sesamum indicum*; 2males, 13females, *Gossypium hirsutum*, all 8.IX.1988-Kozaağacı, 15females, *Sesamum indicum*, 8.IX.1988-Kısalar, 20females, 7males, *Gossypium hirsutum*; 2males, herb, both 8.IX.1988-Gündoğdu, 1female, *Amygdalus communis*, 8.IX.1988-Hurma, 1female, *Hibiscus esculentus*; 18males, 11females, *Gossypium hirsutum*, both 15.IX.1988-Adrasan, 3females, *Sesamum indicum*; 17males, 8females, *Gossypium hirsutum*; 7females, *Lytrum* sp, al 15.IX.1988-Evrenköy, 1male, 3females, *Arachis hypogaea*; 10males, 27females, *Gossypium hirsutum*, both 29.IX.1988-Manavgat, 9males, 10females, *Gossypium hirsutum*, 29.IX.1988-1male, 5females, *Arachis hypogaea*; 21males, 23females, both 13.X.1988-Çeltikçi, 2males, 5females, *Solanum melongena*; 1female, *Olea europaea*; 3males, 6females, *Vitex agnus-castus*; 4female, *Lycopersicon esculentum*; 11female, *Zea mays*; 4female, *Ficus carica*, all 13.X.1988-Çolaklı, 1female, *Cassia* sp, 7.XI.1988-Mahmutlar, 1female, *Eribotrya japonica*, 10.XI.1988-Kircamisi, 1male, 1female, *Rosa* sp; 1male, *Gerbera* sp, both 25.XI.1988-Abdurrahmanlar, female, *Sinapis* sp (flowers), 8.XII.1988-Hatipler, 2females, *Anemone* sp, 23.II.1989-Hurma, 1female, *Phlomis armeniaca*; 4females, *Prunus domestica* (flowers), both 10.III.1989-Çandır, 3female, *Prunus persica* (flowers), 10.III.1989-Gebiz, 2female, *Taraxacum* sp,

17.III.1989-Abdurrahmanlar, 1female, *Prunus armeniaca*; 1female, *Pisum sativum*; 1female, *Vicia faba*; 1female, *Allium cepa*, all 17.III.1989-Çalkaya, 2female, *Pisum sativum*, 17.III.1989-Karaçalı, 1female, *Calycotome villosa*, 17.III.1989-Düzlerçamı, 1female, *Pyrus elaeagrifolia*; 2female, *Ribes* sp; 8females, *Colutea* sp; 1female *Calycotome villosa*, all 17.III. 1989-Yazır, 1female, *Prunus domestica* (flowers), 24.III.1989-Korkuteli, 1female *Amygdalus communis* (flowers), 24.III.1989-Kayaburma, 1female, *Amygdalus communis*, 7.IV.1989-Burmancı, 1male, 5female, *Pisum sativum*; 1male, 3female, *Prunus persica*; 1male, 6female, *Vicia sativa*; 1female, *Cucurbita pepo*; 1female, *Acacia cyanophylla*, all 7.IV.1989-Kuşlar, 2female, *Euphorbia* sp, 7.IV.1989-Serik, 1female, *Citrus aurantium*, 7.IV.1989-Korkuteli, 1female, *Prunus cerasus* (flowers); 4female, *Euphorbia* sp; both 13.IV.1989-Finike, 5females, *Trifolium* sp; *Olea europaea*, both 20.IV.1989-Serik, 7males, 7females, *Citrus limonium* (flowers); 1male, 2females, *Citrus sinensis* (flowers); 2males, 1female, *Triticum aestivum* (ears); 1male, *Holcus lanatus*, all 27.IV.1989-Çolaklı, 1male, 1female, *Phaseolus vulgaris*; 1female, *Vitis vinifera*, both 27.IV.1989-Aksu, 1female, *Triticum aestivum* (ears), 27.IV.1989-Düzlerçamı, 1male, *Nerium oleander*, 4.V.1989-Yazır, 1male, *Prunus avium* (leaves); 1male, *Prunus armeniaca* (leaves); 1female, *Prunus persica* (leaves), all 4.V.1989-Bahtılı, 1female, *Ficus carica*; 4males, 3females, *Anthemis* sp, both 4.V.1989-Çakırlar, 5males, 1female, *Hypericum* sp; 1male, *Olea europaea*, 5females, *Punica granatum*, 18.V.1989-Kovanlık, 6males, 1female, *Avena sativa* (ears), 18.V.1989-Kurşunlu, 3female, *Phaseolus vulgaris*, 18.V.1989-Yukarıkaraman, 1male, 3female, *Phaseolus vulgaris*; 2females, *Olea europaea*, both 25.V.1989-Tatköy, 5females, *Medicago sativa* (flowers), 25.V.1989-Gömbe, 2females, *Vicia sativa*; 2males, 1female, *Medicago sativa*, both 25.V.1989-Akçay, 16females, *Trifolium* sp; 3female, *Populus* sp; 1female, *Pimpinella anisum*, all 25.V.1989-Mahmutlar, 1female, *Zea mays*; 2females, *Phaseolus vulgaris*, both 1.VI.1989-Çolaklı, 1female, *Lycopersicon esculentum*; 2females, *Capsicum annuum*, both 1.VI.1989-Korkuteli, 1male, *Althea* sp, 16.VI.1989-Finike, 1male, 4females, *Onobrychis* sp; 1female, *Zea mays*, 22.VI.1989-Hatipler, 2females, *Gossypium hirsutum*, 6.VII.1989-Bucakşeyhler, 1male, *Vitex agnus-castus*; 2females, *Vigna sinensis*, both 6.VII.1989-Korkuteli, 3males, 9females, *Medicago sativa*; 1females, *Althea* sp, both 11.VII.1989-Sülekler, 1male, 1female, *Alhagi pseudoalhagi*, 11.VII.1989-Hurma, 1female, *Sesamum indicum*; 2females, *Solanum melongena*; 1male, 2females, *Gossypium hirsutum*; 1male, *Myrtus communis*, all 10.VIII.1989-Gedelme, 1male, 5females, *Phaseolus vulgaris*; 1female, *Malus communis*; 1male, *Hypericum* sp, all 10.VIII.1989-Koyunlar, 1female, *Arachis hypogaea*; 3males, 5females, *Gossypium hirsutum*; 1male, *Arachis hypogaea*; 4female, *Sesamum indicum*, all 17.VIII.1989-Dumanlar, 4females *Gycine soja*; 17.VIII.1989-Serik, 6males, 7females, *Gossypium hirsutum*, 17.VIII.1989-Akçay, 1female, *Prunus domestica*, 31.VIII.1989-Gömbe, 1male, 1female, *Menta* sp, 31.VIII.1989-Kuzköy, 1female, *Populus* sp; 8females, *Medicago sativa*, both 31.VIII.1989-Gazipaşa, 1female, *Arachis hypogaea*; 1male, 3females, *Musa paradisi*; 2females, *Gossypium hirsutum*, all

7.IX.1989-Bayat-bademlisi, 1female, *Phaseolus vulgaris*; 1female, *Prunus persica*; 2females, *Medicago sativa*; 1female, *Zea mays*, all 21.IX.1989-İmrahor, 1male, *Pyrus communis*, 21.IX.1989-Gümüşkaya, 1female, *Taraxacum* sp, 1male, 1female, *Zea mays*; 2females, *Malus communis*, both 21.IX.1989-Ekşili, 1male, 3females, *Phaseolus vulgaris*, 30.X.1989-Çalkaya, 2females, *Bellis perennis*, 30.X.1989-Çağlayan, 1male, herb; 1male, *Eriobotrya japonica*, both 30.X.1989-Bahtılı, 6males, 10females, crucifer; 1male, 1female, *Raphanus sativa*, both 10.XI.1989-Alaylı, 1female *Taraxacum* sp, 21.XII.1989-Dumanlar, 1female, *Pisum sativum*; 2females, *Apium graveolens* var *dulce*, both 21.II.1990.

**Habitat:** Flowers of various plants. Pest on cotton.

**Distribution:** Palaearctic. Probably all over Turkey.

**Remarks:** In costal areas all year around except January, in inland in the period of March-September.

#### *Frankliniella tenuicornis* Uzel

**Material examined:** Korkuteli, 3females, *Triticum aestivum* (pre-ear.); 4females, *Triticum aestivum* (pre-ear.), both 13.IV.1988-Göynük, 5females, *Zea mays*, 27.V.1988-Aksu, 1female, *Gossypium hirsutum*, 9.VI.1988-Bekirler, 3females, *Zea mays*, 9.VI.1988-Kızilot, 1female, *Zea mays*, 9.VI.1988-İçliköy, 9females, *Musa paradisi*; 9.VI.1988-Okurcalar, 1male, 9females, *Musa paradisi*, 9.VI.1988-Sarıabalu, 2females, *Zea mays*, 23.VI. 1988-Akseki, 1male, *Amygladus communis*, 14.VII. 1988-Aşağıkocayatak, 1female, *Zea mays*, 21.VII.1988-Okurcalar, 2males, 17female, *Musa paradisi*, 21.VII.1988-Alanya, 1male, 15females, *Musa paradisi*, 21.VII.1988-Göynük, 4female, *Zea mays*, 4.VIII.1988-Tekirova, 1female, *Zea mays*, 4.VIII.1988-Adrasan, 1female, *Zea mays*, 4.VIII.1988-Çalka, 4females, *Zea mays*, 4.VIII.1988-Belek, 1female, *Arachis hypogaea*, 18.VIII.1988-Çenger, 2males, 2females, *Zea mays*, 18.VIII. 1988-Yeşilköy, 7females, *Musa paradisi*, 18.VIII.1988-Okurcalar, 2males, 18females, *Musa paradisi*, 18.VIII.1988-Korkuteli, 6males, 1females, *Zea mays*; 1male, 2females, *Echinochloa* sp, both 25.VII. 1988-İhsaniye, 3males, 4females, *Zea mays*, 8.IX.1988-Alanya, 1male, 3females, *Musa paradisi*; 4males, 15females, *Musa paradisi*, both 8.IX.1988-Kuzdere, 1male, *Zea mays*, 15.IX.1988-Adrasan, 1male, *Zea mays* 15.mays 15.IX.1988-Turunçova, 3females, *Zea mays*; 1male, *Musa paradisi*, both 15.IX.1988-Okurcalar, 7females, *Musa paradisi*, 29.IX.1988-Alanya, 4females, *Musa paradisi*, 29.IX.1988-Çeltikçi; 3females, *Zea mays*, 13.X.1988-Mahmutlar, 3females, *Musa paradisi*; 1male, *Zea mays*; 4females, *Phaseolus vulgaris*, 13.X.1988-Tekirova, 1male, *Zea mays*, 27.X.1988-Deniztepe, 1female, *Allium porrum*, 8.XII.1988-Korkuteli, 4females, cereal, 13.IV.1989-Elmalı, 1male, 1female, cereal, 13.IV.1989-Aksu, 1female, *Triticum aestivum* (ears), 27.IV.1989-Söğütçük, 1female, *Pyrus elaeagrifolia*, 4.V.1989-Akyar, 1female, *Amygdalus communis* (leaves), 4.V.1989-Bozova, 1female, cereal, 4.V.1989-Kirkgözhan, 1male, *Zea mays*, 18.V.1989-Kovanlık, 1male, *Avena sativa* (ears), 18.V.1989-Çobanisa, 1male, 1female, *Triticum aestivum* (ears), 25.V.1989-Gömbe, 2females, *Triticum aesti-*

*vum* (ears), 25.V.1989-Yeşilöz, 1male, 9females, *Musa paradisii*, 1.VI.1989-Mahmutlar, 8females, *Musa paradisii*; 1male, *Solanum melongena*; 1female, *Zea mays*, all 1.VI.1989-Gölova, 1female, *Triticum aestivum* (ears), 16.VI.1989-Ekşili, 3females, *Zea mays*, 6.VII.1989-Çalış, 3females, *Zea mays*, 6.VII.1989-Bucakşeyhler, 2females, *Sesamum indicum*, 6.VII.1989-Peri, 1female, *Oryza sativa*, 6.VII.1989-Mamatlar, 3females, *Triticum aestivum*, 11.VII.1989-Sülekler, 1male, *Avena sativa*, 11.VII.1989-Gedik, 1male, *Sorghum vulgare*, 27.VII.1989-Bereket, 1female, *Oryza sativa*, 27.VII.1989-Mamalar, 1female, *Rubus fructicosus*; 1females, *Gossypium hirsutum*, both 27.VII.1989-Avsallar, 2males, 5females, *Musa paradisii*, 27.VII.1989-Yeşilköy, 1female, *Zea mays*; 7females, *Musa paradisii*, both 27.VII.1989-Yavrudoğan, 1female, *Sorghum vulgare*, 17.VIII.1989-Elmalı, 1female, *Zea mays*, 31.VIII.1989-Gazipaşa, 1female, *Musa paradisii*, 7.IX.1989-Kocaoğlanlı, 3females, *Musa paradisii*, 7.IX.1989-Koyunlar, 1female, *Avena sativa*, 25.I.1990.

**Habitat:** Graminivorous. Pest of cereals.

**Distribution:** Holarctic. Black Sea, Central and Southern Anatolia regions of Turkey.

**Remarks:** In coastal areas in the period of April-January, in inland between April-August. Surprisingly infests young banana fingers in Antalya.

*Isoneurothrips australis* Bagnall

**Material examined:** Nigit, 1female, *Crateagus* sp (flowers), 30.III. 1988-Aksu, 1female, *Citrus nobilis deliciosa* (flowers), 20.IV.1988-Kaş, 1male, *Pistacia* sp, 16.VI.1988-Koyunlar, 1female, *Prunus persica* (leaves). 23.VI.1988-Çakırlar, 5males, 10females, *Eucalyptus* sp, 10.XI.1988-Bahaklı, 1female, *Myrtus communis*; 11males, 17females, *Eucalyptus* sp; 1male, *Clematis* sp; 1female, grass, all 7.XII.1989-Çakırlar, 29males, 30females, *Eucalyptus* sp; 7.XII.1989-Hacisekililer, 1male, *Myrtus communis*, 7.XII.1989-Göloluk, 10males, 5females, *Eucalyptus* sp, 21.XII.1989-Boğazak, 6males, 4females, *Eucalyptus* sp, 21.XII.1989-Akınlar, 5female, *Eucalyptus* sp, 21.XII.1989-Gökçam, 5males, 17females, *Eucalyptus* sp; 9females, *Eriobotrya japonica*; 3females, grass, all, 9.I.1990-Göynük, 2males, 3females, *Eucalyptus* sp, 9.I.1990-Fettahlı, 2females *Eucalyptus* sp, 25.I.1990-Burmancı, 2females, *Eucalyptus* sp, 25.I.1990-Bahaklı, 2males, 11females, *Eucalyptus* sp; 1female, *Rubus fructicosus*; 1male cereal, all 9.II.1990-Çakırlar, 4males, 2females, *Eriobotrya japonica*; 1male, *Narcissus tazette*; 14females, *Eucalyptus* sp, all 9.II.1990-Kızılarık, 1female, *Amygdalus communis*, 21.11.1990-Boztepe, 7females, *Eucalyptus* sp; 2males, 1female, *Medicago sativa*, both 21.II.1990.

**Habitat:** Ligneous plants.

**Distribution:** Subtropics. Mediterranean region of Turkey.

**Remarks:** Only in coastal areas, on *Eucalyptus* flowers, mainly in the period of November-February.

*Kakothrips robustus* (Uzel)

Material examined: Gündoğmuş, 1female, *Cercis siliquastrum*, 27.IV.1989-Akçay, 1female, *Pimpinella anisum*, 25.V.1989.

Habitat: Fabaceae.

Distribution: Euro-Asian. Presumably all over Turkey.

*Limothrips angulicornis* Jablonowski

Material examined: Akyar, 1female, cereal, 4.V.1989.

Habitat: Graminivorous.

Distribution: Holarctic. Central Anatolia in Turkey.

*Limothrips cerealium* Haliday

Material examined: Yeşilköy, 7females, *Triticum aestivum* (pre-ear.) 17.II.1988-Alanya, 2females, *Jasminum* sp, 17.II.1988-Göynük, 2females, *Triticum aestivum* (pre-ear.), 23.III. 1988-Kumluca, 7females, *Triticum aestivum* (preear.), 9females, *Triticum aestivum* (ears), both 23.III.1988-Gebiz, 1female, *Triticum aestivum* (pre-ear.), 30.III.1988-Duraliler, 3females, *Triticum aestivum* (ears), 11.IV.1988-Beşkonak, 1female, *Hordeum vulgare* (ears). 20.IV.1988-Kepez, 1female, *Olea europaea* (leaves), 27.V.1988-Göynük, 1female, *Vitis vinifera*, 27.V.1988-Bekirler, 4females, *Quercus cerris*; 2females, *Prunus persica* (leaves), both 9.VI.1988-Kızılıot, 4females, *Amygdalus communis*-Akinlar, 1female, *Arachis hypogaea*, 23.VI.1988-Sarıabalu, 1female, *Zea mays*, 23.VI.1988-Hurma, 3female cereal (pre-ear.). 10.III.1989-Beşikçi, 4females, cereal (per-ear.), 10.III.1989-Gebiz, 4females, cereal (per-ear.), =17.III.1989-Abdurrahmanlar, 1female, *Amygdalus communis*, 17.III.1989-Taşağıl, 4females, cereal (pre-ear.), 17.III.1989-Kumluca, 1female, *Triticum aestivum* (ears), 20.IV.1989-Finike, 1female, *Trifolium* sp, 20.IV.1989-Serik, 1male, 4females, *Triticum aestivum* (ears); 13females, *Holcus lanatus*, 27.IV.1989-Çolaklı, 10females, *Triticum aestivum* (ears); 1female, *Olea europaea*; 1female, *Vitis vinifera*, all 27.IV.1989-Gençler, 1male, 3females, *Hordeum vulgare* (ears), 27.IV.1989-Aksu, 2females *Triticum aestivum* (ears), 27.IV.1989-Söğütçük, 1female, *Triticum aestivum* (ears), 4.V.1989-Kumluca, 1male, 1female, *Triticum aestivum* (ears), 11.VI.1989-Yeşilbayır, 1male, *Triticum aestivum*, 18.V.1989-Kovanlık, 4males, , 1female, *Avena sativa* (ears), 18.V.1989-Kurşunlu, 1female, *Amygdalus communis*; 4female, *Olea europaea*, both 18.V.1989-Gaziler, 2females, *Olea europaea*, 18.V.1989-Dumanlar, 1female, *Apium graveolens* var *dulce*, 21.II.1990.

Habitat: Graminivorous, Pest of cereals.

Distribution: Semi-Cosmopolitan. Central Anatolia, Marmara and Mediterranean regions of Turkey.

Remarks: Very rare in inland. In coastal areas between February-June, not only on Gramineae but other plants especially on trees as well. Presumably its presence on trees derives from the need for sheltering.

*Limothrips denticornis* Haliday

**Material examined:** Korkuteli, 1female, *Triticum aestivum* (pre-ear.), 13.IV.1988-Korkuteli, 2females, cereal 13.IV.1989.

**Habitat:** Graminivorous.

**Distribution:** Holarctic. Central Anatolia, Marmara and Aegean regions in Turkey.

*Limothrips transcaucasicus* Savenko

**Material examined:** Yenice, 3females, *Hordeum* sp, 5.V.1988

**Habitat:** Graminivorous.

**Distribution:** Transcaucasia and Turkey. Black Sea - and Central Anatolia regions of Turkey.

## Özet

### Antalya'nın Thysanoptera faunası üzerinde çalışmalar II. Thripidae Sthephens (Kısım 1)

Thripidae familyasına bağlı 28 tür ile iliskin faunistik bilgiler verilmektedir. Bulunan türlerden üçü *Aptinothrips rufus* f.*styligera* Priesner, *Ceratothripoides nigri-ventris* Pelikan ve *Dendrothrips karnyi* (Priesner) Türkiye için yeni kayıttır.

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