

## Studies on the Thysanoptera of Antalya III. Thripidae Stephens (Part 2)\*

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### Summary

This part deals with 27 species belong to Thripidae. Nine of them are new for turkish fauna.

### Introduction

The present part of the study discloses the data on 27 species belong to Thripidae. The author is gratefull to Dr.R. zur Strassen (Forschungsinstutit Senckenberg, Frankfurt am Main, Deutschland) for identification of *Thrips armeniacus* Pelikan.

*Microcephalothrips abdominalis* (D.L.Crawford)

**Material examined :** Duraliler, 1 male, 5 females, *Tagetes* sp, 10.IX.1989.

**Habitat :** Compositae, especially *Tagetes*.

**Distribution :** Tropics and Subtropics. First record for Turkey.

*Neohydatothrips gracilicornis* (Williams)

**Material examined :** Finike, 1 female, *Vicia faba* (flowers), 24.II.1988-Karatepe, 1 female, *Vicia sativa* (flowers), 23.III.1988-Kumluca, 2 females, *Triticum aestivum* (ears), 23.III.1988-Turunçova, 1 male *Citrus* sp (flowers), 6.IV.1988-Yeni-

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ce 1 female, *Calycotome villosa* (flowers), 13.IV.1988-Sinekçibeli, 1 male, *Cedrus* sp. 16.VI.1988-Söğütçuması, 1 female, *Cedrus* sp; 1 male, 1 female, *Pinus brutia*; 1 male, 3 females, *Quercus* sp, all 4.VIII.1988-Yazır (Korkuteli), 1 male, *Prunus avium* (leaves), 4.V.1989-Akyar, 1 male, cereal, 4.V.1989-Özdemir, 1 male, *Vitis vinifera*; 16.VI.1989-Cevizli, 2 males, 3 females, *Rosa canina*; 1 female, *Vitis vinifera*; 1 female, *Quercus cerris*, all 29.VI.1989-Fersin, 1 female, *Cydonia vulgaris*, 29.VI.1989.

**Habitat :** Fabaceae, ligneous plants including Pinaceae.

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

*Odontothrips confusus* Priesner

**Material examined :** Mamatlar, 2 males, *Medicago sativa*, 11.VII.1989-Bozova, 1 male, *Prunus domestica*, 3.VIII.1989.

**Habitat :** Fabaceae, particularly *Medicago*.

**Distribution :** Euro-Siberian. Central Anatolia of Turkey.

*Odontothrips loti* Haliday

**Material examined :** Sülekler, 2 males, *Alhagi pseudoalhagi* 11.VII.1989.

**Habitat :** Fabaceae, preferably *Lotus*.

**Distribution :** Euro-Siberian. New record for Turkey.

*Odontothrips karnyi* Priesner

**Material examined :** Yavaş, 2 females, *Lupinus angustifolius* (flowers), 30.III.1988-Kale, 1 male, *Phaseolus vulgaris*, 24.XI.1988-Beşikçi, 2 females, *Calycotome villosa*, 10.III.1989 Gebiz, 1 female, *Calycotome villosa*, 17.III.1989-Aksu, 1 male, *Narcissus tazette*, 25.I.1990.

**Habitat :** Fabaceae.

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

*Odontothrips meridionalis* Priesner

**Material examined :** Yenice, 24 males, 18 females, *Spartium junceum* (flowers); 1 male, 1 female, *Colutea* sp, both 5.V.1988-Düzlerçam, 3 males, 12 females, *Spartium junceum*; 2 females, *Quercus* sp; 1 female, *Nerium oleander*, all 4.V.1989 Yenice, 3 males, 3 females, *Genista* sp, 11.VII.1989-Yenice, 1 males, 3 females, *Genista* sp, 3.VIII.1989.

**Habitat :** Fabaceae, particularly *Spartium junceum*.

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

*Oxythrips ajugae* Uzel

Material examined : Karatepe, 1 male, *Citrus* sp (flowers), 23.III.1988-Göynük, 1 female, *Calycotome villosa* (flowers); 1 female, *Triticum aestivum* (pre-ear.), both 23.III.1988-Kumluca, 5 female, *Triticum aestivum* (pre-ear.); 1 male, 1 female, *Pyrus elaeagrifolia* (flowers); 8 males, 32 females, *Pinus pinea* (flowers); 1 male, 2 females, *Asphodelus* sp (flowers), all 23.III.1988-Gebiz 13 females, *Pinus brutia* (flowers); 1 female, *Euphorbia biglandulosa*; 2 female, *Triticum aestivum*, all 30.III.1988-Turunçova, 1 female, *Euphorbia helioscopia*, 6.IV.1988-Adrasan, 4 females, *Pinus brutia* (flowers), 6.IV.1988-Korkuteli, 1 female, *Prunus persica* (flowers); 1 female, *Triticum aestivum* (pre-ear.), both 13.IV.1988-Maarif, 6 females, *Phyllirea* sp; 3 males, 25 females, *Pinus brutia*; 1 female, *Euphorbia* sp, all 13.IV.1988-Yenice, 6 female, *Quercus* sp (flowers); 1 female, *Arbutus andrachne* (flowers), both 13.IV.1988-Beşkonak, 1 female, *Hordeum vulgare* (ears), 20.IV.1988-Yenice, 1 female, *Olea europaea* (flowers); 4 female, *Colutea* sp (flowers), both 5.V.1988-Geyikbayırı, 1 male, *Amygdalus communis* (flowers); 2 females, *Pinus brutia*, 23.II.1989-Hurma; 2 female, cereal (pre-ear.), 10.III.1989-Çandır, 3 males, 16 females, *Pinus brutia*; 8 males, 8 females, *Ceratonia siliqua*; 1 female, *Calycotome villosa*; 1 female, *Prunus domestica* (flowers); 3 males, 6 females, *Citrus* sp (flowers), 5 females, *Cupressus sempervirens*, all 10.III.1989-Beşikçi, 1 male, *Calycotome villosa*, 10.III.1989-Akçapınar, 1 female, *Citrus limonium*, 17.III.1989-Gebiz, 1 male, *Taraxacum* sp; 3 females, cereal; 1 male, 2 females, *Pinus brutia*, both 17.III.1989-Sarıabaklı, 1 male, 7 females, *Pinus brutia* 17.III.1989-Taşağıl, 1 female, *Prunus armeniaca*, 17.III.1989-Düzlerçamı, 1 male, 7 females, *Pinus brutia*; 1 female, *Ribes* sp, both, 24.III.1989-Hacıveliler, 1 female, *Citrus sinensis*, 24.III.1989-Kızıllar, 1 female, *Pinus brutia*, 7.IV.1989-Yenice, 2 females, *Pistacia* sp, 13.IV.1989-Maarif, 1 female, *Pinus brutia*, 13.IV.1989-Öküzgözü, 1 female, *Amygdalus communis*; 1 female, *Prunus cerasus*, both 13.IV.1989-Kumluca, 1 female, *Triticum aestivum*, 20.IV.1989-Güneycik, 1 female, *Quercus cerris*, 27.IV.1989-Gündoğmuş, 1 female, *Vitis vinifera*, 27.IV.1989-Söğütük, 1 female, *Pyrus elaeagrifolia*, 4.V.1989-Yazır (Korkuteli), 2 females, *Prunus armeniaca*; 1 female, *Prunus persica*; 1 female, *Juglans regia* all 4.V.1989-Korkuteli, 1 female, *Prunus cerasus*, 4.V.1989-Akyar, 1 female, *Amygdalus communis* (leaves), 4.V.1989-Bozova, 1 female, *Rosa canina*; 1 female, *Amygdalus communis* (leaves), both 4.V.1989-Tatköy, 1 female, *Juglans regia* 25.V.1989.

Habitat : Trees, particularly *Pinus*

Distribution : West Palaearctic. Aegean, Mediterranean and Central Anatolia regions of Turkey.

Remarks : In the coast in February-April, in the inland April-May. Numerous adults and larvae on *Pinus* during the pollination period.

*Oxythrips priesneri* Pelikan

Material examined : Maarif, 2 females, *Phyllirea* sp., 13.IV.1988.

Habitat : *Pinus* and *Picea*

Distribution : Czechoslovakia, Germany. First record for Turkey

*Parascolothrips priesneri* Mound

Material examined : Çeltikçi, 1 female, *Olea europaea*, 13.X.1988-Demirciler, 1 male, *Quercus* sp. 13.X.1988-Kovanlık, 4 females *Vitis vinifera*, 18.V.1989-Bayatbademli, 5 males, *Vitis vinifera*; 18 males, 17 females, *Malus communis*; 4 males, 3 females, *Prunus domestica*; 1 male, *Helianthus annuus*, all, 21.IX.1989-Ormana, 5 males, 10 females, *Malus communis*; 1 female, *Vitis vinifera*, both 28.IX.1989-Ibradı, 2 females, *Malus communis*; 1 female, *Prunus domestica*, both 28.IX.1989-Yelten, 1 female, *Capsicum annuum*, 23.X.1989.

Habitat : Deciduous trees especially apple. Known as predator of tetranychids.

Distribution : Iraq, Iran, Israel. Mediterranean region of Turkey.

*Physothrips albicornis* (Knechtel)

Material examined : Beşkonak, 5 females, *Malus communis* (flowers); 1 female, *Cydonia vulgaris* (flowers), both 20.IV.1988-Göynük, 1 female, *Vitis vinifera*, 27.V.1988-Bekirler 4 females, *Quercus cerris*; 1 female, *Lycopersicon esculentum*; 1 male, 3 females, *Prunus persica*, all 9.VI.1988-Koyunlar, 1 female, *Prunus persica*, 22.VI.1988-Akseki, 1 male, 2 females, *Amygdalus communis*; 2 males, 4 females, *Vitis vinifera*, both 14.VII.1988-Fersin, 2 females, *Vitis vinifera*, 14.VII.1988-Güzelbağ, 2 males, 3 females, *Vitis vinifera*; 1 male, *Amygdalus communis*; 1 male, 1 female, *Hibiscus esculentus* all 21.VII.1988-Güney, 2 female, *Amygdalus communis*, 21.VII.1988-Güney, 2 female, *Amygdalus communis*, 21.VII.1988-Adrasan, 1 male, *Gossypium hirsutum*, 4.VIII.1988-Yukarıkaraman, 3 female, *Cupressus sempervirens*, 25.VIII.1988-Öküzgözü, 2 males, 5 female, *Amygdalus communis*; 25.VIII.1988-Gölova, 2 females, *Vitis vinifera*, 25.VIII.1988-Gökpinar, 1 male, *Lycopersicon esculentum*, 25.VIII.1988-Çeltikçi, 3 females, *Solanum melongena*, 13.X.1988-Demirciler, 1 female, *Pistacia* sp; 3 females, *Quercus* sp, both 13.X.1988-Düzlerçam, 1 female, *Ribes* sp; 24.III.1989-Yazır (Korkuteli), 5 females, *Prunus domestica* (leaves), 13.IV.1989-Elmalı, 1 female, cereal, 13.IV.1989-Bayat, 2 males, 2 females, *Populus* sp, 4.V.1989-Yazır (Korkuteli), 1 female, *Prunus persica* (leaves), 4.V.1989-Yeşilbayır, 1 females, *Prunus armeniaca* (leaves), 18.V.1989-Kırkgözhan; 1 female, *Zea mays*, 18.V.1989-Kovanlık, 1 female, *Morus alba* (leaves); 4 females, *Amygdalus communis*; 2 female, *Vitis vinifera*, all 18.V.1989-Öküzgözü, 9 females, *Amygdalus communis* (leaves), 25.V.1989-Çobanisa, 1 female, *Amygdalus communis* (leaves), 25.V.1989-Macar, 1 females,

*Prunus domestica* (leaves); 4 females, *Quercus cerris*, both 1.VI.1989-Yenice, 2 female, *Arbutus andrachne*, 16.VI.1989-Kale, 3 females, *Pistacia* sp, 22.VI.1989-Akseki, 2 females, *Malus communis*; 1 male, 8 females, *Vitis vinifera*, both 29.VI.1989-Cevizli, 1 male, 3 female, *Malus communis*; 1 male, *Vitis vinifera*; 1 male, *Vitis vinifera*; 1 female, *Quercus cerris*; 1 male, *Verbascum* sp, all 29.VI.1989-Geriş, 3 females, *Vitis vinifera*, 29.VI.1989-Fersin, 1 female, *Prunus domestica*, 29.VI.1989-Eksili, 1 males, 3 female, *Prunus persica*; 1 male, 2 female, *Solanum melongena*, both 6.VII.1989-Hatipler, 1 male, 1 female, *Olea europaea*, 6.VII.1989-Bucakşeyhler, 2 female, *Hibiscus esculentus*, 6.VII.1989-Yenice, 1 male, *Nerium oleander*, 11.VII.1989-Bozova, 1 male, 1 female, *Juglans regia*; 1 male, 2 female, *Prunus domestica*, both 3.VIII.1989-Çobanisa, 1 female, *Amygdalus communis*, 3.VIII.1989-Doyran, 1 male, 2 females, *Prunus persica*, 10.VIII.1989- Yavrudoğan, 1 female, *Gossypium hirsutum*, 17.VIII.1989-Çobanisa, 1 males, 7 females, *Vitis vinifera*; 1 male, 2 females, *Prunus domestica*, both 31.VIII.1989-Kocaoğlanlı, 1 male, *Capsicum annum*; 1 female, *Solanum melongena*; 1 male, *Vitex agnus-castus*, 7.IX.1989-Göynük, 2 females, *Prunus persica*, 14.IX.1989-Beycik, 1 male, *Vitis vinifera*, 14.IX.1989-Bayatbademli, 1 female, *Prunus domestica*; 1 female *Capsicum annum*; 1 female, *Phaseolus vulgaris*; 1 female, *Prunus persica*; 1 female, *Zea mays*; 3 female, *Amygdalus communis*; all 21.IX.1989-İmrahor, 2 females, *Prunus persica*, 21.IX.1989-Kızılpinar, 4 females, *Prunus domestica*; 2 males, 6 females, *Juglans regia*; 3 females, *Phaseolus vulgaris*; 7 females, *Capsicum annum*, all 21.IX.1989- Gölova, 9 males, 9 females, *Vitis vinifera*; 2 females, *Pyrus communis*, 21.IX.1989-Gümüşkaya, 6 females, *Juglans regia*; 1 male, *Malus communis*, both 21.IX.1989-Ibradı, 3 males, 2 females, *Corylus avellana*; 1 male, *Juglans regia*, both 28.IX.1989-Yazır (Korkuteli), 1 female, *Pyrus communis*; 23.X.1989-Yelten, 2 females, *Amygdalus communis*; 1 female, *Malus communis*; 1 male, *Solanum melongena*; 1 male, *Capsicum annum*; 1 male, *Myrtus communis*, 30.X.1989-Hatipler, 1 male, 1 female, *Prunus persica*, 30.X.1989-Kurşunlu, 1 female, *Phaseolus vulgaris*, 30.X.1989-Duraliler, 1 female, *Conyza canadensis*, 10.XI.1989.

**Habitat :** Deciduous trees.

**Distribution :** Europe, except north. Central and Southern Anatolia in Turkey.

**Remarks :** In the period of April-October in inland, in March-November in coast.

#### *Physothrips salicis* (O.M.Reuter)

**Material examined :** Yukarıkaraman, 5 females, *Populus* sp, 25.V.1989-Fersin, 1 males, 1 female, *Lycopersicon esculentum* 29.VI.1989-Mamatlar, 8 females, *Populus* sp; 1 female, *Pyrus communis*, both 11.VII.1989-Bozova, 1 female, *Prunus domestica*, 3.VIII.1989-Kuzköy, 1 female, 1 male, *Populus* sp, 31.VIII.1989-Adrasan, 1 female, *Salix* sp, 14.IX.1989-Yelten, 1 male, 8 females, *Populus* sp; 1 female, *Cucurbita pepo*; 4 males, 1 female, *Pimpinella anisum*; 3 males *Medicago sativa*; 2 males, *Raphanus sativa*, all 23.X.1989.

**Habitat :** *Populus* and *Salix*.

**Distribution :** Euro-Siberian. Central Anatolia in Turkey.

***Rhopalandrothrips tschirkunae* Jachontov**

**Material examined :** Kuzköy, 1 female, *Malus communis* (flowers), 5.V.1988-Gençler, 1 female, *Vitis vinifera*, 14.VII.1988-Korkuteli, 1 female, *Prunus persica* (flowers), 13.IV.1989-Sülekler, 1 male, 2 females, *Malus communis*, 11.VII.1989-Bayatbademlisi, 1 male, 3 females, *Capsicum annum*, 21.IX.1989-Ormana, 2 males, 2 females, *Vitis vinifera*; 1 female, *Amygdalus communis*; 1 male, bush; 2 males, *Juglans regia* all 28.IX.1989-Ibradı, 1 male, 1 female, *Cornus mas*; 1 male, *Prunus domestica*; 3 males, 1 female, *Prunus persica*, 1 male, *Solanum melongena*, all 28.IX.1989-Fersin, 1 male, 3 females, *Arbutus andrachne*, 28.IX.1989-Yazır (Korkuteli), 1 female, *Malus communis*, 23.X.1989.

**Habitat :** Ligneous plants.

**Distribution :** Uzbekistan, Turkey. Central Anatolia in Turkey.

***Rubiothrips vitalbae* (Bagnall)**

**Material examined :** Mavikent, 1 female, *Citrus* sp (flowers), 6.IV.1988-Göynük, 1 male, *Vitis vinifera*, 27.V.1988-Macar, 1 female, *Vitis vinifera*, 1.VI.1989-Geriş, 5 female, *Clematis* sp, 29.VI.1989-Hatipler, 1 female, *Prunus domestica*, 30.X.1989.

**Habitat :** *Clematis vitalba*.

**Distribution :** Warm parts of Europe. Central Anatolia in Turkey.

***Rubiothrips vitis* (Priesner)**

**Material examined :** Gölova, 1 female, *Vitis vinifera*, 16.VI.1988-Gökpınar, 1 male, 6 females, *Vitis vinifera*, 25.V.1988.

**Habitat :** *Vitis vinifera*

**Distribution :** Palestina, Greece, Romania and Turkey. The most common thrips species in vineyards of Aegean region in Turkey (Cengiz, 1974).

***Scirtothrips canizoi* Titschack**

**Material examined :** Nigit, 1 female, *Crateagus* sp (flowers); 30.III.1988-Elmalı, 10 males, 10 female, *Amygdalus communis* (leaves); 1 female, *Pyrus communis* (leaves), both 5.V.1988-Kayaburma, 1 male, 5 females, *Amygdalus communis* (leaves). 7.IV.1989-Akyar, 1 female, *Prunus domestica* (leaves); 2 females, *Amygdalus communis* 1 both, 4.V.1989-Bozova, 1 female, *Amygdalus communis* (leaves), 4.V.1989.

**Habitat :** It has been found to breed on *Amygdalus communis* in this study.

**Distribution :** Known only from Spain. New for Turkish fauna.

*Scirtothrips dignus* zur Strassen

**Material examined :** Duraliler, 3 females, *Cupressus sempervirens*, 16.V.1988.

**Habitat :** *Juniperus phoenicea*

**Distribution :** Greece, and Spain (Berzosa and Cano, 1989). First record for Turkey.

*Scirthothrips mangiferae* Priesner

**Material examined :** Beldibi, 6 females, *Arbutus andrachne*, 27.V.1988-Perakende, 2 females, *Myrtus communis*, 23.VI.1988-Kuzdere, 11 females, *Myrtus communis*, 15.IX.1988-Bahtılı, 1 female, *Ficus carica*, 11.V.1989-Yenice, 2 females, *Arbutus andrachne*, 16.VI.1989-Ekşili, 2 females, *Myrtus communis*, 30.X.1989-Çakırlar, 4 females, *Myrtus communis*, 10.XI.1989.

**Habitat :** *Mangifera indica* (mango) and *Parkinsonia aculeata*.

**Distribution :** East Mediterranean-East Africa. New for Turkey.

**Remarks :** Only in coastal areas, and primarily on *Myrtus* and *Arbutus* in Turkey.

*Scolothrips longicornis* Priesner

**Material examined :** Yukarıkocayatak, 1 female, *Gossypium hirsutum*; 1 female, *Solanum melongena*, both 14.VII.1988-Aşağıkocayatak, 2 females, *Hibiscus esculentus*, 21.VII.1988-Belek, 4 females *Arachis hypogaea*, 18.VIII.1988-Korkuteli, 10 females, *Phaseolus vulgaris*; 1 male, 8 females, *Prunus avium*; 10 females, *Prunus persica*; 1 male, 6 females, *Echinocloa* sp, all 25.VIII.1988-Öküzungözü, 3 females, *Prunus spinosa*; 2 females, *Amygdalus communis*, 25.VIII.1988-Dumanlar, 1 female, *Glycine soja*, 8.IX.1988-Çolaklı, 1 male, 4 females, *Arachis hypogaea*, 13.X.1988-Demirciler, 1 female, *Quercus* sp, 13.X.1988-Mahmutlar, 1 female, *Phaseolus vulgaris*, 10.XI.1988-Gömbe, 1 female, *Malus communis* (leaves), 25.V.1986-Bozova, 1 male, *Amygdalus communis*, 3.VIII.1989-Hurma, 1 male, 7 females, *Arachis hypogaea*, 10.VIII.1989-Akçay, 2 female, *Malus communis*, 31.VIII.1989-Kuzköy, 1 female, *Prunus persica*, 31.VIII.1989-Beycik, 6 females, *Malus communis*, 2 females, *Malus communis*; 1 female, *Morus alba*, all 14.IX.1989-Bayatabademli, 1 female, *Prunus domestica*, 21.IX.1989-İmrahor, 1 female, *Prunus persica*, 3 females, *Malus communis*; 1 male, 1 female, *Pyrus communis*, all 21.IX.1989-Kızılpinar, 2 fe-

males, *Vitis vinifera*; 1 female, *Allium sativum*; 2 females, *Phaseolus vulgaris*; 2 females, *Capsicum annum*; all 21.IX.1989-İbradı, 1 female, *Solanum melongena*, 28.IX.1989-Korkuteli, 1 female, *Prunus domestica*, 23.X.1989-Yelten, 2 females, *Capsicum annum* 23.X.1989.

**Habitat :** Predatory on tetranychids.

**Distribution :** West Palaearctic. East and Southern Anatolia in Turkey.

*Sitothrips arabicus* Priesner

**Material examined :** Korkuteli, 2 females, *Triticum aestivum* (ears), 16.VI.1988-Belen, 5 females, *Triticum aestivum* (ears)-Gençler, 5 females, *Hordeum vulgare* (ears), 27.IV.1989-Söğütük, 4 females, *Triticum aestivum* (ears), 4.V.1989-Bozova, 3 females, cereal; 1 female, *Hordeum vulgare* (ears), both 4.V.1989-Eymir, 1 female, *Hordeum vulgare* (ears), 25.V.1989-Öküzgözü, 2 females, *Triticum aestivum*, 16.VI.1989-Karaköy, 6 females, *Triticum aestivum* (ears), 16.VI.1989-Gölova, 3 females, *Triticum aestivum* (ears), 16.VI.1989.

**Habitat :** Graminivorous.

**Distribution :** Mediterranean, Transcaucasia. Central Anatolia in Turkey.

**Remarks :** Mainly in inland.

*Stenothrips graminum* Uzel

**Material examined :** Çobanisa, 1 male, 3 females, *Triticum aestivum*, 25.V.1989-1 female, *Pimpinella anisum*, 11.VII.1989.

**Habitat :** Graminivorous.

**Distribution :** West Palaearctic. Central Anatolia, Marmara and Mediterranean regions of Turkey.

*Taeniothrips annulatus* Karny

**Material examined:** Finike, 2 males, 6 females, *Euphorbia* sp, 24.II.1988-Kumluça, 1 male, 4 females, *Euphorbia* sp, 23.III.1988-Gebiz, 2 males, *Euphorbia biglandulosa*; 1 male, 5 females, *Euphorbia* sp, both 30.III.1988-Turunçova, 2 females, *Euphorbia helioscopia*, 6.IV.1988-Maarif. 1 female, *Euphorbia* sp, 13.IV.1988-Yenice, 2 males, 5 females, *Calycotome villosa* (flowers); 1 male, *Anthemis* sp; 15 males, *Colutea* sp; 1 male, 1 female, *Cardaria* sp, all 5.V.1988-Keppez, 3 females, *Citrus sinensis* (flowers); 5.V.1988-Duraliler, 1 female, *Nerium oleander* (flowers); 26.V.1988-Kemer, 1 female, *Erica* sp (flowers), 24.XI.1988-Günük, 6 females, *Euphorbia* sp, 22.XII.1988-Kumluça, 1 female, *Euphorbia* sp, 19.I.1989-Çakırlar, 3 males, 2 females, *Euphorbia* sp, 23.II.1989-Hatipler, 1 female, *Euphorbia* sp, 23.II.1989-Hurma, 3 female, *Euphorbia* sp, 10.III.1989-Çandır, 1

male, *Calycotome villosa*; 1 male, *Raphanus raphanistrum*, 1 both 10.III.1989-Beşikçi, 1 male, cereal, 10.III.1989-Ulupınar, 3 males, 11 females, *Arbutus andrachne*, 10.III.1989-Akçapınar, 3 males, 1 female, *Euphorbia* sp, 17.III.1989-Düzlerçamı, 13 males, 7 females, *Euphorbia* sp; 24.III.1989-Arif, 6 males, 25 females, *Euphorbia* sp; 1 female, *Prunus persica* (flowers); 1 male, *Pyrus communis*, all 24.III.1989-Düzlerçamı, 1 male, 1 female, *Ribes* sp; 1 male, 1 female, *Citrus* sp, both 13.IV.1989-Yenice, 16 males, 4 females, *Calycotome villosa*; 31 males, 1 female, *Euphorbia* sp; 1 male, *Triticum aestivum*; 1 female, *Colutea* sp, all 13.IV.1989-Söğütük, 1 male, 2 females, *Pyrus elaeagrifolia*, 13.IV.1989-Beldibi, 9 males, 5 females, *Spartium junceum*, 20.IV.1989-Kavak, 1 female, *Malus communis* (flowers), 20.IV.1989-Gündoğmuş, 1 male, *Ribes* sp, 27.IV.1989-Yenice, 1 male, *Paliurus spina christi*, 4.V.1989-Bayat, 1 female, *Pyrus communis*, 4.V.1989-Yazır (Korkuteli), 1 male, *Eleagnus* sp; 1 male, *Juglans regia*, both 4.V.1989-Altınyaka, 1 female, *Juglans regia* (leaves); 2 males, *Rosa canina*; 1 male, *Prunus armeniaca* (leaves), all 11.V.1989-Bahtılı, 1 male, *Salix* sp, 7.XII.1989-Gökçam, 1 female, *Euphorbia* sp, 9.I.1990-Doyran, 18 female, 18 females, *Asphodelus* sp, 9.I.1990-Hurma, 1 female, *Clematis* sp, 9.I.1990-Bahtılı, 2 females, *Euphorbia* sp; 1 female, *Euphorbia* sp, both 9.II.1990.

**Habitat:** Flowers of various plants

**Distribution:** Mediterranean with exception of Africa. Aegean and Mediterranean.

**Remarks:** Mainly in coastal areas, between November and May. Its main host is *Euphorbia* in Antalya.

***Taeniothrips inconsequens* (Uzel)**

**Material examined:** Kumluca, 1 female, *Pyrus elaeagrifolia* (flowers), 2.III.1988-Töngüslü, 9 male, *Calycotome villosa*, 30.III.1988-Abdurrahmanlı, 1 female, *Pyrus elaeagrifolia* (flowers), 30.III.1988-Korkuteli, 1 female, *Pyrus communis* (flowers); 2 females, *Triticum aestivum* (pre-earing); 4 females, *Prunus persica* (flowers); 4 females, *Prunus domestica* (flowers); 2 females, *Pyrus communis* (flowers); 5 females, *Prunus domestica* (flowers); 3 females, *Pyrus communis* (flowers) all 13.IV.1988-Yenice, 1 female, *Quercus* sp (flowers); 4 females, *Arbutus andrachne*, both 13.IV.1988-Elmalı, 7 females, *Malus communis* (flowers); 2 females *Cydonia vulgaris* (flowers); 1 female, *Triticum aestivum* (pre-earing); 2 females, *Juglans regia* (flowers); 4 females, *Pyrus communis* (flowers); 2 females, *Crateagus* sp (flowers), all 5.V.1988-Geyikbayırı, 1 male, *Vicia Faba* (flowers), 23.II.1989-Kovanlık, 1 male, cereal, 23.II.1989-Hurma, 1 female, *Prunus armeniaca* (flowers), 10.III.1989-Çandır, 1 female, *Prunus persica* (flowers), 10.III.1989-Ulupınar, 4 males, 21 females, *Arbutus andrachne*, 10.III.1989-Akçapınar, 1 female, *Prunus domestica*, 17.III.1989-Karaçalı, 1 female, *Calycotome villosa*, 17.III.1989-Düzlerçamı, 1 female, *Pyrus elaeagrifolia* (flowers); 2 females, *Ribes* sp; 7 females, *Calycotome villosa*, all 24.III.1989-Yenice, 1 male, 26 females, *Arbutus*

*andrachne* (flowers), 24.III.1989-Maarif, 4 females, *Pyrus elaeagrifolia*, 24.III.1989-Söğütçük, 2 males, 1 female, *Amygdalus communis* (flowers); 2 females, *Prunus domestica* (flowers), 24.III.1989-Yazır, 1 female, *Prunus persica* (flowers), 24.III.1989-Korkuteli, 1 male, 4 females, *Amygdalus communis* (flowers), 4 males, 16 females, *Prunus domestica* (flowers), both 24.III.1989-Elmalı, 2 females, *Prunus domestica* (flowers); 6 females, *Amygdalus communis* (flowers), both 24.III.19879-Arif, 6 females, *Malus communis* (flowers); 1 female, *Euphorbia* sp; 5 females, *Prunus persica* (flowers); 1 female, *Prunus avium* (flowers) all 24.III.1989-Yenice, 2 females, *Laurus nobilis*; 3 females, *Arbutus andrachne*, both 13.IV.1989-Korkuteli, 1 female, *Prunus persica* (flowers); 1 female, *Malus communis* (flowers); 5 females, *Pyrus communis* (flowers); 2 females, *Prunus cerasus* (flowers); 1 female, *Taraxacum*; 2 females, *Ribes* sp; 1 female, *Juglans regia* (flowers); 4 females, *Prunus avium* (flowers), all 13.IV.1989-Elmalı, 3 females, *Cydonia vulgaris*, 13.IV.1989-İhsaniye, 1 male, 3 females, *Calycotome villosa*, 21.II.1990.

**Habitat:** Fruit trees in Rosaceae. Fruit pest.

**Distribution:** Palaearctic. Central Anatolia and Aegean region in Turkey.

**Remarks:** In coast in the period of February-April, in inland March-May, on flowers of fruit trees (particularly temperate fruits). Heavily infested *Arbutus andrachne* flowers in coastal and transitional areas.

***Taeniothrips meridionalis* Priesner**

**Material examined:** Yeşilköy, 1 male, 2 females, *Vicia faba* (flowers), 17.II.1988-Gazipaşa, 3 females, *Calycotome villosa* (flowers); 3 females, *Calycotome villosa* (flowers), both 2.III.1988-Göynük, 1 female, *Calycotome villosa* (flowers), 23.III.1989-Gebiz, 1 male, *Asphodelus* sp; 2 females, *Euphorbia* sp, both 30.III.1988-Nığış, 1 female, *Pyrus elaeagrifolia* (flowers), 2 females, *Crateagus* sp (flowers), both 30.III.1988-Kumluca, 2 females, *Citrus* sp (flowers), 1 female, *Pyrus eleagrifolia* (flowers), both 30.III.1988-Turunçova, 6 females, *Citrus* sp, 6.IV.1988-Mavikent, 1 female, *Citrus* sp (flowers), 6.IV.1988-Korkuteli, 13 females, *Pyrus communis* (flowers), 3 females, *Prunus persica* (flowers); 2 females, *Capsella bursa-pastoris*; 3 females, *Prunus domestica* (flowers); 17 females, *Pyrus communis* (flowers); 1 female, *Prunus domestica* (flowers); 1 females, *Pyrus communis* (flowers), all 13.IV.1988-Yazır (Korkuteli), 10 females, *Prunus persica* (flowers), 13.IV.1988-Yenice, 4 females, *Calycotome villosa* (flowers), 13.IV.1988-Güvercinlik, 1 male, 4 females, *Rosa* sp, 20.IV.1988-Beşkonak, 7 females, *Malus communis* (flowers); 1 male, 4 females, *Cydonia vulgaris* (flowers); 1 female, *Scandix pecten-veneris* (flowers), all 20.IV.1988-Sağırın, 1 female, *Cistus* sp (flowers); 1 male, 1 female, *Cercis siliquastrum* (flowers), both 20.IV.1988-Yenice, 1 male, *Colutea* sp; 2 males, 5 females, *Cardaria* sp, both 5.V.1988-Yazır (Korkuteli), 2 females, *Cydonia vulgaris* (flowers); 3 females, *Malus communis* (flowers), both 5.V.1988-İmrähör, 3 females, *Malus communis* (flowers), 5.V.1988-Elmalı, 2 males, 11 females, *Malus communis* (flowers); 6 females, *Cydonia vulgaris* (flowers); 1 female, *Juglans regia* (flowers); 3 males, 10 females, *Crateagus*

sp (flowers); all 5.V.1988-Kuzuköy, 14 females, *Malus communis* (flowers), 5.V.1988-Çobanisa, 7 females, *Malus communis* (flowers), 5.V.1988-Kepez, 1 female, *Citrus sinensis*, 5.V.1988-Duraliler, 1 female, *Nerium oleander* (flowers), 26.V.1988-Hurma, 1 male, *Nerium oleander* (flowers), 27.V.1988-Korkuteli, 1 female, *Cardaria* sp, 16.VI.1988-Gölova, 1 male, 1 female, *Vitis vinifera*, 16.VI. 1988-Gömbe, 1 female, herb, 16.VI.1988-Mahmutlar, 1 female, *Eriobotrya japonica*, 10.XI.1988-Abdurrahmanlar, 1 female, *Eriobotrya japonica* (flowers), 8.XII.1988-Kumluca, 1 female, *Euphorbia* sp, 16.I.1989-Okurcalar, 1 female, *Vicia faba*; 3 females, *Eriobotrya japonica* (flowers), both 2.II.1989-Mahmutlar, 1 female, *Vicia faba* (flowers), 2.II.1989-Okurcalar, 3 females, *Calycotome villosa*, 2.II.1989-Çakırlar, 3 females, *Euphorbia* sp, 23.II.1989-Geyikbayırı, 1 female, *Vicia faba*; 1 female, *Narcissus tazette*; 1 female, *Amygdalus communis* (flowers), 1 female, *Calycotome villosa* (flowers); 1 female, *Asphodelus* sp; 3 females, *Daphne oleoides*; 1 female, *Pinus brutia*, all 23.II.1989-Kovanlık, 1 female, cereal, 23.II.1989-İlica, 10 females, *Amygdalus communis* (flowers), 23.II.1989-Düden, 1 female, *Prunus persica* (flowers), 23.II.1989-Hurma, 1 female, *Phlomis armeniaca*; 1 female, *Euphorbia* sp; 1 female, *Prunus domestica* (flowers), 1 female, *Platanus orientalis* (flowers); 1 female, *Salix* sp (flowers), all 10.III.1989-Çandır, 1 female, *Prunus persica* (flowers); 3 females, *Calycotome villosa* (flowers); 1 female, *Asphodelus* sp; 1 female, *Prunus domestica* (flowers); 1 female, *Citrus* sp (flowers), all 10.III.1989-Hasyurt, 1 female, *Koelpina* sp, 10.III.1989-Beşikci, 1 female, *Calycotome villosa*, 10.III.1989-Akçapınar, 1 female, *Prunus persica*, 17.III.1989-Gebiz, 4 females, *Calycotome villosa*, 17.III.1989-Taşağıl, 1 female, *Prunus armeniaca*, 17.III.1989-Düzlerçamı, 3 females, *Pyrus elaeagrifolia*, 24.III.1989-Maarif, 4 females, *Pyrus elaeagrifolia*, 24.III.1989-Söğütçük, 2 females, *Amygdalus communis* (flowers); 4 females, *Prunus domestica* (flowers), 24.III.1989-Yazır, 1 female, *Prunus persica* (flowers),, 24.III.1989-Korkuteli, 6 females, *Amygdalus communis* (flowers); 3 females, *Prunus persica* (flowers), both 24.III.1989-Öküzgözü, 4 females, *Amygdalus communis* (flowers), 24.III.1989-Arif, 2 females, *Malus communis* (flowers), 7 females, *Prunus avium* (flowers),, both 24.III.1989-Turunçova, 1 female, *Citrus sinensis* (flowers), Kaya-burma, 1 male, bush 7.IV.1989-Burmancı, 1 female, *Acacia cynophylla* (flowers), 7.IV.1989-Serik, 1 male, 1 female, *Citrus aurantium* (flowers), 7.IV.1989-Düzlerçamı, 3 males,2 females, *Ribes* sp, 13.IV.1989-Yenice, 9 males, 2 females, *Calycotome villosa*; 1 male, *Triticum aestivum*; 1 female, *Calutea* sp; all, 13.IV.1989-Söğütçük, 3 females, *Pyrus elaeagrifolia* (flowers), 13.IV.1989-Yazır (Korkuteli), 1 female, *Prunus avium* (flowers); 4 females, *Malus communis* (flowers); 2 females, *Pyrus communis* (flowers), all 13.IV.1989-Korkuteli, 3 females, *Malus communis* (flowers); 1 female, *Prunus avium* (flowers), both 13.IV.1989-Öküzgözü, 2 females, *Amygdalus communis*; 13 females, *Prunus cerasus*, both 13.IV.1989-Eymir, 4 females, *Prunus cerasus*, 13.IV.1989-Akçay, 8 females, *Pyrus communis*, 13.IV.1989-Elmalı, 4 females, *Malus communis*, 13.IV.1989-Beldibi, 2 females, *Citrus sinensis*, 20.IV.1989-Göynük, 1 female, *Citrus limonium* (flowers), 20.IV.1989-Kemer, 2 females, *Citrus sinensis*,

20.IV.1989-Serik, 1 male, *Citrus limonium* (flowers), 27.IV.1989-Güneycik, 1 female, *Cotinus* sp; 1 male, *Phlomis armeniaca*; 1 male, 1 female, *Trifolium* sp, all 27.IV.1989-Gündoğmuş, 1 female, *Pyrus communis* (leaves); 10 males, 15 females, *Ligustrum* sp; 7 males, 2 females, *Ribes* sp; 1 female, *Amygdalus communis*, 9 males, 9 females, *Cercis siliquastrum*, all, 27.IV.1989-Düzlerçamı, 1 male, *Nerium oleander*, 4.V.1989-Söğütçük, 1 female, *Pyrus elaeagrifolia* (leaves), 4.V.1989-Bayat, 1 male *Malus communis* (leaves), 4.V.1989-Yazır (Korkuteli), 1 male, *Prunus armeniaca* (leaves); 1 male, *Prunus persica* (leaves); 2 males, *Prunus domestica* (leaves), all 4.V.1989-Korkuteli, 1 male, *Malus communis* (leaves); 1 female, *Prunus persica* (leaves); 1 female, *Prunus cerasus* (leaves), all 4.V.1989-Akyar, 1 female, *Cornus mas* (leaves); 3 females, *Prunus domestica* (leaves); 11 males, 14 females, *Berberis* sp; 1 male, 2 females, *Jasminum fructicans*, all 4.V.1989-Bozova, 11 males, 5 females, *Rosa* sp; 1 male, 2 females, *Hordeum vulgare* (ears); 1 female, *Eleagnus* sp; 2 males, 3 females, *Rosa canina*, 4.V.1989-Tatköy, 1 male, *Malus communis*, 25.V.1989-Öküzgözü, 1 female, *Amygdalus communis* (leaves), 25.V.1989-Çobanisa, 11 males, 12 females, *Eleagnus* sp (flowers); 1 male, 1 female, *Triticum aestivum* (ears); 2 males, *Rosa canina*, all 25.V.1989-Gömbe, 1 female, *Medicago sativa*, 25.V.1989-Akçay, 2 males, 12 females, *Isatis* sp; 1 male, *Beta vulgaris*, both 25.V.1989-Eymir, 1 female, *Eleagnus* sp (flowers), 25.V.1989-Korkuteli, 1 male, *Amygdalus communis*; 2 males, 6 females, *Althea* sp, both, 16.VI.1989-Özdemir, 1 female, *Prunus domestica* 16.VI.1989-Gölova, 2 males, *Vitis vinifera*; 10 males, 1 female, *Isatis* sp, both 16.VI.1989-Cevizli, 1 female, *Verbascum* sp, 29.VI.1989-Mamatlar, 2 females, *Pimpinella anisum*; 1 female, *Solanum tuberosum*, both 11.VIII.1989-Sülekler, 8 males, 5 females, *Pimpinella anisum*; 1 female, *Alhagi pseudoalhagi*, both 11.VII.1989-Kürüş, 2 females, *Eriobotrya japonica*, 21.XII.1989-Koyunlar, 1 female, *Raphanus raphanistrum*, 25.I.1990-Aksu, 3 females, *Narcissus tazette*, 25.I.1990-İhsaniye, 2 females, *Calycotome villosa*; 1 female, *Amygdalus communis*, both 21.II.1990-Amlaylı, 2 females, *Amygdalus communis*, 21.II.1990.

**Habitat:** Flowers of various plants, but mainly woody plants. It is a pest of temperate fruits.

**Distribution:** Turano-Mediterranean. Presumably in all parts of Turkey, though recorded only in the west.

**Remarks:** In cost in November-May, in inland in March-July. It occurred mainly on fruit trees in both parts.

*Thermothrips mohelensis* Pelikan

**Material examined:** Gölova, 1 female, *Vitis vinifera*, 16.VI.1989.

**Habitat:** *Galium verum*.

**Distribution:** Very little known, Czechoslovakia and Germany. New for Turkish fauna.

*Thrips angusticeps* Uzel

**Material examined:** Gebiz, 1male, *Triticum aestivum* (pre-earing), 30.III.1988-Töngüslü, 1male, *Calycotome villosa* (flowers), 30.III.1988-Hatipler, 5males, 2females, *Triticum aestivum* (pre-earing), 30.III.1988-Serik, 9females, *Raphanus raphanistrum* (flowers); 1male, *Vicia faba* (flowers) 2females; *Ornithagalus* sp (flowers), all 30.III.1988-Campus, 1male, *Spiraea* sp, 31.III.1988-Duralliler, 3females, *Triticum aestivum* (ears), 11.IV.1988-Korkuteli, 3females, (brac.), *Triticum aestivum* (pre-earing), 13.IV.1988-Yenice, 1male, *Calycotome villosa* (flowers), 13.IV.1988-Aksu, 1male, 1female, *Rapistrum* sp; 5males, 1female, *Ranunculus* sp, both 20.IV.1988-Serik, 5 female, *Triticum aestivum* (ears); 1female, *Vicia sativa* (flowers); 3female, *Melilotus officinalis* (flowers), alli 20.IV.1988-Peri, 1male, 1female, *Hordeum vulgare* (ears); 1female, *Scandix pecten-veneris*, both 20.IV.1988-Yenice, 1 female, *Quercus coccifera*; 1male, 1female, *Hordeum* sp; *Cardaria* sp, all 5.V.1988-Elmalı, 1female, *Triticum aestivum* (pre-earing), 5.V.1988-Gökçam, 2 females, *Cucurbita pepo*, 27.V.1988-Aksu, 1female, *Gossypium hirsutum*, 9.VI.1988-Abdurrahmanlar, 1 male, *Synapis* sp, 8.XII.1988-Koyunlar, 1female, *Vicia faba*, 5.I.1989-Varsak, 1 female, *Anemone* sp, 5.I.1989-Gebiz, 1male, *Taraxacum* sp; 1female, cereal (pre-earing), both 17.III.1989-Abdurrahmanlar, 3males, 5females, *Pisum sativum*; 1male, 2female, *Vicia faba*; 1male, 3female, *Allium cepa*, all 17.II.1989-Taşağıl, 1female, *Vicia faba*, 17.III.1989-Çalkaya, 1male, *Pisum sativum*, 17.III.1989-Kayaburma, 11males, 4females, *Triticum aestivum* (ears); 1male, bush; 1female, *Quercus cerris*; 1female, *Tripleurosperma* sp; 1female, composit; all 7.IV.1989-Burmancı, 4males, 4females, *Pisum sativum*; 1male, 7females, *Raphanus raphanistrum*; 1male, 1female, *Triticum aestivum*; 1male, 4females; *Acacia cyanophylla* (flowers), all 7.IV.1989-Yenice, 1male, *Triticum aestivum*; 1female, *Colutea* sp, 13.IV.1989-Göynük, 1male, *Citrus nobilis deliciosa* (flowers); 1male, *Citrus limonium* (flowers), both 20.IV.1989-Kemer, 2males, *Trifolium* sp, 20.IV.1989-Çamyuva, 2females, *Citrus nobilis deliciosa* (flowers); 3females, *Alyssum murale*, both 20.IV.1989-Kumluca, 10males, 9females, *Triticum aestivum* (ears), 20.IV.1989-Finike, 1female, *Trifolium* sp, 20.IV.1989-Aksu 1female, *Citrus nobilis deliciosa* (flowers), 27.IV.1989-Serik, 5females, *Citrus sinensis* (flowers); 3males, 1female, *Triticum aestivum* (ears); 4males, *Holcus lanatus*, all 27.IV.1989-Çolaklı, 1male, 2females, *Phaseolus vulgaris*, 27.IV.1989-Çolaklı, 1female, *Vitis vinifera*, 27.IV.1989-Gençler, 1female, *Ceratonia siliqua*; 2males, 3females, *Hordeum vulgare* (ears), both 27.IV.1989-Güneycik, 1female, *Cotinus* sp; 1female, *Trifolium* sp; 1female, *Quercus cerris*, all 27.IV.1989-Gündoğmuş, 14females, *Quercus* sp; 1females, *Prunus avium* (leaves), both i 27.IV.1989-Aksu, 1male, 1female, *Triticum aestivum* (ears), 27.IV.1989-Yenice, 1male, 3females, *Hordeum vulgare*, 4.V.1989-Söğütçük, 1male, 1female, *Triticum aestivum* (ears), 4V.1989-Bayat, 1femae, *Prunus persica* (leaves); 1female, *Juglans regia*, 4.V.1989-Bozova, 1male, 1female, cereal; 1female *Hordeum vulgare* (ears), both 4.V.1989-Bahtılı, 2females, *Ficus caria*, 11.V.1989-Kovanlık, 1male, *Vitis vinifera*, 2males,

3females, *Conyza canadensis*, both 30.X.1989-Bahtılı, 5females, *Euphorbia* sp; 2males, crucifer, both 10.XI.1989-Düden, 1female, *Sonchus* sp, 27.XI.1989-Koyunlar, 1female, *Vicia faba*, 27.XI.1989-Yeni Dumanlar, 1male, 2females, cereal, 21.XIII.1989-Küçükbelkis, 2females, cereal, 21.XII.1989-Burmancı, 1male, 2females, cereal, 25.I.1990-Bahtılı, 2females, *Capsella bursa-pastoris*; 1female, cereal, both 9.II.1990-Perge, 3males, 4females, *Anemone* sp, 21.III.1989.

**Habitat:** Polifag, leaf and flower inhabiting, known as pest of flax in Europe.

**Distribution:** West Palaearctic. Presumably all over Turkey.

**Remarks:** More frequent in coastal areas, in the period of October-June.

#### *Thrips armeniacus* Pelikan

**Material examined:** Gölova, 7females, *Isatis* sp; 16.VI.1989.

**Habitat:** No exact data available.

**Distribution:** Known only from Armenia (U.S.S.R.) upto now. New record for Turkey.

#### *Thrips dubius* Priesner

**Material examined:** Korkuteli, 9females, *Euphorbia* sp, 13.IV.1989-Finike, 3females, *Euphorbia* sp, 20.IV.1989.

**Habitat:** Euphorbia.

**Distribution:** Europe, Transcaucasia, Turkey. Mediterranean region of Turkey.

### Özet

#### Antalya'nın Thysanoptera faunası üzerinde çalışmalar III. *Thripidae* Stephens (Kısım 2)

Thripidae'ye ait 27 türle ilgili faunistik bilgilere yer verilmektedir. Kaydedilen türlerden 9'u Türkiye için yenidir. Bunlar *Microcephalothrips abdominalis* (D.L.Crawford), *Odontothrips loti* Haliday, *Od. karnyi* Priesner, *Oxythrips priesneri* Pelikan, *Scirtothrips canizoi* Titschack, *S.dignus* zur Strassen, *S. mangiferae* Priesner, *Thermothrips mohelensis* Pelikan ve *Thrips armeniacus* Pelikan'dır.

### Literature

Berzosa, J. and J.H.Cano, 1989. A new species of *Scirtothrips* Shull from Spain. *Senckenbergiana biol.*, 70 (4/6) : 281-285.

Cengiz, F., 1974. İzmir ve Manisa Dolaylarında Bağlara Arız Olan Thysanoptera türleri, Tanımları, Konukçuları, Zararları ve Tabii Düşmanları Üzerinde Araştırmalar. Zir. Müc. Zir. Kar. Gen. Müd. Araş. Tek.Bül. 22, İzmir, 86.