

STUDIES ON THE THYSANOPTERA
OF ANTALYA IV. THRIPIDAE STEPHENS-3*

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SUMMARY

Eight species belong to genus *Thrips* Linnaeus are viewed.

INTRODUCTION

The most widespread and abundant two species of Thysanoptera, namely, *Thrips tabaci* Lindeman and *Thrips major* Uzel are dealt in this part. The position of *T. major* as a species dwelling in flowers of various trees and shrubs in winter time was analysed by Tunç (1989).

Thrips major Uzel

Material examined: Alanya, 3♂, 12♀, *Jasminum* sp (flowers); 1♀ *Lantana camara* (flowers) both, 17.II.1988-Alara, 1♀, *Dianthus caryophyllus* (greenhouse), 17.II.1988-Yeşilköy, 4♀, *Vicia faba* (flowers), 17.II.1988-Kale, 2♀, *Acer* sp (flowers), 24.II.1988-Finike, 4♀, *Amygdalus communis* (flowers); 2♀, *Vicia faba* (flowers), both 24.II.1988-Gazipaşa, 4♀, *Asphodelus* sp (flowers); 7♀, *Calycotome villosa* (flowers); 4♀, *Amygdalus communis*; 10♀, *Calycotome villosa*, all 2.III.1988-Hocalar, 1♀, *Vicia faba* (flowers), 2.III.1988-Göynük, 8♀, *Calycotome villosa*, 23.III.1988-Kumluca, 8♀, *Mercurialis annua*; 3♀, *Citrus sinensis* (flowers); 17♀, *Pyrus elaeagrifolia* (flowers); 1♀, *Pinus pinea* (flowers); 1♀, *Euphorbia* sp, all 23.III.1988-Gebiz, 4♀, *Asphodelus* sp; 10♂, 1♀, *Euphorbia* sp, both 30.III.1988-Töngüçlü, 1♀, *Calycotome villosa* (flowers), 30.III.1988-Abdurrahmanlı, 2♀, *Pyrus elaeagrifolia* (flowers);

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3♀, *Triticum aestivum*, both, 30.III.1988-Nigit, 4♀, *Crateagus*, sp (flowers), 30.III.1988-Kumluca, 2♂, 15♀, *Citrus* sp (flowers); 7♀ *Pyrus elaeagrifolia* (flowers); 6♀, *Chrysanthemum* sp, all 6.IV.1988-Turunçova, 1♀, *Euphorbia helioscopia*; 7♂, 34♀, *Citrus* sp(flowers), both 6.IV.1988-Finike, 2♀, *Acacia cyanophylla* (flowers), 6.IV.1988-Mavikent, 12♂, 19♀, *Citrus* sp(flowers), 6.IV.1988-Adrasan, 5♀, *Citrus* sp(flowers), 6.IV.1988-Korkuteli, 1♂, *Triticum aestivum* (pre-earing); 1♂, *Triticum aestivum* (pre-earing), both 13.IV.1988-Aksu, 11♂, 19♀, *Citrus nobilis deliciosa*(flowers); 5♀ *Rapistrum* sp(flowers); 1♂, 3♀, *Ranunculus* sp, all 20.IV.1988-Serik, 1♂, *Vicia sativa*(flowers), 20.IV.1988-Güvercinlik, 2♂, 20♀, *Rosa* sp, 20.IV.1988-Beşkonak, 8♀ *Malus communis*(flowers); 1♂, 6♀, *Cydonia vulgaris* (flowers), both 20.IV.1988-Sağırın, 3♀, *Cistus* sp(flowers); 2♂, 3♀ *Cercis siliquastrum*, 20.IV.1988-Yenice, 1♀, *Hordeum* sp; 1♀, *Colutea* sp, both 5.V.1988 Yazır(Korkuteli), 1♀, *Prunus avium*, 5.V.1988-Kepez, 26♀, *Citrus sinensis*; 1♀, *Olea europaea*(flowers), both 5.V.1988-Duraliler, 1♀, *Punica granatum*(flowers); 40♂, *Nerium oleander*(flowers) both, 25.V.1988-Göynük, 1♀, *Vitis vinifera*, 27.V.1988-Beldibi, 1♀, *Daucus* sp; 2♂, 5♀, *Citrus limonum*(flowers), both 27.V.1988-Hurma, 3♀, *Paliurus spina-christi*(flowers); 2♂, 3♀, *Nerium oleander*(flowers); both 27.V.1988-Gölova, 1♀, *Vitis vinifera*, 16.VI.1988-Gömbe, 1♀, *Euphorbia* sp, 16.VI.1988-Arif, 1, 2♀, *Clematis* sp, 30.VI.1988-Kuzdere, 1♀, *Zea mays*; 1♀, *Vitex agnus-castus*, both 15.IX.1988-Turunçova, 1♀, *Zea mays*, 15.IX.1988-Çolaklı, 1♀, *Arachis hypogaea*, 13.X.1988-Tekirova, 1, 3♀, *Rosa* sp; *Prunus persica*, both 27.X.1988-Çolaklı, 5♂, 13♀, *Eriobotrya japonica*(flowers); 1♀, *Cassia* sp, both 7.XI.1988-Mahmutlar, 1♀, 17♀, *Eriobotrya japonica*(flowers); 1♀, *Phaseolus vulgaris*, both 10.XI.1988-Serapsu, 1♀, *Erica* sp(flowers); 10.XI.1988-Okurcalar, 1♀, *Dianthus caryophyllus*, 10.XI.1988-Kale, 9♀, *Eriobotrya japonica*(flowers); 2♀, *Phaseolus vulgaris*; 1♂, 9♀, *Tagetes* sp; 2♀ *Phaseolus vulgaris*, all 24.XI.1988-Mavikent, 3♀, *Eriobotrya japonica* (flowers), 24.XI.1988-Kemer, 6♀, *Erica* sp, 24.XI.1988-Aşağıkaraman, 1♂, 5♀, *Eriobotrya japonica* (flowers), 8.XII.1988-Abdurrahmanlar, 2♂, 3♀, *Eriobotrya japonica*(flowers); 1♂, *Sinapis* sp(flowers), both 8.XII.1988-Göynük, 5♀, herb, 22.XII.1988-Mavikent, 1♂, *Datura* sp, 22.XII.1988-Finike, 2♂, 10♀, *Eriobotrya japonica*(flowers), 22.XII.1988-

Varsak, 5 ♂ Clematis sp; 6 ♀, Eriobotrya japonica(flowers) both 5.I.1989-Hasyurt, 17 ♀, Eriobotrya japonica(flowers); 1 ♀, Vicia faba; both 19.I.1989-Yazır (Kumluca), 4 ♂, 17 ♀, Clematis sp(flowers), 19.I.1989-Kumluca, 15 ♀, Euphorbia sp, 10 ♀, Calycotome villosa, both 19.I.1989-Okurcalar, 6 ♂, 9 ♀, Vicia faba(flower); 6 ♀, Eriobotrya japonica (flowers), both 2.II.1989-Serapsu, 2 ♀, Amygdalus communis(flowers); 1 ♀, Dianthus caryophyllus both 2.II.1989-Mahmutlar, 3 ♂, 31 ♀, Eriobotrya Japonica(flowers); 1 ♂, 4 ♀, Vicia faba(flowers), both 2.II.1989-Okurcalar 5 ♀, Calycotome villosa(flowers), 2.II.1989-Koyunlar, 1 ♀, Prunus persica (flowers), 2.II.1989-Çakırlar, 2 ♀, Euphorbia sp, 23.II.1989-Geyikbayırı, 4 ♀, Amygdalus communis(flowers), 41 ♀, Calycotome villosa(flowers); 16 ♀, Asphodelus sp, both 23.II.1989-İllica, 4 ♀, Amygdalus communis (flowers), 23.II.1989-Hatipler, 2 ♀, Euphorbia, 23.II.1989-Yeşilkaraman, 2 ♀, Amygdalus communis(flowers), 23.II.1989-Topaklı, 5 ♀, Vicia faba, 23.II.1989-Düden, 9 ♀, Prunus persica(flowers), 23.II.1989-Hurma, 5 ♀ Prunus armeniaca(flowers); 1 ♀, Phlomis armeniaca (flowers); 8 ♀, Prunus domestica(flowers); 1 ♂, 6 ♀, Citrus sp(flowers); 4 ♀, Vicia faba; 4 ♀, Capsella bursa-pastoris; 2 ♀, Platanus orientalis(flowers); 6 ♀, Salix sp (flowers), all 10.III.1989-Çandır, 1 ♀, Prunus persica; 6 ♀, Calycotome villosa(flowers); 1 ♀, Asphodelus sp; 4 ♂, 5 ♀, Prunus domestica(flowers); 1 ♀, Citrus sp(flowers); 10.III.1989-Hasyurt, 5 ♀, Prunus armeniaca(flowers), 10.III.1989-Beşikçi, 4 ♀, Calycotome villosa, 10.III.1989-Akçapınar, 1 ♂, 20 ♀, Prunus domestica; 4 ♀, Prunus domestica; 4 ♀, Prunus persica, both 17.III.1989-Gebiz, 1 ♂, Taraxacum sp; 24 ♀, Calycotome villosa, both 17.III.1989-Abdurrahmanlar, 1 ♀, Amygdalus communis; 4 ♀, Prunus armeniaca; 1 ♀, Vicia faba, all 17.III.1989-Taşağıl, 2 ♀, Prunus armeniaca, 17.III.1989-Düzlerçamı, 1 ♀, Ribes sp; 2 ♀, Colutea sp. both 24.III.1989-Arif, 2 ♀, Malus communis(flowers); 1 ♀, Prunus persica(flowers); 6 ♀, Pyrus communis (flowers); 2 ♀, Prunus avium(flowers); 24.III.1989-Turunçova, 2 ♂, 26 ♀ Citrus sinensis(flowers), 24.III.1989-Hacıveliler, 2 ♂, 1 ♀, Citrus sinensis (flowers), 24.III.1989-Kayaburma, 6 ♂, 7 ♀ bush; 1 ♂, Asphodelus sp, 1 ♀, Quercus cerris; 1 ♀, Tripleurosperma sp; 7 ♀, Prunus cerasus, all 7.IV.1989-Burmancı, 2 ♀, Pisum aestivum 7 ♀ Morus alba(flowers); 7 ♂, 9 ♀, Citrus sp(flowers); 2 ♀, Prunus persica; 1 ♂, 4 ♀, Acacia cyanophylla, all 7.IV.1989-Kuşlar, 2 ♀, Pyrus elaeagrifolia(flowers);

1♀, *Prunus persica*(flowers), both, 7.IV.1989-Serik, 2♂, 5♀, *Citrus aurantium*(flowers), 7.IV.1989-Burmancı, 2♂, 4♀, *Cydonia vulgaris* (flowers), 7.IV.1989-Düzlerçamı, 6♂, 15♀, *Ribes* sp; 10♂, 6♀, *Citrus* sp, both 13.IV.1989-Yenice, 10♂, 1♀, *Calycotome villosa*; 5♂, 1♀, *Pistacia*, sp, both 13.IV.1989-Söğütçük, 1♀, *Pyrus elaeagrifolia*, 13.IV.1989-Beldibi, 3♂, 6♀, *Citrus sinensis*(flowers), 20.IV.1989-Göynük, 8♀, *Citrus nobilis deliciosa* (flowers), 20.IV.1989-Kemer, 3♀, *Citrus sinensis*, 20.IV.1989-Çamyuva, 10♂, 6♀, *Citrus sinensis* (flowers); 5♀ *Citrus nobilis deliciosa*(flowers), both, 20.IV.1989-Finike, 4♀, *Citrus sinensis*(flowers); 11 ♂, *Citrus limonium*(flowers); 1♀, *Euphorbia* sp; 1♀, *Morus alba*(flowers), all 20.IV.1989-Aksu, 3♀, *Citrus limonium* (flowers); 9♂, *Citrus nobilis deliciosa*(flowers), 27.IV.1989-Serik, 10♂, *Citrus limonium*(flowers); 10♂, 1♀, *Citrus sinensis*(flowers); 10♂, *Triticum aestivum*(ears), all 27.IV.1989-Çolaklı, 3♀, *Olea europaea*, 27.IV.1989-Gençler, 1♀, *Pistacia* sp. 27.IV.1989-Gündoğmuş, 2♀, *Vitis vinifera*; 1♀, *Pyrus communis*; 21 ♀, *Ligustrum* sp; 2♀, *Quercus* sp (flowers); 2♀, *Triticum aestivum* (ears); 10♂, 6♀, *Malus communis* (leaves); 1♀, *Amygdalus communis*, all 27.IV.1989-Kepes, 6♀, *Olea europaea*, 4.V.1989-Düzlerçamı, 2♂, 3♀, *Nerium oleander*, 4.V.1989-Yenice, 10♀, *Pallurus spina-christi*, 4.V.1989-Söğütçük, 1♀, *Pyrus elaeagrifolia* (leaves), 4.V.1989-Yazar (Korkuteli), 3♀, *Prunus armeniaca* (leaves); 10♂, 8♀, *Prunus persica* (leaves); 10♂, 1♀, *Prunus domestica* (leaves); 10♂, 2♀, *Eleagnus* sp; 2♀, *Juglans regia* (leaves), all 4.V.1989-Akyar, 1♀, *Berberis* sp, 4.V.1989-Bozova, 1♂, *Rosa* sp; 10♂, 1♀, *Hordeum vulgare* (ears); 1♀, *Rosa canina*, all 4.V.1989-Bahtılı, 4♀ *Vitis vinifera*; 3♀, *Morus alba*(leaves); 2♂, 2♀, *Citrus* sp (flowers); 1♀, *Punica granatum*(flowers); 1♀, *Olea europaea*, all 11.V.1989-Altinyaka, 20♀, *Rosa* sp; 10♂, 20♀, *Prunus Persica*; 6♀, *Malus communis* (leaves); 4♀, *Juglans regia* (leaves); 2♀, *Morus alba* (leaves); 2♂, 11♀, *Rosa canina*; 2♂, 4♀ *Prunus armeniaca*(leaves); 2♀, *Amygdalus communis*(leaves), all 11.V.1989-Yeşilbayır, 2♂, *Prunus armeniaca* (leaves); 1♀, *Vitis vinifera*, both 18.V.1989-Kovanlık, 1♀, *Morus alba*, 18.V.1989-Ekşili, 1♀, *Nerium oleander*, 18.V.1989-Tatköy, 1♀, *Malus communis* (leaves); 1♀, *Prunus armeniaca* (leaves), 25.V.1989-Çobanisa, 4♀, *Eleagnus* sp; 1♀, *Triticum aestivum* (ears); 4♂, 5♀, *Rosa canina*, all 25.V.1989-Gömbe, 3♂, *Triticum aestivum* (ears), 25.V.1989-Akçay, 1♀, *Pyrus elaeagrifolia* (leaves), 25.V.1989-Eymir, 1♀, *Eleagnus* sp

(flowers), 25.V.1989-Yenice, 1♀, *Phyllirea* sp, 16.VI.1989-Korkuteli, 1♀, *Prunus persica*, 16.VI.1989-Finike, 2♀, *Zea mays*, 22.VI.1989-Geriş, 1♀, *Vitex agnus-castus*, 29.VI.1989-Gedelme, 1♀, *Hypericum* sp, 10.VI.1989-Mahmutlar, 1♀, *Musa paradisi*, 7.IX.1989-Göynük, 30, 7♀, *Rubus fructucosus*; 2♂, *Vitex agnus-castus*; 1♀, *Vigna sinensis* all 14.IX.1989-Beycik, 1♀, *Malus communis*; 1♀, *Zea mays* both 14.IX.1989-İbradı, *Corylus avellana*, 28.IX.1989-Kovanlık, 4♂, 6♀, *Erica* sp, 30.IX.1989-Çalkaya, 1♂, 1♀, *Dapane gnidioides*; 5♂, 10♀ *Eriobotrya japonica*, both 30.XI.1989-Kemerağzı, ♀, *Rubus fructicosus* 1♂, *Vitex agnus-castus*, both 30.X.1989-Çağlayan, 1♀, *Eriobotrya japonica*, 30.X.1989-Duraliler, 8♂, 10♀, *Clematis* sp; 3♂, 2♀, *Rubus fructicosus*; 4♂, 1♀, *Daphne gnidioides*; 4♀, *Ceratonia siliqua*; 1♀, *Olea europaea*; 1♂, 7♀, *Eriobotrya japonica*, all 10.XI.1989-Aşağıkaraman, 3♂, 14♀, *Eriobotrya japonica*; 5♀, *Ceratonia siliqua* both 10.XI.1989-Bahtılı, 2♀, *Eriobotrya japonica*; 2♀, *Rosa* sp, both 10.XI.1989-Çakırlar, 3♂, 2♀, *Eriobotrya japonica*; 2♀, *Rosa* sp, both 10.XI.1989-Çakırlar, 3♂, 2♀, *Eucalyptus* sp; 1♂, 1♀, *Myrtus communis*, 10.XI.1989-Sütçüler, 2♂, 5♀, *Ceratonia siliqua*, 27.XI.1989-Düden, 1♂, 4♀, *Rosa* sp; 5♂, 6♀, *Chrysanthemum morifolium*, both 27.XI.1989-Varsak, 7♂, 22♀, *Eriobotrya japonica*; 21♂, 10♀, *Erica* sp, 27.XI.1989-Kirişçiler, 7♀, *Clematis* sp; 27.XI.1989-Kızıllar, 12♀, *Clematis* sp, 27.XI.1989-Yenikant, 1♀, *Eucalyptus* sp, 27.XI.1989-Kızılarık, 3♀, *Eriobotrya japonica*, 27.XI.1989-Güzeloba, 1♂, 5♀, *Eucalyptus* sp; 1♂, 3♀, *Ceratonia siliqua*, 27.XI.1989-Bahtılı, 1♂, 3♀, *Eriobotrya japonica*; 2♀, *Salix* sp; 1♂, 3♀, *Clematis* sp; 1♀, grass, all 7.XII.1989-Çakırlar, 3♀, *Eriobotrya japonica*; 6♂, 6♀, *Clematis* sp; 1♂, 1♀, *Ceratonia siliqua*, all 7.XII.1989-Hacisekililer, 6♀, *Ceratonia siliqua*, 7.XII.1989-Yenigöl, 7♀, *Eriobotrya japonica*, 21.XII.1989-Alaylı, 1♂, 7♀, *Clematis* sp; 21.XII.1989-Göloluk, 2♂, 4♀, *Narcissus tazette*; 2♀, *Eucalyptus* sp, both 21.XII.1989-Kürüş, 11♀, *Eriobotrya japonica*, 21.XII.1989-Boğazak, 4♀, *Eucalyptus* sp, 21.XII.1989-Gökçam, 1♂, 7♀, *Eriobotrya japonica*, 9.I.1990-Hurma, 2♂, 8♀, *Clematis* sp, 9.I.1990-Aslanbucak, 16♀, *Eriobotrya japonica*; 4♀, *Bougainvillea glabra*; 9♀, *Rosa* sp, all 9.I.1990-Göynük, 5♂, 14♀, *Calycotome villosa*, 9.I.1990-Koyunlar, 8♀, *Eriobotrya japonica*, 25.I.1990-Gaziler, 5♀, *Clematis* sp, 25.I.1990-Fettahlı, 4♀, *Eriobotrya japonica*; 1♀,

Eucalyptus sp, both 25.I.1990-Aksu, 4♀, *Narcissus tazette*, 25.I.1990-Bahtılı, 1♀, *Euphorbia* sp; 1♀, *Eucalyptus* sp; 1♀, *Rubus fructicosus*, all 8.II.1990-Çakırlar, 9♀, *Eriobotrya japonica*; 16♂, *Nacissus tazette*; 9♀, *Mercurialis annua*, all 9.II.1990-Karatepe, 5♀, *Mercurialis annua*, 9.II.1990-Kızılarık, 2♀, *Prunus persica* (flowers); 2♀, *Euphorbia* sp; 4♀, *Amygdalus communis*; 1♀, crucifer; 1♀, *Mercurialis annua*; 1♀, *Sonchus* sp; 1♀, *Raphanus raphanistrum*, all 21.II.1990-İhsaniye, 9♀, *Calycotome villosa*; 1♀, *Acer* sp; *Amygdalus communis*, all 21.II.1990-Alaylı, 3♀, *Amygdalus communis*, 21.II.1990.

Habitat : Flowers of various plants particularly ligneous plants.
Citrus pest in North Africa.

Distribution: Holarctic. It was recorded from all regions of Turkey except Southeastern Anatolia.

Remarks : In the coastal areas is predominant species on flowers of *Citrus*, medlar and temperate fruits and appears in the period of September-June. In inland between April and September.

***Thrips mareoticus* Priesner**

Material examined : Belen, 3♀, *Triticum aestivum*, 20.IV.1989

Habitat : Flowers of Compositae

Distribution : Mediterranean. Marmara region of Turkey.

***Thrips minutissimus* Linnaeus**

Material examined : Kumluca, 1♀, *Triticum aestivum* (pre-earing); 3♀, *Pyrus elaeagrifolia* (flowers), both 23.III.1988-Töngüslü, 3♀, *Calycotome villosa*(flowers), 30.III.1988-Abdurrahmanlı, 1♂, 2♀ *Pyrus elaeagrifolia*(flowers), 30.III.1988- Nigit, 1♂, *Crateagus* sp (flowers), 30.III.1988-Finike, 1♀, *Acacia cyanophylla*(flowers), 6.IV.1988-Adrasan, 1♀, *Pinus brutia* (flowers), 6.IV.1988-Yenice, 1♀, *Quercus* sp (flowers), 13.IV.1988-Yenice, 12♀, *Quercus coccifera*, 5.V.1988-Geyikbayırı, 1♀, *Vicia faba*(flowers), 23.II.1989-Hurma, 1♀, *Prunus domestica*(flowers); 1♀, *Citrus* sp(flowers); 1♀, *Platanus orientalis* (flowers); 1♀, *Salix* sp(flowers) all 10.III.1989-Çandır, 3♀, *Prunus domestica*(flowers); 1♂, 1♀, *Raphanus raphanistrum*, both 10.III.1989-

Hasyurt, 1♀, *Ornithagatum* sp, 10.III.1989-Akçapınar, 1♀, *Prunus domestica*(flowers); 17.III.1989-Düzlerçamı, 1♀, *Ribes* sp, 24.III.1989-Maarif, 1♀, *Pyrus elaeagrifolia*(flowers); 24.III.1989-Söğütçük, 2♀, *Amygdalus communis*(flowers), 24.III.1989-Yazır, 1♀, *Prunus persica*(flowers), 24.III.1989-Korkuteli, 1♀, *Amygdalus communis*(flowers), 24.III.1989-Arif, 2♀, *Prunus avium*, 24.III.1989-Kayaburma, 1♀, *Quercus cerris*, 7.IV.1989-Kuşlar, 1♀, *Euphorbia* sp, 7.IV.1989-Eymir, 1♀, *Prunus cerasus*, 13.IV.1989-Gündoğmuş, 1♀, *Quercus cerris*, 27.IV.1989-Byat, 1♀, *Populus* sp, 4.V.1989-Yazır (Korkuteli), 1♀, *Prunus cerasus* (leaves); 1♀, *Eleagnus* sp, both 4.V.1989-Korkuteli, 2♀, *Pyrus communis* (yaprak), 4.V.1989-Özdemir, 1♀, *Prunus domestica* 16.VI.1989.

Habitat : Deciduous tree, particularly temperate fruits.

Distribution : Europe, Aegean and Central Anatolia regions of Turkey

Remarks: In coastal areas in the period of February-April, in inland March-June.

Thrips nigropilosus Uzel

Material examined: Hasyurt, 1♀, (brac.), *Koelpina* sp, 10.III.1989-Fersin, 2♀, (mac.), *Lycopersicon esculentum*, 29.VI.1989.

Habitat : Flowers of herbaceous plants, particularly Compositae

Distribution : Palaearctic. Only from İstanbul in Turkey.

Thrips physapus Linnaeus

Material examined : Duraliler, 1♀, *Nerium oleander*(flowers), 26.V.1988-Mamatlar, 6♀, *Carthamus* sp, 11.VII.1989.

Habitat : Flowers of various plants, but mainly Compositae.

Distribution : Euro-Siberian. Existing records only from Western Anatolia but presumably all over Turkey.

Thrips tabaci Lindeman

Material examined: Kumluca, 9♀, *Cucumis sativus*(greenhouse) 10.I.1988-Alanya, 5♀, *Lantana camara* (flowers), 17.II.1989-Konaklı, 12♀, *Pisum sativum*(flowers), 17.II.1989-Kale, 10♀, *Cucumis sativus*;

2♀, *Vicia faba*(flowers), both 24.II.1988-Finike, 6♀, *Amygdalus communis*; 1♀, *Euphorbia* sp, both 24.II.1988-Gazipaşa, 2♀, *Cucumis sativus*; 1♀, *Asphodelus* sp(flowers); 1, *Calycotome villosa*(flowers), all 2.III.1988-Bahtılı, 1♀, *Raphanus raphanistrum*(flowers), 23.III.1988-Karatepe, 5♀, *Vicia sativa*(flowers), 23.II.1988-Kumluka, 6♀, *Triticum aestivum* (ears); 2♀, *Euphorbia* sp, both 23.III.1988-Gebiz, 1♂, 5♀ *Euphorbia* sp, 2♀; *Asphodelus* sp, 30.III.1988-Abdurrahmanlı, 2♀, *Triticum eastivum* (ears), 30.III.1988-Yavaş, 1♂, 2♀, *Lupinus angustifolius*(flowers), 30.III.1988-Serik, 2♀, *Raphanus raphanistrum*(flowers); 2♂, 7♀, *Vicia faba*(flowers); 1♀, *Ornithagatum* sp(flowers), all 30.III.1988-Campus, 9♀, *Spirea* sp(flowers), Kumluka, 2♀, *Citrus* sp(flowers); 2♀, *Raphanus* sp; 4♀, *Raphanus raphanistrum*, all 6.IV.1988-Turunçova, 1♀, *Euphorbia helioscopia*; 4♀ *Citrus* sp(Flowers); 2♀, *Matricaria chamomilla*, all 6.IV.1988-Mavikent, 1♀, *Citrus* sp(flowers), 6.IV.1988-Yazır (Kumluka), 1♀, *Triticum aestivum* (pre-earring), 6.IV.1988-Duraliler, 3♀, *Prunus persica*(flowers), 11.IV.1988-Korkuteli, 1♀, *Triticum aestivum* (pre-earring); 2♀, *Capsella bursa-pastoris*, both 13.IV.1988-Serik, 4♀, *Vicia sativa*(flowers), 20.IV.1988-Çolaklı, 1♀, *Gladiolus* sp, 20.IV.1988-Beşkonak, 1♀, *Scandix pecten-veneris*, 20.IV.1988-Aksu, 17♀, *Caryophyllus dianthus*, 20.IV.1988-Yenice 1♀, *Hordeum* sp; 4♀, *Cardaria* sp, both 5.V.1988-İmrahor, 1♀, *Malus communis*(flowers), 5.V.1988-Elmalı, 1♀, *Malus communis*; 1♀, *Triticum aestivum* (pre-earring), both 5.V.1988-Kuzuköy, 1♀, *Malus communis*(flowers), 5.V.1988-Duraliler, 5♀, *Vitis vinifera*; 6♀, *Nerium oleander*(flowers), 26.V.1988-Doyran, 1♀, *Olea europaea* (leaves); 7♀, *Phaseolus vulgaris*, 27.V.1988-Gökçam, 8♀, *Solanum melongena*; 5♀, *Cucumis sativus*, 16♀, *Cucurbita pepo*, all 27.V.1988-Göynük, 1♂, 16♀, *Phaseolus vulgaris*; 1♀, *Vitis vinifera* both 27.V.1988-Beldibi, 3♀, *Citrus limonium* (flowers), 27.V.1988-Hurma, 5♀, *Paliurus spina-christi*(flowers); 10♀, *Nerium oleander*(flowers), both 27.V.1988-Aksu, 10♀, *Gossypium hirsutum*, 9.VI.1988-Bekirler, 9♀, *Gossypium hirsutum*; 13♀, *Cucumis melo*; 15♀, *Prunus persica*; 2♀, *Zea mays*, all 9.VI.1988-Kızılıot, 1♀, *Punica granatum*(flowers); 2♀, *Amygdalus communis* (leaves); 2♀, *Vitis vinifera*; 17♀, *Zea mays*, all 9.VI.1988-Okurcular, 7♀, *Musa paradisi*, 9.VI.1988-Campus, 7♀, *Anthemis* sp, 10.VI.1988-Korkuteli, 7♀, *Cardaria* sp, 16.VI.1988-Elmalı, 11♀,

Pimpinella anisum, 16.VI.1988-Akçay, 1♀, *Pyrus communis* (leaves), 16.VI.1988-Gömbe, 5♀, herb, 16.VI.1988; 8♀, *Corylus avellana*, both 16.VI.1988-Kaş, 2♀, *Bougainvillea glabra*; 4♀, *Myrtus communis*, both 16.VI.1988-Koyunlar, 4♀, *Arachis hypogaea*; 5♀, *Prunus persica* (leaves), both 23.VI.1988-Varsaklı, 4♀, *Gossypium hirsitum*; 1♀, *Phaseolus vulgaris*, both 23.VI.1988-Koyunlar, 4♀, *Solanum melongena* 4♀, *Capsicum annuum*; both 23.VI.1988-Boztepe, 2♀, *Gossypium hirsitum*, 23.VI.1988-Akınlar, 2♀, *Arachis hypogaea*; 1♀, *Capsicum annuum*, 23.VI.1988-Sarıabaklı, 1♀, *Gossypium hirsitum*; 1♀, *Zea mays*, both 23.VI.1988-Perakende, 5♀, *Myrtus communis*, 23.VI.1988-Düzlerçamı, 4♀, *Vitex agnus-castus*, 30.VI.1988-Korkuteli, 9♀, *Pimpinella anisum*; 7♀, *Phaseolus vulgaris*, both 30.VI.1988-Elmalı, 1♀, *Vitis vinifera*; 4♀, *Zea mays*, both 30.VI.1988-Yakaçiftlik, 1♀, *Lycopersicon esculentum*; 2♀, *Phaseolus vulgaris*, 30.VI.1988-Arif, 12♀, *Clematis* sp., 30.VI.1988-Turunçova, 2♀, *Hibiscus mutabilis*; 1♀, *Citrus* sp., 8♀, *Acacia karoo*, all 30.VI.1988-Yukarıkocayatak, 5♀, *Gossypium hirsitum*; 4♀, *Vitex agnus-castus*; 2♀, *Solanum melongena*, all 14.VII.1988-Çolaklı, 7♀, *Arachis hypogaea*, 4♀, *Gossypium hirsitum*, both 14.VII.1988-Gençler, 1♀, *Vitis vinifera*, 14.VII.1988-Murtiç, 2♀, *Myrtus communis*; 4♀, *Vitex agnus-castus*; 2♀, *Quercus* sp., all 14.VII.1988-Akseki, 2♀, *Amygdalus communis*; 3♀, *Vitis vinifera*, 14.VII.1988-Fersin, 9♀, *Sesamum indicum*; 3♀, *Vitis vinifera*, both 14.VII.1988-Manavgat, 7♀, *Sesamum indicum* 14.VII.1988-Aşağıkocayatak, 1♀, *Capsicum annuum*; 1♀, *Zea mays*; 1♀, *Hibiscus esculentus*; 2♀, *Sesamum indicum*, all 21.VII.1988-Kumköy, 5♀, *Gossypium hirsitum*, 21.VII.1988-Manavgat, 3♀, *Hibiscus esculentus*; 2♀, *Gossypium hirsitum*, both 21.VII.1988-Güzelbağ, 1♀, *Amygdalus communis*; 6♀, *Hibiscus esculentus*; 10♀, *Sesamum indicum*, all 21.VII.1988-Güney, 2♀, *Myrtus communis*; 1♀, *Vitex agnus-castus*; 2♀, *Amygdalus communis*, 21.VII.1988-Göynük, 1♀, *Vitex agnus-castus*; 3♀, *Capsicum annuum*, 4.VIII.1988-Tekirova, 3♀, *Zea mays*; 4.VIII.1988-Tekirova, 4♀, *Zea mays*, 4.VIII.1988-Çalka, 1♀, *Zea mays*; 1♀, *Arachis hypogaea*, both 4.VIII.1988-Altınyaka, 1♀, *Corylus avellana*, 1♀, *Phaseolus vulgaris*; 2♀, *Sesamum indicum*, all 4.VIII.1988-Havaalanı, 2♀, *Sesamum indicum* 1♀, *Solanum melongena* both 18.VIII.1988-Kemerağızı, 2♀, *Gossypium hirsitum*, 18.VIII.1988-Töngüşlü, 5♀, *Gossypium hirsitum*, 18.VIII.1988-Belek, 2♀, *Arachis hypogaea*, 18.VIII.1988-Karagöz, 1♀, *Sesamum*

indicum, 18.VIII.1988-Korkuteli, 1♀, *Prunus avium*, 25.VIII.1988-Öküz-gözü, 1♀, *Prunus spinosa*; 1♀, *Rosa canina*; 1♀, *Cydonia vulgaris*, all 25.VIII.1988-Eymir, 6♀, *Beta vulgaris*, 25.VIII.1988-Kuzköy, 5♀ *Medicago sativa*; 3♀, *Lycopersicon esculentum*, both 25.VIII.1988-Gökpınar, 2♀, *Lycopersicon esculentum*; 1♀, *Cucurbita pepo*; 2♀, *Capsicum annum*; 18♀, *Daucus carota*, all 25.VIII.1988-Yurtpınar, 2♀ *Gossypium hirsutum*, 7.IX.1988-İhsaniye, 1♀, *Lytrum sp*, 8.IX.1988-Alanya, 1♀, *Musa paradisi*, 8.IX.1988-Adrasan, 3♂, 2♀, *Zea mays*, 15.IX.1988-Turunçova, 1♂, 3♀, *Phaseolus vulgaris*, 15.IX.1988-Çeltikçi, 1♀, *Solanum melongena*; 1♀, *Olea europaea*; 3♀, *Zea mays* all 13.X.1988-Mavikent, 2♀, *Solidago sp*, 27.X.1988-Komluca, 14♀, *Cucumis sativus*; 11♀ *Citrullus lanatus*, both 27.X.1988-Tekirova, 2♀ *Rosa sp*; 1♀, *Zea mays*, both 27.X.1988-Çolaklı, 1♀, *Cassia sp*, 7.IX.1988-Hocalar, 1♀, *Vicia faba*; 1♀, *Gossypium hirsutum*, both 10.X.1988-Mahmutlar, 2♀, *Phaseolus vulgaris* 10.X.1988-Gazipaşa, 1♀, *Rubus fructicosus*; 2♀, *Cucumis sativus*, both 10.XI.1988-Okurcalar, 3♀, *Dianthus caryophyllus*, 10.XI.1988-Kale, 1♀, *Olea europaea*; 1♀ *Tagetes sp*; 1♀, *Phaseolus vulgaris*; 3♀, *Cucumis sativus*, all 24.XI.1988-Kircamisi, 3♀, *Rosa sp*; *Gerbera sp*, 1♀ both 25.II.1988-Kircamisi, 1♀, *Phaseolus vulgaris*, 8.XII.1988-Cumalı, 4♀, cereal, 8.XII.1988-Deniztepe, 3♀, *Allium porrum*, 8.XII.1988-Göynük, 1♀, herb; 2♀, *Euphorbia sp*, 22.XII.1988-Adrasan, 3♀, *Cucumis sativus*, 22.XII.1988-Mavikent, 2♀, *Datura sp*, 22.XII.1988-Koyunlar, 1♀, *Eriobotrya japonica*; 1♀, *Triticum aestivum*, both 5.I.1989-Varsak, 1♀, *Anemone sp*; 1♀, *Clematis sp*, both 5.I.1989-Özülü, 1♀, herb (Liliaceae), 5.I.1989-Kemerağzı, 33♀, *Allium porrum*; 1♀, *Petroselinum sativum*, both 5.I.1989-Güzeloba, 6♀, *Allium cepa*; *Apium graveolens var. dulce*, both, 5.I.1989-Mavikent, 3♀, *Narcissus tazette*, 19.I.1989-Hasyurt, 1, crucifer; 2♀, *Lamium sp*, both 19.I.1989-Manavgat, 1♀, *Vicia faba*(flowers), 2.II.1989-Okurcalar, 2♀, *Cucurbita pepo*, 2.II.1989-Serapsu, 4♀, *Cucurbita pepo*; 7♀, *Cucumis sativus* Çakırlar, 1♀, cereal; 1♀, *Euphorbia sp*, both 23.II.1989-Geyikbayırı, 1♀, *Narcissus tazette*; 1♀, *Amygdalus communis*(flowers), both 23.II.1989-Eksilik, 3♀, *Allium sativum*, 23.II.1989-Hurma, 11♀, *Asphodelus sp*; 2♀, *Phlomis armeniaca*; 1♀, *Vicia faba*; 1♀, *Platanus orientalis*(flowers), all 10.II.1989-Çandır, 3♀, *Allium cepa*; 1♀,

Calycotome villosa; 10♀, *Asphodelus* sp; 1♂, *Citrus* sp(flowers); ♀ *Raphanus raphanistrum*, all 10.III.1989-Hasyurt, 5♀, *Koelpina* sp; 11♀, *Ornithagulum* sp; 5♀, *Cucumis sativus*, all 10.III.1989-Beşikçi, 4♀, cereal (pre-earing), 10.III.1989-Ulupınar, 2♀, *Euphorbia* sp, 10.III.1989-Akçapınar, 5♂, 3♀, *Euphorbia* sp; 3♀, *Asphodelus* sp; 1♀, *Citrus limonium*; all 17.III.1989-Abdurrahmanlar, 12♀, *Pisum sativum*; 1♀, *Vicia faba*; 2♀, *Allium cepa*, all 17.III.1989-Taşağıl, 1♀, *Vicia faba*, 17.III.1989-Çalkaya, 14♀, *Pisum sativum*, 17.III.1989-Karaçalı, 14♀, *Asphodelus* sp; 2♀, *Calycotome villosa* both 17.III.1989-Kemerağzı, 2♀, *Petroselinum sativum*, 17.III.1989-Güzeloba, 19♀, *Allium porrum*, 17.III.1989-Maarif, 4♀, crucifer, 24.III.1989-Yazar, 1♀, *Prunus domestica*(flowers), 24.III.1989-Korkuteli, 1♀, *Amygdalus communis*; 24.III.1989-Arif, ♀, cereal (pre-earing), 24.III.1989-Hacıveiller, 8♀, *Raphanus raphanistrum*; 2♂, 10♀, *Ranunculus* sp, both 24.III.1989-Kayaburma, 3♀, *Triticum aestivum*(ears); 10♀, *Asphodelus* sp; 2♀, *Quercus cerris*; 1♀, *Tripleurosperma* sp, 1♀, compositi; ♀ composit; 1♀, *Phaseolus vulgaris*, all 7.IV.1989-Burmancı, 2♀, *Pisum sativum*; 1♂, *Morus alba*(flowers); 1♀, *Prunus persica*, all 7.IV.1989-Düzlerçami, 2♀, *Ribes* sp, 13.IV.1989-Yenice, 2♀, *Calycotome villosa*; 3♀, *Triticum aestivum*; 1♀, *Colutea* sp; 1♀, *Euphorbia* sp, all 13.IV.1989-Yazır(Korkuteli), 1♀, *Prunus avium*(flowers); ♀, *Prunus domestica* (leaves), both 3.IV.1989-Korkuteli, ♀, *Prunus persica* (flowers), 2♀, *Malus communis*(flowers); ♀, *Pyrus communis*(flowers); 1♀, *Prunus cerasus*(flowers); 6♀, *Euphorbia* sp; 1♀, *Juglans regia* (flowers); 2♀, *Prunus avium*(flowers), all 13.IV.1989-Akçay, ♀, *Pyrus communis*, 13.IV.1989-Elmalı, 1♀, *Malus communis*, 13.IV.1989-Beldibi, 2♀, *Citrus sinensis*, 20.IV.1989-Göynük, 4♀, *Citrus limonium*, 20.IV.1989-Kemer, 3♀, *Citrus sinensis*(flowers); 2♀, *Trifolium* sp, both 20.IV.1989-Çamyuva, ♀, *Citrus sinensis*(flowers); 1♀, *Citrus nobilis deliciosa*; 14♀, *Alyssum murale*, all 20.IV.1989-Kumluka, 1♀, *Triticum aestivum*(ears), 20.IV.1989-Finike, 7♀, *Trifolium* sp; *Citrus sinensis*(flowers); 5♀, *Citrus limonium*(flowers); 2♀, *Euphorbia* sp, 20.IV.1989-Kavak, 11♀, *Anthemis* sp; 11♀, *Malus communis*; 7♀, *Anchusa* sp; 11♀, *Citrus sinensis*, all 20.IV.1989-Belen, ♀, *Triticum aestivum*(ears), 20.IV.1989-Aksu, 2♀, *Citrus limonium*, 27.IV.1989-Serik, 1♀ *Triticum aestivum*(ears), 27.IV.1989-Çolaklı, 1♀, *Phaseolus*

vulgaris; 4 ♀, *Anthemis* sp, both 27.IV.1989-Gençler, 2 ♀, *Hordeum vulgare*, 27.IV.1989-Güneycik, 6 ♀, *Cotinus* sp; 1 ♀, *Phlomis armeniaca*; 1 ♀, *Trifolium* sp, all 27.IV.1989-Gündoğmuş, 1 ♀ *Triticum aestivum*(ears); 1 ♀, *Triticum aestivum* (ears), both 27.IV.1989-Kepez, 3 ♀, *Olea europaea*, 27.IV.1989-Düzlerçami, 2 ♀, *Nerium oleander*, 4.V.1989-Yenice, 4 ♀, *Palurus spina-christi*; 1 ♀, *Hordeum vulgare* (ears), both 4.V.1989-Söğütçük, 2 ♀, *Pyrus elaeagrifolia*; 5, *Triticum eastivum*, both 4.V.1989-Bayat, 2 ♀, *Populus* sp, 4.V.1989-Yazır(Korkuteli, 1 ♀, *Prunus avium*(leaves); 1 ♀, *Prunus cerasus*(leaves); 3 ♀, *Cydonia vulgaris*(leaves), all 4.V.1989-Akyar, 1 ♀, *Cornus mas*(leaves); 2 ♀, cereal, both 4.V.1989-Bozova, 1 ♀, *Hordeum vulgare*(ears), 4.V.1989-Bahtılı, 2 ♀, *Morus alba*(leaves); 2 ♀, *Zea mays*; 4 ♀, *Ficus carica*; 9 ♀, *Anthemis* sp; 1 ♀, *Olea europaea*, all 11.V.1989-Çakırlar, 2 ♀, *Opuntia ficus-indica*(flowers); 7 ♀, *Hypericum* sp; 13 ♀, *Apium graveolens* var *dulce*; 5 ♀, *Phaseolus vulgaris*, all 11.V.1989-Altınyaka, 1 ♀, *Malus communis*(leaves); 1 ♀, *Juglans regia*(leaves), all 11.V.1989-Karaağaç, 1 ♂, 17 ♀, *Triticum aestivum*, 11.V.1989-Kumluca, 1 ♂, 4 ♀, *Nerium oleander*; 3 ♂, 1 ♀, *Triticum aestivum*(ears), both 11.V.1989-Yeşilbayır, 2 ♀, *Solanum tuberosum*(flowers); 7 ♀, *Olea europaea*; 1 ♂, 8 ♀, *Phaseolus vulgaris*; 2 ♀, *Punica granatum*(flowers); 2 ♀, *Vitis vinifera*, all 18.V.1989-Kırkgözhan, 2 ♀, *Zea mays*, 18.V.1989-Kovanlık, 5 ♀, *Avena sativa*(ears); 2 ♀, *Ficus carica*; 2 ♀, *Morus alba*(leaves); 1 ♀, *Amygdalus communis*; 3 ♀, *Vitis vinifera*, all 18.V.1989-Eksili, 3 ♀, *Nerium oleander*, 18.V.1989-Kurşunlu, 1 ♀, *Amygdalus communis*(leaves); 8 ♀, *Phaseolus vulgaris*, both 18.V.1989-Gaziler, 1 ♀, *Pistacia* sp, 18.V.1989-Düden, 2 ♀, *Prunus persica*(leaves), 18.V.1989-Yukarıkaraman, 21 ♀, *Phaseolus vulgaris*; 2 ♀, *Olea europaea*; 1 ♀, *Solanum tuberosum*(flowers); 15 ♀, *Zea mays*, all 25.V.1989-Tatköy, 1 ♀, *Malus communis*(leaves); 1 ♀, *Prunus armeniaca* (leaves); 1 ♀, *Juglans regia*; 4 ♀ *Medicago sativa*, all 25.V.1989-Çobanisa, 2 ♀, *Triticum aestivum* (ears), 25.V.1989-Gömbe, 3 ♀, *Vicia sativa*; 4 ♀, *Medicago sativa*; 4 ♀ *Malus communis* all 25.V.1989-Akçay, 1 ♀, *Isatis* sp; 2 ♀, *Triticum aestivum* (ears); *Populus* sp; 6 ♀, *Pimpinella anisum*, all 25.V.1989-Macar, 3 ♀, *Phaseolus vulgaris*; 2 ♀, *Capsicum annuum*; 2 ♀, *Solanum melongena*; 9 ♀, *Zea mays*; 3 ♀, *Punica granatum*(flowers); 2 ♀, *Prunus domestica*; 1 ♀, *Morus alba*; 1 ♀, *Quercus cerris*; 1 ♀, *Prunus persica*,

all 1.VI.1989-Yeşilöz, 1♀, *Ceratonia siliqua*; 2♀, *Musa paradisi*; 3♀ *Nerium oleander*, all 1.VI.1989-Demirtaş, 8♀, *Zea mays*, 1.VI.1989-Mahmutlar, 1♀, *Solanum melongena*, 1.VI.1989-Çolaklı, 1♀, *Gossypium hirsutum*; 2♀, *Lycopersicon esculentum*; 2♀, *Capsicum annuum*, all 1.VI.1989-Düzlerçamı, 10♀, 1♀, *Vitex agnus-castus*; 1♀; *Nerium oleander*; 1♀, *Verbascum* sp; all 16.VI.1989-Yazır (Korkuteli), 1♀, *Pyrus elaeagrifolia*, 16.VI.1989-Korkuteli, 3♀, *Vitis vinifera*; 1♀, *Prunus persica*, both 16.VI.1989-Öküzgözü, 2♀, *Triticum aestivum* (ears), 16.VI.1989-Özdemir, 2♀, *Eleagnus* sp; 2♀, *Vitis vinifera*; 1♀, *Salix* sp; 10♀, *Allium sativum*; 8♀, *Phaseolus vulgaris*, all 16.VI.1989-Karaköy, 1♀, *Triticum aestivum* (ears), 16.VI.1989-Gölova, 1♀, *Vitis vinifera*; 1♀, *Triticum aestivum* (ears), both 16.VI.1989-Kale, 3♀, *Vitex agnus-castus*; 1♀, *Olea europaea*; 3♀, *Nerium oleander*; 1♀, *Malus communis*(leaves); *Zea mays*, all 22.VI.1989-Finike, 1♀, *Phaseolus vulgaris*; 2♀ *Onobrychis* sp; 9♀, *Daucus* sp, all 22.VI.1989-Akseki, 4♀, *Zea mays*; 5♀, *Amygdalus communis*; 1♀, *Malus communis*; 2♀, *Vitis vinifera*, all 29.VI.1989-Cevizli, 2♀ *Vitis vinifera*; 7♀, *Verbascum* sp, both 29.VI.1989-Geriş, 1♀, *Vitex agnus-castus*; 3♀, *Helianthus annuus*; 3♀, *Sorghum vulgare*; 15♀, *Myrtus communis*; 2♀, *Vitis vinifera*; 8♀, *Clematis* sp, all 29.VI.1989-Fersin, 1♀, *Lycopersicon esculentum*, 29.VI.1989-Odabaşı, 1♀, *Olea europaea*, 6.VII.1989-Eksili, 1♀, *Lycopersicon esculentum*; 3♀, *Zea mays*; 1♀, *Myrtus communis*; 3♀, *Nerium oleander*; 1♀, *Vitex agnus-castus*, all 6.VII.1989-Hatipler, 1♀, *Gossypium hirsutum*; 1♀, *Olea europaea*; 2♀, *Gossypium hirsutum*, 6.VII.1989-Kurşunlu, 1♀, *Zea mays*; 3♀, *Cucumis melo*, both 6.VII.1989-Çalış 1♀, *Vitis vinifera*, 6.VII.1989-Bucakşeyhler, 1♀, *Sesamum indicum*; 2♀, *Vitex agnus-castus*, both 6.VII.1989-Yenice, 3♀, *Vitex agnus-castus*, 11.VII.1989-Korkuteli, 2♀ *Phaseolus vulgaris*; 1♀, *Vitis vinifera*; 6♀, *Prunus persica*; *Populus* sp, 2♀, *Salix* sp; 6♀, *Althea* sp, all 11.VII.1989-Mamatlar, 3♀, *Allium cepa*; 2♀, *Phaseolus vulgaris*; 4♀, *Medicago sativa*; 1♀, *Malus communis*; 1♀, *Beta vulgaris*; 1♀, *Pimpinella anisum*; 5♀, *Solanum tuberosum*; 1♀, *Triticum aestivum* (ears), all 11.VII.1989-Sülekler, 3♀, *Avena sativa*; 1♀, *Malus communis*; 1♀, *Solanum tuberosum*; 7♀, *Pimpinella anisum*; 4♀, *Phaseolus vulgaris*; 3♀, *Prunus persica*; 5♀, *Brassica oleracea* var *alba*; 4♀, *Lycopersicon esculentum*;

6 ♀, *Alhagi pseudoalhagi* all II.VII.1989-Bereket, 1♀, *Oryza sativa*,
27.VII.1989-Mamalar, 3♀, *Myrtus communis*, 1♀, *Arachis hypogaea*;
1♀, *Gossypium hirsutum*, all 27.VI.1989-Avsallar, 1♀, *Musa paradisi*;
4 ♀, *Vigna sinensis*, both 27.VII.1989-Yeşilköy, 2♀, *Rosa sp*; 3♀,
Bougainvillea glabra; 6♀, *Ricinus communis*; 1♀, *Vitex agnus-castus*
all 27.VII.1989-Yenice, 1♀, *Genista sp*, 3.VII.1989-Çukurça, 2♀, *Zea
mays*; 7♀. *Beta vulgaris*; 2♀, *Capsicum annum*, all 3.VIII.1989-Bozova,
1♀, *Helianthus annuus*; 1♀, *Vitis vinifera*; 1♀, *Prunus domestica*, all
3.VIII.1989-Çobanisa, *Vitis vinifera*, 3.VIII.1989-Doyran, 3♀, *Vitex
agnus-castus*, 10.VIII.1989-Kurma, 1♀, *Arachis hypogaea*, 10.VIII.1989-
Gedelme, 1♀, *Hypericum sp*, 10.VIII.1989-Koyunlar, 3♀, *Arachis
hypogaea*; 1♀, *Sesamum indicum*, both 17.VIII.1989-Gaziler, 4♀,
Capsicum annum, 17.VIII.1989-Beyler, 5♀, *Phaseolus vulgaris*;
1♀, *Malus communis*; 10♀ *Sorghum vulgare*; 2♀, *Solanum melongena*;
6♀, *Hibiscus esculentus*; 3♀, *Capsicum annum*, all 31.VIII.1989-Akçay,
3♀, *Vitis vinifera*; 8♀, *Beta vulgaris*; 1♀, *Prunus domestica*, all
31.VIII.1989-Elmalı, 6♀, *Zea mays*, 31.VIII.1989-Kuzköy, 4♀, *Tagetes
sp*; 5♀ *Beta vulgaris*, both 31.VIII.1989-Gökpinar, 5♀, *Daucus carota*;
5♀, *Raphanus sativa*, both 31.VIII.1989-Öküzgözü, 1♀, *Amygdalus
communis*, 31.VIII.1989-Gazipaşa, 1♀, *Arachis hypogaea*; 4♀, *Hibiscus
esculentus*; 1♀, *Zea mays*; 1, *Musa paradisi*; 4♀, *Gossypium hirsutum*;
2♀, *Arachis hypogaea*, all 7.IX.1989-Koçaoğlanlı, 2♀, *Capsicum
annum*; 1♀, *Vitex agnus-castus*, both 7.IX.1989-Mahmutlar, 5♀,
Musa paradisi, 7.IX.1989-Göynük, 7♀, *Vitex agnus-castus*; 4♀,
Vigna sinensis; 1♀, *Prunus persica*, 14.IX.1989-Adrasan, 10, 2♀, *Vitex
agnus-castus*, 14.IX.1989-Bayatbademlisi, 2♀, *Capsicum annum*;
2♀, *Helianthus annus*; 1♀, *Medicago sativa*; 8♀, *Zea mays*, 21.IX.1989-
İmrahor, 1♀, *Prunus persica*; 1♀, *Malus communis*; 2♀, *Cydonia
vulgaris*; 3♀, *Populus sp*; 2♀, *Juglans regia*; 2♀, *Pyrus communis*
all 21.IX.1989-Kızılpinar, 5♀, *Prunus domestica*; 2♀, *Vitis vinifera*;
15♀ *Allium sativum*; 2♀, *Phaseolus vulgaris*; 2♀, *Capsicum annum*,
all 21.IX.1989-Gölova, 1♀, *Pyrus communis*, 21.IX.1989-Gümüşyaka,
5♀, *Phaseolus vulgaris*; 1♀, *Malus communis*; 5♀, *Zea mays*, all
21.IX.1989-Manavgat, 1♀, *Arachis hypogaea*, 28.IX.1989-İbradı, *Corylus
avellana*; 2♀, *Juglans regia*; 1♀, *Cornus mas*; 1♀, *Prunus persica*;
4♀, *Capsicum annum*; 1♀, *Solanum melongena*, 28.IX.1989-İbradı

(600 m), 1♀, *Quercus* sp: 3♂, 3♀, *Daphne* sp, both 28.IX.1989-Yazır (Korkuteli), 2♀, *Prunus persica*: 1♀, *Cydonia vulgaris*: 1♀, *Prunus armeniaca*, all 23.X.1989-Korkuteli, 6♀, *Morus alba*: 1♀, *Cydonia vulgaris*, 23.X.1989-Yelten, 2♀, *Cucurbita pepo*: 1♀, *Prunus avium*: 1♀, *Medicago sativa*: 3♀, *Raphanus sativa*: 1♀, *Solanum melongena*: 3♀, *Brassica oleracea* var. *alba*: 2♀, *Vitis vinifera*, all 23.X.1989-Kovanlık, 5♀, *Conyza canadensis*, 30.X.1989-Ekşili, 2♀, *Phaseolus vulgaris* 30.X.1989-Kurşunlu, 10♂, 7♀, *Allium sativum*: 1♀, *Phaseolus vulgaris*: 3♀, *Helianthus annuus*, all 30.X.1989-Çalkaya, 3♀, *Daphne gnidoides*: 1♀, *Bellis perennis*, both 30.X.1989-Kemerağzı, 2♀, *Zea mays*, 30.X.1989-Çağlayan, 1♀, *Apium graveolens* var. *dulce*, 30.X.1989-Duraliler, 1♀, *Tagetes* sp: 4♀, *Zea mays*: 8♀, *Conyza canadensis*: 5♂, 3♀, *Euphorbia* sp, all 10.IX.1989-Bahtılı, 1♀, *Eriobotrya japonica*: 1♀, *Rosa* sp; 2♀, *Euphorbia* sp: 4♀, *Allium porrum*; 2♀, *Cucurbita pepo*: 11♀, *crucifer*: 7♀, *Raphanus sativa*, all 10.XI.1989-Sütçüler, 4♀, *Conyza canadensis*, 27.XI.1989-Düden, 2♀, *Euphorbia polcherrima*: 11♀, *Dianthus caryophyllus*: 6♀, *Sonchus* sp, all 27.XI.1989-Varsak, 2♀, *Eriobotrya japonica*: 6♀, *Gladiolus* sp: 4♀, *Solanum melongena*, all 27.IX.1989-Kirişçiler, 3♀, *Clematis* sp, 27.XI.1989-Yenikent, 2♀, *Eucalyptus* sp, 27.IX.1989-Kızılarık, 9♀, *Eriobotrya japonica*: 1♀, *Solanum melongena*: 1♀, *Allium porrum*, all 27.XI.1989-Topçular, 11♀, *Lactuca sativa*: 6♀, *Brassica oleracea* var. *alba*, both 27.IX.1989-Güzeloba, 3♀, *Zea mays*, 27.XI.1989-Koyunlar, 1♀, *Vicia faba*: 4♀, *Medicago sativa* both 27.IX.1989-Bahtılı, 1♀, *Eriobotrya japonica*: 3♀, *Allium porrum*: 2♀, *Laurus nobilis*: 1♀, grass: 2♀, grass, all 7.XII.1989-Çakırlar, 4♂, 10♀, *Euphorbia* sp: 2♀, *Asphodelus* sp: 3♀, *Calendula officinalis*: 1♀, *Clematis* sp: 2♀, *Raphanus raphanistrum*, all 7.XII.1989-Hacisekililer, *Euphorbia* sp: 1♀, *Ceratonia siliqua* both 7.IX.1989-Yenigöl, 5♀, *Allium porrum* 21.XII.1989-Dumanlar, 2♀, *Asphodelus* sp, 21.XII.1989-Gökçam, 1♀, *Asphodelus* sp: 5♀, *Narcissus tazette*, both 9.I.1990-Doyran, 1♀, *Asphodelus* sp, 9.I.1990-Aslanbucak, 4♀, *Calendula officinalis*, 9.O.1990-Koyunlar, 1♀, *Cynara scolymus*: 6♀, *Allium porrum*; 26♀, *Pisum sativum*, all 25.I.1990-Kircamisi, 1♀, *Allium cepa*: 1♀, *Capsella bursa-pastoris*: 2♀, *Cynara scolymus*: 3♀, *Mercurialis annua*, all 25.I.1990-Kampüs, 1♀, *Euphorbia* sp, 25.I.1990Bahtılı, 4♀, *Euphorbia*

sp; 3, ♀ *Capsella bursa-pastoris*: 1 ♀, *Calendula officinalis*: 1 ♀, *Raphanus raphanistrum*, all 9.II.1990-Çakırlar, 1 ♀, *Narcissus tazette*: 1 ♀, *Calendula officinalis*: 2 ♀, *Capsella bursa-pastoris*: 1 ♀, *Allium cepa*, all 9.II.1990-Kızılarık, 4 ♀, *Capsella bursa-pastoris*: 1 ♀, *Euphorbia sp*; 3 ♀ *crucifer*: 4 ♀, *Asphodelus sp*; 4 ♀, *Allium cepa*; 4 ♀, *Allium porrum*; 2 ♀, *Sonchus sp*; 1 ♀, *Raphanus raphanistrum*, all 21.II.1990-Perge, 10 ♀, *Asphodelus sp*, 21.II.1990-Dumanlar, 13 ♀, *Pisum sativum*; 1 ♀, *Apium graveolens* var *dulce*, both 21.II.1990-Boztepe, 20 ♀, *Medicago sativa*, 21.II.1990-Kumköy, 1 ♀, *Anemone sp*, 21.II.1990.

Habitat : Polyphag, pest on various agricultural crops, primarily on tobacco, onion and cotton.

Distribution : Cosmopolitan. All over Turkey.

Remarks : In coastal areas all year around on diverse plants.

In inland was traced through whole sampling period, that is March-October. It is a pest of onion, garlic and leak; may cause damage to cotton in the seedling stage; greenhouse grown cucumber and squash are infested when pesticidal pressure ceased in Antalya.

***Thrips trehernei* Priesner**

Material examined: Yazır (Korkuteli), 1 ♀, *Cydonia vulgaris* (flowers), 5.V.1988-Düzlerçami, 1 ♀, *Nerium oleander*, 16.VI.1989-

Habitat : Flowers of various plants, especially Compositae with yellow flowers.

Distribution : Euro-Siberian. All over Turkey, except Eastern and Southeastern Anatolia.

ÖZET

ANTALYA'nın THYSANOPTERA FAUNASI ÜZERİNDE ÇALIŞMALAR IV. Thripidae Stephens-3.

Thrips Linnaeus cinsine bağlı 8 tür ile ilgili faunistik kayıtlara; habitatlarına ve dağılışlarına ilişkin bilgilere yer verilmektedir.

REFERENCE

Tunc, İ., 1988. Thysanoptera in a coastal Mediterranean winter. Ak.U.Zir.Fak. Derg., 2(1), 105-113.