



# A LIST OF RECORDED SYRIAN INSECTS AND ACARI

BY

**G. EL-HARIRI, PH. D.**

Assistant Prof. of Economic Entomology  
Faculty of Agriculture, University of Aleppo

1968

## CONTENTS

PART I	Page	PART II	Page
Acarina	5	Olive	100
Insecta		Pome	101
Thysanura	8	Stone fruits	105
Collembola	9	Pistachio	110
Orthoptera	9	Grape	112
Dermoptera	16	Citrus	114
Isoptera	16	Walnut, fig, pomegranate	116
Corrodentia == Psocop- tera	16	Forests	118
Ephemeroptera	17	Cotton	122
Odonata	17	Cereals	124
Mallophaga	18	Forage legumes	127
Anoplura	18	Edible legume	129
Thysanoptera	19	Solanaceous plants	130
Hemiptera-Heteroptera	20	Crucifers	132
Homoptera	26	Cucurbits	134
Neuroptera	34	Beets and related crops	135
Lepidoptera	34	Okra, sesame, mint, garlic, onion, artichoke, lettuce	136
Coleoptera	56	Ornamentals	138
Hymenoptera	74	Stored products	140
Diptera	84	Medical & Veterinary	144
Siphonaptera == Apha- niptera	98	Entomophagous	151
		References	157

## A LIST OF RECORDED SYRIAN INSECTS AND ACARI

Informations about Syrian insects and acari are scattered in the literature. Fokeu (1893) recorded Syrian gall maker insect species. Seguy (1924) listed many mosquito species from Syria. Topsent (1928) listed some insect and other animal species collected from Syria by Henri Kerville during this voyage in 1908. 29 species of Syrian coccids were recorded by Bodenheimer (1926). Talhouk (1954) published the first list of Syrian economic insects attacking plant crops, and in 1961, the same author, added another short list. Shneider (1957) recorded few economic insect species attacking fruit trees, mainly, and other crops. A study of insects attacking pistachio in Syria was published by Shneider (1958). Balachowsky (1963) in his book on economic Coleoptera, has included many Syrian Coleoptera species. Skaf et al (1964) wrote a list of economic Coleoptera of Syria. Knorr and Vaughn (1964) recorded aphid, coccid, and mite species attacking Syrian citrus trees. Gentry (1965) in his handbook, listed the economic crop insects and mites of Syria and other countries of Northeast Africa and Southwest Asia.

So far, no complete list of recorded insects has been

published. It will be helpful to list known Syrian insects and mites, since a complete list is not available. Insects which are indicated by asterisks (\*\*) are recorded for the first time from Syria. The list is in two parts : Part I is concerning insects and mites placed according to their taxonomical positions. Hosts are given beside each species. In part II, insects and mites are written according to their hosts. Medical and veterinary insects and acari and entomophagous insects are included.

## PART I

### ACARINA

#### ARGASIDAE

Argas persicus (Oken), poultry, spirochetosis vector.  
Borrelia anserina (Sakh.) (= Spirochæta galinorum Blanc.), chickens, geese, turkeys, other birds.

Ornithodoros sp., domestic animals

#### DEMODICIDAE

Demodex folliculorum Simon, man, animals.

#### DERMANYSSIDAE

Dermanyssus gallinae De Geer, chickens, other birds.

#### ERIOPHYIDAE

Aceria granati (Can. & Mas.), pomegranate.

Aceria phloeoecoptes (Nal.), almond.

Aceria sheldoni (Eving), lemon.

Aculus lycopersici (Mass.), tomato.

Eriophyes pyri (Pagst.), pear, apple, plum.

Eriophyes vitis (Pagsts), pear, apple, plum.

Fhyllcoptes sp., olive.

Phyllocoptruta oleivorus (Ashm.), orange, lemon.

Phytoptus phleocoptes typicus Nale., almond, plum

## IXODIDAE

Boophilus calcaratus (Birula), sheep.

Dermacentor sp., domestic animals

Haemaphysalis sp., dog, other animals,

Hyalomma aegyptium L., domestic animals (camel, cattle,  
horse), wild animals (tortoise).

Hyalomma anatolicum Koch., sheep, vector of crimean  
hemorrhagic fever.

Ixodes ricinus (L.), wide range of domestic animal hosts.

Margaropus sp., cattle, sheep, other domestic animals.

Rhipicephalus sp., domestic animals.

## PSOROPTIDAE

Chorioptes equi (Hering) (= Chorioptes symbiotes), horse leg.

Otodectes cynotis (Hering), ears of dog and cat.

Psoroptes equi (Hering), farm animals.

Psoroptes equi var. ovis (Hering),  
causes sheep scab.

Psoroptes equi var. bovis (Gerlach),  
causes cattle scab.

Psoroptes equi var. capræ (Delaf.),  
causes ear scab of goat,

#### **PYEMOTIDAE**

Pyemotes ventricosus (Newp.) , entomophagous, man.

#### **SARCOPTIDAE**

Knemidokoptes mutans (Rob. & Lanq.), poultry legs.

Notoedres cati Hering, dog.,

Notoedres cati var. cuniculi Gerlach, rabbit.

Sarcoptes scabiei (De Geer), man, domestic animals.

Sarcoptes scabiei var. equi Gerl.,  
horse, mule.

Sarcoptes scabiei var. canis Gerl.,  
dog's ears and eyes.

Sarcoptes scabiei var. capræ Furs.,  
goat.

Sarcoptes scabiei var. ovis Megen.,  
sheep's face.

Sarcoptes scabiei var. hominis  
(Hering), man.

#### **TENUIPALPIDAE (= PHYTOOPTIPALPIDAE)**

Brevipalpus obovatus Donn. (= Brevipalpus  
inornatus (Banks)), lemon.

Brevipalpus sp., orange.

Ceneopalpus pulcher (C. & F.) (= Brevipalpus geisenheyneri (Rubs.) = B. pyri Sayed  
B. oudemansi (Geij.)), pear, quince, poplar.

#### TETRANYCHIDAE

Bryobia praetiosa Koch., apple, pear, peach.

Eutetranychus orientalis (Klein), citrus.

Panonychus ulmi (Koch.), apple. (= Tetranychus ulmi Kuch.)

Tetranychus telarius (L.). cotton, rose, apple, citrus,  
beans, watermelon.

#### TYROGLYPHDAE (= ACARIDAE)

Tyroglyphus sp., (= Acarus sp.), flour, stored cereal  
products.

### INSECTA

#### THYSANURA

##### JAPYGIDAE

Japyx gigas var. syriacus Silv., hosts are unknown.

##### LEPISMIDAE

Acrotelsa collaris F., hosts are unknown.

- Ctenolepisma kervillei Silv., hosts are unknown.  
Ctenolepisma kraepelini Eschrch, hosts are unknown.  
Ctenolepisma lineata F., hosts are unknown.  
Lepisma saccharina L., starchy materials in houses.  
Thermobia aegyptiaca Luc., starchy materials in houses  
Thermobia domestica ( Pack. ), starchy materials in houses.

#### **MACHILIDAE**

- Machilinus rupestris Luc., hosts are unknown.

### **COLLEMBOLA**

#### **SMINTHURIDAE**

- Lepidocyrtinus incertus Hand., cotton.  
Sminthurus viridis Lubb., alfalfa, lucerne.

### **ORTHOPTERA**

#### **ACRIDIDAE**

- Acnerida volxemi ?, hosts are unknown.  
Acrida bicolor (Thunb.), cotton.  
Acrida turrita (L.), hosts are unknown.

- Acridella nausta (L.), hosts are unknown.
- Acridella robusta ?, hosts are unknown.
- Aerotylus insubricus (Scop.), hosts are unknown.
- Aerydium cePeroi Bol., hosts are unknown.
- Aerydium deppressum Bris., hosts are unknown.
- Aiolopus savignyi (Kr.) (= Aiolopus affinis Bol.) hosts are unknown.
- Aiolopus strenens Latr., hosts are unknown.
- Aiolopus thalassinus (F.), hosts are unknown.
- Anacridium aegyptium (L.), polyphagous plant feeder.
- Atractomorpha sp., hosts are unknown.
- Brunnerella mirabilis Sauss., hosts are unknown.
- Calliptamus barbarus barbarus Costa (= Calliptamus siculus Burn.), hosts are unknown.
- Calliptamus barbarus pallidipes ?, hosts are unknown.
- Calliptamus italicus (L.), polyphagous, cereals, cotton, forage, vegetables.
- Calliptamus vieculus ?, hosts are unknown.
- Calliptamus sp., hosts are unknown.
- Chorthippus albomarginatus ?, host are unknown
- Chorthippus bicolor L., hosts are unknown.
- Chorthippus macrocerus P. W., hosts are unknown.

- Chrotogonus lugubris Blanch., hosts are unknown.
- Dericorys libialis Pall., hosts are unknown.
- Dociostaurus anapalicus ?, hosts are unknown.
- Dociostaurus anatolicus ?, hosts are unknown.
- Dociostaurus gonei Ossk., hosts are unknown.
- Dociostaurus hauensteini Bol., hosts are unknown.
- Dociostaurus kraussinigrogeniculus Uv.,  
hosts are unknown.
- Dociostaurus maroccanus (Thunb.), polyphagous,  
cereals, forage, vegetables.
- Dociostaurus tartarus ? hosts are unknown.
- Duronella laticornis Krauss., hosts are unknown.
- Eremopaza gigas Kirby, hosts are unknown.
- Eremoperacinerascens virescens Uv., hosts are  
unknown.
- Eremopeza saussurei violacea Uv., hosts are un-  
known.
- Erenotmethis carinatus F., hosts are unknown.
- Euprepocnemis plorans (Charp.), polyphagous, cotton,  
berseem.
- Franella eremaphila Uv., hosts are unknown.
- Helioseirthus moseri Sauss., hosts are unknown.
- Locusta migratoria ph. solitaris L., hosts are  
unknown.

- Mioscirtus wagneri Ev., hosts are unknown.
- Notostaurus anatolicus K., hosts are unknown.
- Oedaleus decorus Germ. hosts are unknown.
- Oedaleus senegalensis Kr. hosts are unknown.
- Oedipoda caerulescens (L.), hosts are unknown.
- Oedipoda miniata (Pall.) , hosts are unknown.
- Oediota nigrofasciatus ? , hosts are unknown.
- Oedipoda salina Pall. , hosts are unknown.
- Oedipoda schoehi Sauss. , hosts are unknown.
- Paratettix meridionalis Ramb., hosts are unknown
- Pezotettix giornæ Rossi. , hosts are unknown.
- Pyrgodera armata F.W., hosts are unknown.
- Pyrgomorpha conica (Ol.), hosts are unknown.
- Ramburiella bolivari ? , hosts are unknown.
- Ramburiella lurcomana J.W., hosts are unknown.
- Ramburiella truchmana F.W. , hosts are unknown.
- Schistocerca gregaria (Forsk.), polyphagous plant feeder.
- Seintharistaropalpis brureri Sauss. , hosts are unknown.
- Sphingonotus carinatus Sauss. , hosts are unknown.
- Sphingonotus coeruleans L., hosts are unknown.
- Sphingonotus nebulosus porsa Sauss., hosts are unknown.

Sphingonotus cepofasciatus Sew., hosts are unknown  
Spkingonotus rubescens Walk., host are unknown.  
Sphingonotus runerelis ?, hosts are unknown.  
Sphingonotts satrapes Sauss., hosts are unknown.  
Sphinhonotus savignyi Sauss., hosts are unknown.  
Stauroderus bicolor Charp., hosts are unknown.  
Stauroderus syriacus Bol., hosts are unknown.  
Thisoecetrinus pterostichus E.W., hosts are un-  
known.  
Thisoecetruis rulissimilis F.W., hostt are unknown.  
Thisoleitcas dorsalus F.W., hosts are unknown.  
Tmethis gibber Stal.. hosts are unknown.  
Tmethis pulchripennis asiaticus Serv., hosts are  
unknown.  
Tmethis pulchripennis UV., hosts are unknown.  
Xerohippns sp., hosts are unknown.  
Yranatmethis zagrosi Uv., hosts are unknown.

## BLATTIDAE

Blatta orientalis (L.), stored food.  
Blatella germanica (L.), stored food, medical impor-  
tance.  
Periplaneta americana L., stored food, medical im-

Polyphaga aegyptiaca (L.) (= Heterogamia aegyptiaca L.), stored food.

Polyphaga africana L. (= Heterogamia africana L.), stored food.

## **GRYLLIDAE**

Gryllodes herbaceus Sauss., hosts are unknown.

Gryllus bimaculatus De Geer (= Liogryllus bimaculatus De Geer), polyphagous, crucifers, alfalfa, cotton, potatoes, corn, cucurbits.

Gryllus burdigalensis Latr. (Acheta burdigalensis Latr.), hosts are unknown.

Gryllus campestris L. (Acheta campestris L.)  
hosts are unknown.

Gryllus desertus Pall. (Acheta deserta Pall. == Melanogryllus desertus (Pall.)),  
hosts are unknown.

Gryllus domesticus L. (= Acheta domesticus (L.)), polyphagons.

Nemobius heydeni Fisch., hosts are unknown.

Tropidopoia cylindrica Marsch., hosts are unknown.

## **GRYLLOTALPIDAE**

Gryllotalpa gryllotalpa (L.) (= Gryllotalpa vulgaris Latr.), cotton, vegetables, (Tomatoes, potatoes, legume).

## **MANTIDAE**

Empusa sp., hosts are unknown.

Eremiaphila genei Lef., hosts are unknown.

Iris oratoria L., hosts are unknown.

Mantis religiosa L., entomophagous.

Sphodromantis bicolorata Burn., entomophagous.

## **TETTIGONIIDAE (= PHASGONURIDAE)**

Bradyporus lodipas ?, hosts are unknown.

Decticus albifrons F., hosts are unknown.

Ephippigera sp., a predator of Eurygaster.

Homorocaryphus nitidulus Scop., hosts are unknown.

Metrioptera intermedia Serv., hosts are unknown.

Orkania ebbursiana Uv., hosts are unknown.

Phaneroptera nana nana F., hosts are unknown.

Pholidoptera ledereri Fieb., hosts are unknown.

Pholidoptera punctifrons Burn., hosts are unknown.

Platycleis sp., hosts are unknown.

Pleronemabius heydeni Fisch., hosts are unknown.

Tettigonia caudata Charp., hosts are unknown.

Tettigonia viridissima (L.) (= Phasgonura vi-  
ridissima L.), polyphagous plant feedr.

## DERMAPTERA

### FORFICULIDAE

Forficula auricularia L., many plants.

Forficula lurida Fisch. many plants.

### LABIDURIDAE

Labidura riparia Pall., hosts are unknown.

## ISOPTERA

### TERMITIDAE

Leucotermes lucifugus Rassi., hosts are unknown.

## CORRODENTIA = PSOCOPTERA\*

Liposcelis (Troctes) sp.,\*\* stored grains.

---

\* Recorded for the first time.

## EPHEMEROPTERA

Undetermined species.

## ODONATA\*

### AGRIONIDAE

- Agrion ornatum Heyer.  
Agrion puella L.  
Agrion pulchellum Linden.  
Calopteryx splendens var. hyalina Mart.  
Calopteryx splendens var. syriaca Gene.  
Enallagma cyathigerum Charp.  
Epallage fatime Charp.  
Ischnura elegans Linden.  
Platycnemis dealbata Kl.  
Platycnemis pennipes Pall.  
Pseudagrion prætextatum Selys.  
Psilocnemis kervillei Martin.

### AESCHNIDAE

- Gomphus davidi Selys.  
Gomphus simillimus Selys.

---

\* The hosts of this order are unknown.

Onychogomphus lefebvrei Selys.

#### **LIBELLULIDAE**

Crocothemis erythraea Brull.\*\*

Libellula fulva Mull.

Orthetrum brunneum Fonsc.

Orthetrum ramburi Selys.

#### **MALLOPHAGA**

##### **TRICHODECTIDAE**

Columbicola columbae (L.) (= Lipeurus baculus Nitz.). pigeon.

Menopon gallinae (L.), chickens.

#### **ANOPLURA**

##### **HAEMATOPINIDAE**

Haematopinus asini (L.), horse, mule.

Haematopinus eurysternus (Nitz.), cattle.

Haematopinus ovinus L. sheep.

##### **PEDICULIDAE**

Pedeculus humanus capitis De Geer, man head.

## THYSANOPTERA

### AEOLOTHRIPIDAE

Aeolothrips collaris ssp. meridionalis Pries.,  
hosts are u. known.

### PHLAEOTHRIPIDAE

Bolothrips arenarius Pries., hosts are unknown

Haplothrips cerealis Pries., hosts are unknown.

(PRIESNER, H. (1960) . A monograph of the Thysanoptera  
of the Egyptian deserts. Publ. Inst. Des.  
Egypte, No. 13, 549 p.)

Pediculus humanus humanus L. man body.

Phthirius pubis (L.), pubic regions of the man body.

## THYSANOPTERA

### AEOLOTHRIPIDAE

Aeolothrips intermedius Bagnal.\*\* hosts are unknown

### PHLAEOTHRIPIDAE

Haplothrips cottae (Vuill.), carnation.

Haplothrips tritici (Kurd.), grains.

Liothrips oleae (Costa), olive.

### THRIPIDAE

Heliothrips haemorrhoidalis (Bouche), citrus.

Limothrips cerealeum (Haliday), wheat, other grains.

Retithrips syriacus (Mayet) (= Retithrips aegyptiacus March.), grape, pear, cotton, plum, walnut, eucalyptus, pistachio, vegetables.

Thrips iranicus Yakhon., pistachio.

Thrips pistaciae Yakhon., pistachio.

Thrips tabaci Lind., cotton, cabbage, onion, beets, tobacco.

## **HEMIPTERA - HETEROPTERA**

### **BELOSTOMATIDAE**

Lethocerus niloticum Stal. hosts are unknown.

### **BERYTIDAE**

Berytus brevipennis Puton., hosts are unknown.

### **CIMICIDAE**

Cimex columbarius Jen., pigeons, chickens.

Cimex lectularius L., man.

### **COREIDE**

Corizus hyoscyami L., hosts are unknown.

Maccevethus lineola F., hosts are unknown,

Phyllobomphra lacerata Sch., hosts are unknown.

Stenocephalus albipes F., hosts are unknown.

Stenocephalus marginatus Feer., hosts are unknown.

### **CORIXIDAE**

Arctocoris albiventris Horv., hosts are unknown.

Arctocoris lateralis Leach. (= Arctocoris hieroglyphica Duf.), hosts are unknown.

Arctocoris nigrolineata Fieb., hosts are unknown.

Corixa affinis Leach., hosts are unknown.

### **CYDNIDAE**

Tritomegas marginatus Sign., hosts are unknown.

### **GERRIDAE**

Gerris argentatus Schumm., hosts are unknown.

Gerris castæ Seh., hosts are unknown.

Gerris laterales Schumm., hosts are unknown.

Gerris paludum F., hosts are unknown.

Gerris thoracius Schumm., hosts are unknown.

### **HEBRIDAE ( == NAEOGEIDAE )**

Herbus pusillus Fall., hosts are unknown.

### **LYGAEIDAE**

Aphanus alboacuminatus Goeze var. bicolor Horv.

hosts are unknown.

Apterola lownii Saund., hosts are unknown.

Cymus melanocephalus Fieb., hosts are unknown.

Dicranoccephalus ( Stenocephalus ) sp., hosts are  
unknown.

Emblethis griseus Wolf., hosts are unknown.  
Emblethis verbasci F., hosts are unknown.  
Geocoris scutellarus Put., hosts are unknown.  
Ischnodemus suturalis Horv. hosts are unknown.  
Lygaeus equestris L., hosts are unknown.  
Lygaeus pandurus Scop., hosts are unknown.  
Metopolax sp., hosts are unknown.  
Nysius cymoides Spin., hosts are unknown.  
Oxycarenus collaris Muls. & Rey, hosts are unknown.  
Oxycarenus hyalinipennis ( Costa ), cotton, okra,

**MIRIDAE ( == CASPIDAE )**

Calocoris hadenborgi Fieb., hosts are unknown.  
Calocoris hispanicus Gm., hosts are unknown.  
Calocoris hispanicus var. confluens Reut., hosts  
are unknown.  
Calocoris hispanicus var. nemoralis F., hosts  
are unknown.  
Calocoris norvegicus Gm., hosts are unknown.  
Camptobrochis lutescens Schill., hosts are unknown.  
Camptobrochis punctulatus Fall., hosts are unknown.  
Camptobrochis punctulatus serenus Dougl., hosts  
are unknown.

Greontiades pallidus (Ramb.), cotton, clover, alfalfa  
corn.

Deraeocoris rutilus Sch., hosts are unknown.

Dioneonotus cruentatus (Brull.), citrus.

Liocoris tripustulatus F., hosts are unknown.

Lygus genulatus ?, hosts are unknown.

Lygus pratensis L., hosts are unknown.

Orthocephalus tenuicornis var. fulvipes Reuter,  
hosts are unknown.

Plagiotylus dispar Reut., hosts are unknown.

Stenodema calcarata Fall., hosts are unknown.

Trigonotylus ruficornis Geoff., hosts are unknown.

## NABIDAE

Nabis ferus L., hosts are unknown.

## NOTONECTIDAE

Notonecta glauca L., hosts are unknown.

Plea atomaria Pall., hosts are unknown.

## PENTATOMIDAE

Aelia rostrata Boh., Graminaceae such as wheat.

- Apodiphus amygdali Germ., hosts are unknown.
- Cydnus aterrimus Fork., hosts are unknown.
- Eurydema ornata (L.) (= Eurydema festivum (L.)),  
radish, cabbage, cotton, potato, cereals.
- Eurydema festiva var. decorata Sch., hosts are un-  
known.
- Eurydema formosa Puton., hosts are unknown.
- Eurydema neutrali Kul., hosts are unknown.
- Eurydema rugulosum Dhrm., hosts are unknown.
- Eurygaster austriaca (Schr.), cereals.
- Eurygaster integriceps Put., grains of graminaceous.
- Eurygaster maurus (L.), cereals.
- Carpocoris pudicus Poda (= Carpocoris pur-  
pureipennis Degger), hosts are unknown.
- Coridus viduatus (F.); melons, other cucurbits.
- Dolycoris baccarum L., hosts are unknown.
- Graphosoma italicum Mnll., hosts are unknown.
- Graphosoma semipunctata (F.)\*\*, hosts are unknown.
- Nezara virdula (L.), tomato, corn, vegetables, cotton,  
alfalfa, melon.
- Odontotarsus purpureolineatus Rossi., hosts are  
unknown.
- Peribalus vernalis Wolff., hosts are unknown.

Podops rectidens Horv., hosts are unknown.

Stagonomus italicus Gm., hosts are unknown.

### **PYRRHOCORIDAE**

Pyrrhocoris apterus L., hosts are unknown.

### **REDUVIIDAE**

Eotomeoris ulalaus Ross., hosts are unknown.

Holotrichius putoni Reut., hosts are unknown.

Nagusta goedeli Kol., hosts are unknown.

Oncoccephalua bipartitus Horv., hosts are unknown.

Reduvius pallipes Klug., hosts are unknown.

Rhinocoris christophi var. pictipes Horv. , hosts  
are unknown.

Rhinocoris kervillei Horv., hosts are unknown.

Rhinocoris sp.\*\*, hosts are unknown.

### **TINGIDAE**

Elasmotropis selecta Horv., hosts are unknown.

Monanthia echii Schra., hosts are unknown.

Monosteira lobulifera Reut., pear.

Monosteira unicostata (Muls. & Rey,), almond, ap-

ricot, other stone fruits, pear, apple, hawthorn,  
willow, poplar.

Physatochila confinis var. putoni Horv., hosts are  
unknown.

Serenthia atricapilla Spin., hosts are unknown.

Stephanitis pyri (F.), apple, walnut, oak, poplar,  
pear.

#### VELIIDE

Velia rivulorum var. uentralis Puton., hosts are  
unknown.

Rhagovelia nigricans Burm., hosts are unknown.

## HOMOPTERA

#### ALEYRODIDAE

Bemisia tabaci (Genn.), cotton, cucurbits, tomato.

Dialeurodes kirkaldyi (Kot.), cirtus, ornamentals.

Siphoninus finitimus (Silv.), citrus, apple, fig.

#### APHIDIDAE

Acyrthosiphon pisum (Harris), legume plants.

Aphis craccivora Koch., legume plants, melons, citrus.

- Aphis fabæ Scop., beans, beets.
- Aphis gossypii Glov., citrus, cotton, cucurbits, tobacco,  
pomegranate, mint.
- Aphis nerii Boyer, ornamentals.
- Aphis pomi De Geer, apple, pear, quince.
- Aphis punicæ Pass. (= Aphis durantæ Theob.),  
pomegranate.
- Brachycaudus amygdalinus (Schtd.), apricot, almond,  
peach.
- Brachycaudus helichrysi (Kalt.), Compositæ, stone-  
fruits.
- Brevicoryne brassicae (L.), crucifers.
- Capitophorus elaeagni (Del Guercio)\*\*, artichoke.
- Hyalopterus pruni (Geoff.), peach, plum, others.
- Hyperomuzus lactucae (L.), Sonchus sp.
- Macrosiphoniella sanborni (Gill.), chrysanthemum.
- Macrosiphum rosæ (L.), roses.
- Myzus persicæ (Sulze.). citrus, radish, solaceous plants,  
rosaceous plants.
- Phlöemyzus passerinii (Sign.), poplar.
- Rhopalosiphum maidis (Fitch), sorghum, corn, barley,  
wheat.
- Sappaphis malii (Ferrai) (= Anuraphis roseus  
Baker), apple.

Schizaphis graminum (Rond.), wheat.

Therioaphis maculata (Buckton), \*\* alfalfa.

Toxoptera aurantii (Boyer), citrus.

#### CERCOPIDAE

Cercopis sanguinolenta L., hosts are unPnown.

Philænus impictifrons Horv., hosts are unknown.

Philænus impictifrons var. arcifer Horv. , hosts  
are unknown.

Philaenus impictifrons var. quinquemauslatus  
Horv., hosts are unknown.

Philaenus impictifrons var. seminiger Horv.,  
hosts are unknown.

Philænus impictifrons var. vestitus Horv., hosts  
are unknown.

Philaenus leucophthalmus L. (= Philaenus spu-  
marius Auct.) hosts are unknown.

#### CICADIDAE

Chloropsalta viridissima (Walker) (= Cicadatra  
alhageos (Kol.) ), grape.

Melampsalta tumidifrons Horv., hosts are unknown.

## COCCIDAE

- Ceroplastes floridensis Coms., citrus, pistachio.
- Ceroplastes rusci (L.), fig.
- Ceroplastes sinensis Del Guerico, ornamentals, pistachio.
- Coccus hesperidum (L.), fig, citrus, acacia, oleander.
- Lecanium corni Bouche, apricot, pear, other deciduous fruit trees.
- Pulvinaria pistaciae Bod. (= Anapulvinaria pistaciae Bod.), pistachio.
- Saissetia oleae (Bern.) (= Lecanium olcae Bern.), olive, citrus, oleander.

## DIASPIDIDAE

- Aonidiella aurantii (Mask.), citrus, other plants.
- Aspidiotus britannicus Newst., olive.
- Aspidiotus hederae (L.), olive, apple, oleander, citrus.
- Aspidiotus lataniae (Sign.), fig.
- Aspidiotus zonatus (Frauenfeld), hosts are unknown.
- Chinoraspis striata Newst., hosts are unknown.

- Chrysomphalus dictyospermi (Morgan), citrus.
- Chrysomphalus ficus (Ashm.) (= Chrysomphalus aonidum (L.)), citrus, olive.
- Diaspis echinocacti (Bche.). hosts are unknown.
- Diaspis syriaca Lind., pistachio.,
- Epidiaspis gennadii Leon., pistachio.
- Lepidosaphes beckii (Newm.), citrus, olive, fig, other plants.
- Lepidosaphes ficus (Sign.), fig, plum, apple.
- Lepdiosaphes minima Newst., hosts are unknown.
- Lepidosaphes palestinensis Bodenh., olive.
- Lepidosaphes pinniformis Bche., hosts are unknown.
- Lepidosaphes pistaciae Arch., pistachio.
- Lepidosaphes ulmi (L.), fruit trees. olive.
- Leucapsis knemior Hoke., hosts are unknown.
- Leucaspis pini Hart., hosts are unknown.
- Leucaspis riccæ Targ. — Tozz., olive.
- Melanspis inopinata (Leon.) (= Melanaspis inopinatus (Leon:)), pistachio.
- Parlatoria oleæ (Clov.) pistachio, olive, apple, pear, citrus, stonefruits.
- Parlatoria pergandii Comst., citrus.
- Pinnaspis aspidistrae (Sign.), hosts are unknown.

Pseudaulacaspis pantagona (Targ. — Tozz.), stone  
fruit, other plants.

Suturaspis pistaciae Lind. (== Leucaspis pistaciae Lind.) (== Salicicola pistaciae Lind.), pistachio.

#### ERIOSOMATIDAE

Aploneura lentisci (Pass.), pistachio.

Baizongia pistaciae (L.), pistachio.

Eriosoma lanigerum (Hausm.), apple.

Eriosoma lanuginosum (Hartig.), elm, peer.

Forda follicularia (Pass.), pistachio.

Forda formicaria Heyden, pistachio.

Forda riccobonii (Stef.) (== Forda hirsuta Mord.),  
pistachio.

Forda trivialis (Pass.), pistachio.

Geoica urticularia (Pass.), pistachio.

Paracletus cimiciformis Heyden., pistachio,

Pemphigus bursarius (L.), poplar.

Pemphigus lichtensteini Tullgren., poplar.

Pemphigus spirothecae Pass., poplar.

Slavum wertheimae Hille Ris Lambers, pistachio.

Smynthurodes betæ Westw., pistachio.

Tetraneura gallarum (Gmelin), elm.

**FULGORIDAE ( = ISSIDAE )**

Hysteropterum grylloides F. (= Hysteropterum flavesrens (Olivier)), olive.

Hysteropterum laminatum Horv., hosts are unknown.

**JASSIDAE ( CICADELLIDAE )**

Acocephalus elongatus Leth., hosts are unknown.

Athysanus striola Fall., hosts are unknown.

Circulifer opacipennis (Lech.), sesame, olive.

Emoasca decipiens Paoli, grape, cotton, beets, cucur-  
bits.

Emoasca lybica (Berg.), cotton.

Eupteryx melissae Curt., hosts are unknown.

Hecalus syriacus Horv., hosts are unknown.

Idiocerus stali Fieb., pistachio.

Megophthalmus scanicus Fall., hosts are unknown.

Pediopsis nana Sch., hosts are unknown.

Thamnotettix loratus Horv., hosts are unknown.

Thamnotettix prasinus Fall., hosts are unknown.

## **LACHNIDAE**

Pterochloroides persicae (Chol.) peach, apricot.

## **MARGARODIDAE**

Icerya purchasi Mask., citrus, other plants.

Porphyrophora polonica (L.), barley, wheat, other plants.

## **ORTHEZIIDAE**

Orthezia insignis ?, ornamentals.

## **PHYLLOXERIDAE**

Viteus vitifolii (Fitch) (= Phylloxera vastatrix Planch), grape.

## **PSEUDOCOCCIDAE**

Planococcus citri (Risso) (= Pseudococcus citri (Risso)), citrus, grape, other plants.

Pseudococcus sp., cypress,

## **PSYLLIDAE**

Agonoscena targionii (Licht.), pistachio.

Euphyllura olivina (Costa), olive.

Homotoma ficus (L.), fig.  
Psylla pyricola Forest., pear.  
Trioza buxtoni Laing., fig.

#### **TETTIGOMETRIDAE**

Tettigometra costulata Fieb., hosts are unknown.  
Tettigometra oblqua Panz., hosts are unknown.

#### **NEUROPTERA**

##### **CHrysopidae**

Chrysopa vulgaris Schneid., a predator of aphids,  
Pseudococcus, other insects.

##### **MYRMELEONIDAE**

Cueta sp.\*\* hosts are unknown.  
Palpares cephalores Klug., hosts are unknown.

##### **NEMOPTERIDAE**

Kirbynia sheppardi Kirb., hosts are unknown.

#### **LEPIDOPTERA**

##### **AEGERIIDAE**

Chamaesphecia chalcidiformis Hb., hosts are un-  
known.

Chamæusphecia masariformis O., hosts are unknown.

Dipsosphecia ichneumoniformis F., hosts are unknown.

Dipsosphecia uroceriformis Tr., hosts are unknown.

Sciaapteron tabaniforme Rott., hosts are unknown.

Synanthedon myopæformis Borkh., apple, plum, apricot.

Synanthedon myopæformis var. elegan Ld., hosts are unknown.

Trochitium apiformis (Clarck) (= Aegeria apiformis Clarck), poplar.

Trochilium stomoxyforme Hb., hosts are unknown.

## ARCTIIDAE

Arctia pulchella L. (= Utethesia pulchella L.), hosts are unknown.

Arctia villica L., hosts are unknown.

Arctia villica var. fulminans Stgr., hosts are unknown.

Callimorpha hera L. (= Callimorpha quadripunctaria Poda), hosts are unknown.

Coscinia striata L. (= Coscinia grammica L.), hosts are unknown.

Cymbalophora (Euprepia) pudica Esp., hosts are unknown.

Diaphora menelica Ol., hosts are unknown.

Eucharia festiya Hfn. (= Eucharia hebe L.,  
Arctia hebe L., hosts are unknown.

Lithosia marcida Mn., hosts are unknown.

Ognogyna bang-haasi Stgr., hosts are unknown.

Ognogyna loewii (Z.), beets.

Paidia murina Hb., hosts are unknown.

Phragmatobia fuliginosa L., hosts are unknown.

## BOMBYCIDAE

Bombyx mori L., a silk producer.

## COSSIDAE

Cossus cossus (L.) (= Trypanus cossus L.),  
grape, elm, willow, apricot, peach.

Dyspessa ulula (Borkh.), garlic, onion.

Hypopta caestrum Hb., hosts are unknown.

Stygia tricolor Ld., hosts are unknown.

Zeuzera pyrina (L.), apple, pear, olive, pomegranate,  
cherry.

## DREPANIDAE

Cilex glaucata asiatica Hass., hosts are unknown.

## GELECHIIDAE

Anarsia lineatella Zell., almond, apricot, peach,  
apple.

Borkhausenia icterinella Mn., hosts are unknown.

Bryotropha domestica Hw., hosts are unknown.

Depressaria atomella Hb., hosts are unknown.

Depressaria comitella Ld., hosts are unknown.

Dedressaria irrorata Stgr., hosts are unknown.

Depressaria subpaopinquellea Stt., hosts are unknown.

Depressaria tenebricosa Zell., hosts are unknown.

Gelechia plutelliformis Stgr., hosts are unknown.

Gnorimoschema ocellatella (Boyd.), beets.

Gnorimoschema operculella (Zell.), potato, tobacco,  
other solanaceous plants.

Holoscolia forficella Hb., hosts are unknown.

Oecocecis guyonella Gn., hosts are unknown.

Pectionphora gossypiella (Saund.) (= Plateydra gossypiella (Saund.)), cotton, okra.

Psecadia quadrinotella Mn., hosts are unknown.

Recurvaria nanella (Hbn.), apple, quince, apricot,  
other stone fruit trees.

Rhizosia flavella Dup., hosts are unknown.

Rhizosia formosella Hbn., hosts are unknown.

Schneidereria pistaciella Weber, pistachio.

Sitotroga cerealella (Ol.), stored grains.

Teleia tamariciella Zell., hosts are unknown.

## GEOMETRIDAE

Acidalia aversata L., hosts are unknown.

Acidalia coemosaria Ld., hosts are unknown.

Acidalia completa Stgr., hosts are unknown.

Acidalia consolidata Ld., hosts are unknown.

Acidalia dimidiata Hufn., hosts are unknown.

Acidalia elongaria Rbr., hosts are unknown.

Acidalia exilaria Gn., hosts are unknown.

Acidalia filicata Hb., hosts are unknown.

Acidalia flaccidaria Z., hosts are unknown.

Acidalia fractilineata Z., hosts are unknown.

Acidalia imitaria Hb., hosts are unknown.

Acidalia politata Hb., hosts are unknown.

Acidalia rufaria Hb., hosts are unknown.

- Acidalia turbidaria HS., hosts are unknown.
- Anaitis plagiata L., hosts are unknown.
- Campogramma bilineata L., hosts are unknown.
- Eubolia pumicaria Ld., hosts are unknown.
- Eucrostes beryllaria Mn., hosts are unknown.
- Eucrostes indigenata Vill.. hosts are unknown.
- Euscaria interpunctaria H. - S., hosts are unknown.
- Hibernia leucophaearia Schiff., hosts are unknown.
- Larentia salicata Hb., hosts are unknown.
- Larentia unicata Gn., hosts are unknown.
- Ortholitha cervinata var. pallidata Stgr. , hosts  
are unknown.
- Rhodometra sacraria L., hosts are unknown.
- Selidosema ericotaria var. syriacaria Stgr., hosts  
are unknown.
- Semiothisa aestimaria var. syriacaria Stgr. , hosts  
are unknown.
- Tephroclystia dodoneata Gn., hosts are unknown.
- Tephroclystia gueneeata var. syriacata Stgr., hosts  
are unknown.
- Tephroclystia indigata Hbn., hosts are unknown.
- Tephroclystia unedonata Mab., hosts are unknown.
- Zamacra flabellaria Heegar., hosts are unknown .

## **CRACILLARIIDAE**

Lithocolletis populifoliella ? , poplar.

## **HESPERIIDAE**

Hesperia carthami Hbn., hosts are unknown.

Hesperia sp., hosts are unknown.

## **HYPONOMEUTIDAE**

Cerostoma horridellum Tr., hosts are unknown.

Hyponomeuta malinellus Zell., apple, pear.

Hyponomeuta padellus (L.), apple, cherry , almond ,  
apricot, willow,

Plutella maculipennis (Curt.) (= Plutella cruciferarum Zett.), crucifers.

Prays citri Mill., citrus.

Prays oleellus (F.), olive.

## **INCURVARIIDAE**

Nemotois annae Zell., hosts are unknown.

Nemotois instrianellus H. - S. , hosts are unknown.

## **LASIOCAMPIDAE**

Lasiocampa terreni H. - S. , hosts are unknown.

Pachypasa otus (Drury), pistachio, oak, cypress, thuja.

### **LEMONIIDAE**

Lemonia peilei subsp. talhouki Wiltshire, hosts are unknown.

### **LYCAENIDAE**

Everes argiades Pall.\*\*, hosts are unknown.

Hœdes phlaeas (L.)\*\*, hosts are unknown.

Lampides boeticus (L.), legumes.

Lycæna bellargus ?, hosts are unknown.

Plebejus ismenias Meig. (= Plebejus ligurica Obt.), hosts are unknown.

Virachola livia (Klug.), pomegranate, acacia.

### **LYMANTRIIDAE**

Dasy corsa modesta Stgr., hosts are unknown.

Lithostego palaestinensis Amsel., hosts are unknown

Nygma phaeorrhœa (H.-S.), almond, other fruits, forest trees.

Prothetria dispar (L.) (= Lymantria dispar L.) deciduous forest trees, fruit trees.

### **LYONETIIDAE**

Lyonetia clerkella (L.), cherry, apple, pear, plum.

## MOMPHIDAE

Stagmatophora dohrni Zell., hosts are unknown.

## NOCTUIDAE (= PHALAEINAE = AGROTIDAE)

Acantholipes regularis Hbn., hosts are unknown.

Acontia luctuosa Esp., hosts are unknown.

Acontia urania Friv., hosts are unknown.

Acontiola lascivalis Ld., hosts are unknown.

Acronycta psi L., hosts are unknown.

Aedia funesta Esp., hosts are unknown.

Agrotis equaloram Ev. hosts ars unknown.

Agrotis fimbriola Esp., hosts are unknown.

Agrotis flammatra ( Denis & Schiff. ), cotton, tobacco,  
peanut, vegetables.

Agrotis flavina H. - S. , hosts are unknohn.

Agrotis forcipula Hbn., hosts are unknown.

Agrotis melanura Koll., hosts are unknown.

Agrotis pronuba L.\*\* (Triphaena pronuba L.), hosts  
are unknown.

Agrotis spinifera Hbn., hosts are unknown.

Agrotis ypsilon Rot. (= Agrotis ipsilon (Hufn.)),  
cotton, tobacco, peanut, vegetables.

Amphipyra eriopoda H. - S., hosts are unknown.

- Amphipyra tetra F., hosts are unknown.
- Anua tirhaca Cr., hosts are unknown.
- Bryophila contristans Ld., hosts are unknown.
- Callopistria latreillei Dup., hosts are unknown.
- Calocampa exoleta L., hosts are unknown.
- Calymnia diffinis L., hosts are unknown.
- Caradrina ambigua F., hosts are unknown.
- Caradrima aspersa Rbr., hosts are unknown.
- Caradrina belucha Swinh., hosts are unknown.
- Caradrina vicina var. syriaca Stgr., hosts are unknown.
- Catocala coniuncta Esp., hosts are unknown.
- Catocala conversa Esp. hosts are unknown.
- Catocala elocata Esp., hosts are unknown.
- Catocala eutychea Tr., hosts are unknown.
- Catocala hymenaea L., hosts are unknown.
- Catocala nymphagoga Esp., hosts are unknown.
- Catocala puerpera Giorna, hosts are unknown.
- Cerocala scapulosa Hbn., hosts are unknown.
- Chersis syriaca Led., hosts are unknown.
- ~~Chloridea peltigera Schiff.~~, hosts are unknown.
- Cirrhœdia xerampelina var. pallida Stgr., hosts are unknown.

- Cleophana antirrhini Hbn., hosts are unknown.
- Cleophana opposita Ld., hosts are unknown.
- Coccidiphaga scitula Rbr., hosts are unknown.
- Cornutiplusia circumflexa (L.), hosts are unknown.
- Cucullia blottariæ Esp., hosts are unknown.
- Cucullia scrophulariæ Cap., hosts are unknown.
- Dasypolia ferdinandi Rbl., hosts are unknown.
- Earias insulana (Boisd.), cotton, okra other Malvaceæ.
- Ephesia fluminea Scop. (= Ephesia paranympha L.), hosts are unknown.
- Episema cœruleocephala (L.), apple, stone fruits.
- Erastria tazbezlis Scop., hosts are unknown.
- Ethmia pusiella Rom., hosts are unknown.
- Eublemma ostrina Hbn., hosts are unknown.
- Eutelia adoratrix Stgr., hosts are unknown.
- Eutelia adulatrix Hb., hosts are unknown.
- Euterapia laudeti Boisd., hosts are unknown.
- Euxoa segetum Schiff. (= Agrotis segetum Schiff.)  
grains, cotton, tobacco, beets, potato, crucifers, grape.
- Exophyla rectangularis H. — G., hosts are unknown.
- Grammodes geometrica F., hosts are unknown.

- Habrostola triplasia L., hosts are unknown.
- Hæmerosia renalis Boisd., hosts are unknown.
- Heliothis armigera (Hb.) (= Chloridea obsoleta F.), cotton, tobacco, tomato, corn, okra, legumes.
- Heliothis dipsacea (L.) (= Chloridea dipsacea L.), chickpea, cotton, tobacco, tomato, corn, alfalfa, beets.
- Heliothis incarnata Frr., hosts are unknown.
- Heliothis nubigera H. — S., watermelon, tobacco, tomato, apple.
- Heliothis peltigera Schiff., hosts are unknown.
- Heliothis virescens (F.), hosts are unknown.
- Herminia crinalis Tr., hosts are unknown.
- Hypena munitalis Mann., hosts are unknown.
- Hypena obsitalis Hb., hosts are unknown.
- Hypena palpalis Hb., hosts are unknown.
- Hypena ravalis var. syriacalis Stgr., hosts are unknown.
- Hypenodes costæstrigalis Stph., hosts are unknown
- Hypenodes kalchbergi Stgr., hosts are unknown.
- Leucania impura Hb., hosts are unknown.
- Leucania loreyi Dup., hosts are unknown.

Leucania punctosa Tr., hosts are unknown.

Leucania scirpi Dup., hosts are unknown.

Leucanitis caspica Stgr., hosts are unknown.

Leucanitis caylino Lef., hosts are unknown.

Mamestra brassicæ (L.) (= Barathra brassicæ L.), crucifers.

Megalodes eximia Frr., hosts are unknown.

Metopeecera omar Obthr., hosts are unknown.

Metoponia vespertalis Hb., hosts are unknown.

Micra ostrina Hb., hosts are unknown.

Micra parva Hb., hosts are unknown.

Micra polygramma Dup., hosts are unknown.

Micra ragusana Frr., hosts are unknown.

Micra velocior Stgr., hosts are unknown.

Micra velox Hb., hosts are unknown.

Miselia oxyacanthae L., hosts are unknown.

Nycteola asiatica Krul., hosts are unknown.

Nycteola falsalis H. S., hosts are unknown.

Orthosia pistacina F., hosts are unknown.

Orthosia ruticilla Esp., hosts are unknown.

Parallelia algira L.\*\* (= Disgonia algira L.,  
hosts are unknown.

Pericyma albidentaria Frr., hosts are unknown.

Plusia accentifera Lef.\*, hosts are unknown.

Plusia chalcites Esp.\*, hosts are unknown.

Plusia circumscripta Frr.\*, hosts are unknown.

Plusia gamma L.\*, hosts are unknown.

Plusia gutta Gn.\*, hosts are unknown.

Plusia ni Hb.\*, hosts are unknown.

\* (Plusia = Phytometra = Autographa)

Polia canescens Dup., hosts are unknown.

Polia rufocincta H. — S., hosts are unknown.

Polia serpentia Tr., hosts are unknown.

Pseudohadena chenopodiphaga Rbr., hosts are un  
known.

Pseudophila illunaris Hb., hosts are unknown.

Pseudophila tyrrhæa Cr., hosts are unknown.

Rivula sericealis Sc., hosts are unknown.

Saragossa magnoli Boisd., hosts are unknown.

Saragossa silenes Hb., hosts are unknown.

Segetia viscosa Frr., hosts are unknown.

Sesamia cretica Ld., corn, broomcorn, sorghum.

Spodoptera exigua (Hbn.) (= Laphygma exigua  
Hbn. = Caradrina exigua Hbn.), beets,  
alfalfa, okra, cotton, potato, peanut.

Sodoptera litura (F.) (= Prodenia litura (F.)),

cotton, alfalfa, tobacco, sugarbeet, peanut,  
vegetables.

Tæniocampa stabilis View., hosts are unknown.

Tapinostala musculosa Hbn., hosts are unknown.

Tarache lucida Esp., hosts are unknown.

Ulochlæna hirta Hb., hosts are unknown.

Xanthia citrago L., hosts are unknown.

Xanthodes grællsii (Feisth.), cotton.

Xanthodes malvæ Esp., hosts are unknown.

Xylena delphinii L. (= Chariclea delphinii  
L.), hosts are unknown.

## NOLIDAE

Nola cicatricalis Tr., hosts are unknown.

Nola squalida Stgr., hosts are unknown.

## NYMPHALIDAE

Argynnис pandora Schiff., hosts are unknown.

Charaxes iasius L., hosts are unknown.

Limenitis camilla Schiff.\*\*, hosts are unknown.

Limenitis sibilla (L.)\*\*, hosts are unknown.

Melitæa didyma Ochs.\*\*, hosts are unknown.

Melitaea trivia var. etabnana Stgr., hosts are unknown.

Vanessa atlanta L.\*\*, hosts are unknown.

Vanessa cardui (L.), cotton, hollyhock, beans, melons,  
artichoke.

## ORNEODIDAE

Orneodes palodactyla Zell., hosts are unknown.

Orneodes zonodactyla Zell., hosts are unknown.

## PAPILIONIDAE

Papilio machon L.\*\*, hosts are unknown.

Papilio sinon Poda\*\*, hosts are unknown.

Parnassius delius Esp., hosts are unknown.

Parnassius sp., hosts are unknown.

Thais cerisyi God., hosts are unknown.

## PIERIDAE

Aporia crataegi (L.), apple, pear, cherry, hawthorn,  
almond.

Colias croceus (Fourc.) (= Colias edusa F.), al-  
falfa, clover, other legumes.

Colias hyale L., hosts are unknown.

Euchlœ belemia Esp., hosts are unknown.

Gonepteryx cleopatra L.\* \*, hosts are unknown.

Goenpteryx rhamni L.\* \*, hosts are unknown.

Melanargia galathea L.\* \*, hosts are unknown.

Pieris brassicæ (L.), crucifers.

Pieris rapae (L.), crucifers.

Pontia daplidice L.\* \* (= Leucochlœ daplidice

L.), hosts are unknown.

## PSYCHIDAE

Amicta quadrangularia Chr., hosts are unknown.

Amicta tedaldi Heyl., hosts are unknown.

## PTEROPHORIDAE

Agdistis tamaricis Zell., hosts are unknown.

Amblyptilia acanthodactyla Hb., hosts are unknown.

## PYRALIDAE (= PHYCITIDAE, PYRAUSTIDAE)

Acrobasis noctuana (Hbn.), pear.

Amphithrix sublineatella Stgr., hosts are unknown.

Anagasta kuhniella (Zell.) (= Ephestia kuhniella (Zell.)), stored products such as flour, quince dry fruit, walnut, others.

Duponchelia fovealis Zell., hosts are unknown.

Ectomyelois (Myelois) ceratoniae (Zell.), carob,  
citrus.

Ectolmyelois (Myelois) cibriella Hb., hosts are  
unknown.

Ephestia affatella Mn., hosts are unknown.

Ephestia calidella Gn., hosts are unknown.

Ephestia cautella (Wlk.), stored fig, flour, rice, grain,  
sorghum, others.

Ephestia dovsoniella Rdtl., hosts are unknown.

Ephestia elutella (Hbn.), stored tobacco, raisin,  
others.

Ephestia figulilella (Grey), stored fig, raisin, dates.

Ephestia parasitella Stgr., hosts are unknown.

Etiella zinckenella (Treits.), limabean.

Euzophera osseatella (Treits.), eggplant, potato, to-  
mato, pepper, tobacco.

Euzophera sp. \*\*, pomegranate.

Galleria mellonella (L.), beehives.

Hellula undalis L., crucifers.

Heterographis hellenica Stgr., hosts are unknown.

Hymenia recurvalis (F.) (= Hymenia fascialis  
Zell.), beets, others.



Ostrinia nubilalis (Hbn.), (=Pyrausta nubila-  
lis Hbn.), corn, pepper, cotton.

Plodia interpunctella (Hbn.) , flour , stored dry  
pepper, corn , quince fruits , biscuit , zaatar ,  
stored peanut.

Pyralis farinalis L., stored cereals.

Pyrausta verbascalis Schiff., hosts are unknown.

Ulotricha egrenginalia H. - S. , hosts are unknown.

## SATURNIIDAE

Saturnia pyri (Schiff.), cherry , apple , pear , willow ,  
plum.

## SATYRIDAE

Epinephele jurtina L., hosts are unknown.

Hipparchia syriaca Stgr., hosts are unknown.

Melanargia galathea L., hosts are unknown.

Satyrus fatua Frr., hosts are unknown.

Satyrus hermione var. syriaca Stgr. , hosts are un-  
known.

Satyrus semele L., hosts are unknown.

Satyrus sp.\* , hosts are unknown.

## **SCYTHRIDIDAE**

Scythris (= Butalis) intertella Zell., hosts are unknown.

Syringopais (= Scythris) temperatella (Led.) wheat, barley.

## **SPHINGIDAE**

Acherontia atropos L., sesame, olive.

Celerio galli Rott., hosts are unknown.

Celerio lineata livornica (Esp.), grape, other plants

Deilephila euphorbiæ L.\*\*, hosts are unknown.

Deilephila nerii L., (= Daphis nerii L.), hosts are unknown.

Herse convolvuli (L.), beans.

Hippotion celerio L., hosts are unknown.

Macroglossum stellatarum L.\*\*, hosts are unknown.

Protoparce sexta (Joh.), tobacco.

## **THAUMETOPOEIDAE (= NOTODONTIDAE, CERURIDAE)**

Dieranura vinula L., hosts are unknown.

Thaumetopœa pityocampa (Denis & Schiff.), pine.

Thaumetopœa processionea L., oak.

Thaumetopœa solitaria Frr., hosts are unknown.

## TINEIDAE

Euplocamus anthracinalis Sc., hosts are unknown.

Hapsifera luridella Zell., hosts are unknown.

Simeethis nemorana Hb., fig.

Tinea pellionella (L.), stored clothes.

Tinea pistacia Asrag., pistachio.

Tineola biselliella (Hbn.), stored clothes.

Trigophaga tapetzella (L.), stored products.

## TORTRICIDAE & OLETHREUTIDAE

Archips rosana (L.), (= Cacaecia rosana L.),  
apple, pear, quince, plum.

Carpocapsa pomonella (L.), apple, pear, walnut.

Glyciana ambiguella (Hbn.). grape.

Grapholitha funebrana Treits. (= Laspeyresia  
funebrana (Treits.)), plum, other stone  
fruits, apple, walnut.

Heyda nubiferana (Haw.) (= Argyroploce varie-  
gana (Hbn.)), quince, hawthorn.

Laspeyresia (= Grapholitha) effusana Ld., hosts  
are unknown.

Lobesia botrana (Schiff.) (= Polychrosis botra-  
na Schiff.), grape, other fruits.

Sparganothis pilleriana Schiff. (= Oenophthirea pilleriana Schiff.), grape.

Tortrix ochreana Hb., hosts are unknown.

Tortrix pasivana Hb. (= Tortrix sinuana Stph.)  
hosts are unknown.

Tortrix prnubana Hbn. (= Cacaecimorpha pronubana (Hbn.)), violet, carnation.

#### **ZYGAENIDAE (= ANTHROCERIDAE)**

Anthrickera (Zygaena) brizae [var. corycia Stgr.,  
hosts are unknown.

Procris (= Ino) globulariae Hb.\*\*, hosts are un-  
known.

Procris statices L., hosts are unknown.

Theresia (Procris) obscura Zell., hosts are unknown.

Theresia (Rhagades) tenuicornis Zell., hosts are  
unknown.

Theresimima ampelophaga (Bayle) (= Zygæna am-  
pelophaga Bayle), grape.

Zygæna filipendulae L., hosts are unknown.

Zygaena trifolii Esp., hosts are unknown.

## COLEOPTERA

### ANOBIIDAE

Lasioderma serricorne (F.), stored tobacco, dried milk and stored products.

Stegobium paniceum (L.), stored products.

### BOSTRYCHIDAE

Apate monachus F., grape, citrus, acacia, Syringa persica.

Rhizoperta dominica (F.), stored cereals.

Schistoceros bimaculatus Ol. (= Schistoceros auritus Foriw.), grape.

Scobicia chevrieri Villa., pistachio, eucalyptus.

Sinoxylon perforans (Schr.), apple, plum, grape.

### BRUCHIDAE

Acanthoscelides spiniger Baudy., beans (fasulya).

Bruchidius albopictus Allard., stored peas.

Bruchidius biguttatus Ol., hosts are unknown.

Bruchidius histrio Boh. (= Bruchidius quinqueguttatus Baudi), stored legumes.

- Bruchidius incarnatus Boh., stored broadbean.
- Bruchidius obscuripes Gyll., hosts are unknown.
- Bruchidius seminarius (Baudi.) (= Bruchidius pusillus Germ.), hosts are unknown.
- Bruchidius trifolii (Motsch.), alfalfa seeds.
- Bruchidius tuberculatus Hoch., hosts are unknown.
- Bruchus affinis Froel., stored peas, vetch.
- Bruchus brachialis (Fahrs.) vetch seeds.
- Bruchus dentipes (Baudi), broadbeans, vetch and other stored legumes.
- Bruchus emarginatus All., stored peas, vetch, other legumes.
- Bruchus ervi Froel. (= Bruchus sertatus Ill.), stored, vetch, lentil, cultivated beans, other stored legumes.
- Bruchus hamatus Mill., hosts are unknown.
- Bruchus laticollis Boh., hosts are unknown.
- Bruchus lentis Froel., lentil, field and storage.
- Bruchus pisorum L., stored peas.
- Bruchus rufimanus Boh. (= Bruchus fabæ Mots.), stored broadbeans, peas.
- Bruchus signaticornis Gyll. (= Bruchus pallidicornis Boh.), field and stored lentil.

Bruchus tristis Boh. (= Bruchus uniformis Al-  
lard.), stored vetch, peas, beans, lentil.

Bruchus tristiculus Fahr., hosts are unknown.

Bruchus ulicis Muls. & Rey, stored lentil.

Bruchus viciae Ol. (= Bruchus nigripes Gyll.),  
hosts are unknown.

Callosobruchus chinensis (L.), stored cowpea and  
other lehumcs.

Euspermophagus sericeus Geoff. (= Spermophagus  
sericeus Geoff.) (= S. cisti Ol.), sto-  
red legumes.

Pachymerus lallemandi Marseul (= Pseudopachi-  
merina lallemandi Marseul), acacia.

## BUPRESTIDAE

Agrilus aurichalceus Red. (= Agrilus proximus  
Rey), rose, ornamentals.

Agrilus sinuatus (Ol.) (= Agrilus chryseis  
Curtis), apple, pear trees.

Agrilus viridis L., willow, quers, Fagus sp., ap-  
ple, pear, pistachio, grape.

Agrilus sp., pistachio.

Anthaxia brevis Cast. & Gory., pistachio, pine, Fagus  
willow.

- Anthaxia ignipennis Ab., hosts are unknown.
- Aphanisticus emarginatus Ol., hosts are unknown.
- Capnodis anthracina Fisher, stone fruits, pistachio.
- Capnodis carbonaria Klug., almond, apricot, plum,  
pistachio, cherry.
- Capnodis cariosa Pall. (Capnodis cariosa var. hauseri Obenb.), pistachio.
- Capnodis henningi Fald., apricot, plum, wild almond.
- Capnodis miliaris Klug., poplar.
- Capnodis porosa Klug., summac, almond, poplar, ap-  
ricot, plum, peach.
- Capnodis semisuturalis Mars., apple, pear, other  
pomes.
- Capnodis tenebricosa Ol.. apple.
- Capnodis tenebrionis (L.), peach, cherry, other stone  
fruits .
- Chalcophora mariana L., hosts are unknown.
- Chrysoborthis affinis L., hosts are unknown.
- Julodis onopordi F., pine, cypress.
- Melanophila cuspidata (Klug.) (= Melanophila jakovelvi Sem. ), pistachio , fig, juniper,  
poplar.
- Perotis (Aurigena) chlorana (Lap. & Gory), apple,  
almond, other plants.

Pseudocastalia segyptiaca (Gmel.), furniture, timbers.

Ptosima undecimmaculata (Herbst.) (= Ptosima flavoguttata Ill. = Ptosima novemmaculata L.), stone fruits, pomaceous fruits.

Sphenoptera (Tropeopletis) kambyses Oben.  
(= Sphenoptera dhia-ahmadi Cobos.)  
apricot, other fruits.

Sphenoptera (Tropeopletis) dad-khani Oben,  
hosts are unknown.

## CARABIDAE

Calosoma sp. \*\*, hosts are unknown.

Carabus auratus L., hosts are unknown.

Carabus hispanus F., hosts are unknown.

Carabus intricatus L., hosts are unknown.

Carabus nemoralis Mull., hosts are unknown.

Carabus problematicus Herbst., hosts are unknown.

Carabus splendens Ol., hosts are unknown.

Zabrus tenebrioides (Goeze), wheat, barley.

## CERAMBYCIDAE

Agapanthia cardui (L.), artichoke.

- Anobium striatum ? , dry woods.
- Batocera rufomaculata De Geer, fig.
- Cerambyx cerdo L., oak, apricot, pear, cherry.
- Cerambyx dux (Fald.) (==Cerambyx heros Scop. ),  
peach, plum, almond, walnut, forest trees.
- Cerambyx miles Bon., apple, almond.
- Cerambyx nodulosus Germ., oak.
- Cerambyx velutinus Br., oak.
- Chlorophorus varius Müll., grape, forest trees.
- Hylotrupes bajulus (L.), timber, chiefly coniferous.
- Penichroa fasciata Steph., oak.
- Phoraoantha semipunctata F., eucalyptus.
- Plagionotus detritus L., oak.
- Prionus benzikanus ? , hosts are unknown.
- Pyrrhidium sanguineum L., fruit trees.
- Rhesus serricollis Motsch., forest trees.
- Rhopalopus calvipes F., grape, poplar, willow.
- Rhopalopus macropus Germ., fruit trees, oak.
- Stromatium fulvum Villers, forests, furnishers.
- Thrichoferus griseus (F.) (==Hesperophanes frioseus F.), fig.

## CHRYSOMELIDAE

- Aphthona euphorbiæ (Schr.), flax.
- Cassida nobilis L., beets.
- Cassida vittata Vill., beets.
- Chætocnema chlorophana Duft., maize, sorghum.
- Chaetocnema tibialis (Ill.), beets.
- Cyaniris (Cynandrophthalma) viridana Lac.,  
grape.
- Epitrix parvula ?, tobacco.
- Exora collaris (Humm.) (= Exosoma collare  
Humm.), onion.
- Haltica ampelophaga Guer., grape.
- Marseulia dilativentris (Reiche), grains, such as  
wheat, barley.
- Phyllotreta atra (F.) (= Phylloterata atra  
(F.)), crucifers.
- Phyllotreta cruciferae (Goeze), crucifers.
- Phytodecta fornicatus Brug., alfalfa.
- Plagiodes versicolor Laich., poplar, willow.
- Psylliodes sp., graminaceous plants.
- Rhaphidopalpa foveicollis (Lucas) (= Rhaphido-  
pala africana Weise.) = Rhaphido-

palpa delata Erik.), cotton, melons, beans,  
legumes.

## COCCINELLIDAE

Adalia bipunctata (L.), aphidophagous.

Adalia decempunctata (L.)\*\*, aphidophagous.

Adonia variegata (Geoze)\*\*, aphidophagous.

Chilocorus bipustulatus (L.)\*\*, pseudococcidophagous.

Coccidula sp.\*\*, hosts are unknown.

Coccinella septempunctata L., aphids mainly, Pseudococcus.

Coccinella undecimpunctata L., aphidophagous, other insects.

Coccinula quatuordecimpustulata (L.)\*\*, hosts are unknown.

Epilachna chrysomelina (F.), curcubits.

Exochomus quadripustulatus (L.)\*\*, pseudococcidophagous.

Hyperaspis polita Weise., Pseudococcus citri.

Hyperaspis sp.\*\*, pseudococcidophagous.

Rodolia cardinalis Muls., a predator of Icerya purchasi.

- Scymnus includens Kirsh.\*\*, Pseudococcus, aphids.  
Scymnus suturalis Thunberg., Pseudococcus, apids.  
Scymus sp., coccidophagous.  
Semiadalia undecimnotata (Schn.)\*\*, aphidophagus.  
Thea 22-punctata (L.), hosts are unknown.  
Tythaspis 16-punctata (L.)\*\*, hosts are unknown.

### CURCULIONIDAE

- Anthonomus amygdali Haust. ( == Anthonomus ornatus Reiche) almond.  
Anthonomus gentilis Faust., almond.  
Anthonomus ornatooides Reitt. almond.  
Anthonomus pomorum (L.), apple, pear.  
Anthonomus rubi Herbst., rose.  
Apion arrogans Wank., broadbean, vetch.  
Baris granulipennis (Tour.), watermelon.  
Curculio nucum L., pear, apple, grape.  
Hypera brunneipennis Boh., lucerne, alfalfa.  
Hypera striatus (Boh.), legumes including broadbean.  
Hypera variabilis Herbst. ( == Phytonomus variabilis Herbst ) ( == Hypera postica Gyll.), alfalfa, Incerne.

- Larinus ovaliformis Cap., Compositæ.
- Larinus syriacus Gyll., compositæ.
- Lixus anguinus (L.), crucifers.
- Lixus brevipes Briso. (= Lixus difficilis Cap.),  
ornamentals.
- Lixus juncei Bohm., beets.
- Otiorrhynchus cribricollis Gyll., olive.
- Otiorrhynchus (Tourniera) ovalipennis Boh.,  
apple.
- Otiorrhynchus (Dorymerus) peregrinus Stier.,  
grape.
- Pachytychius latipes Debr (= Barytychius la-  
tipes Debr.), wheat.
- Peritelus sphaeroides Germ., apple, grape.
- Polydrosus ponticus Faust. (= Polydrosus dela-  
grangei Desbr.), stone fruits.
- Rhamphus pulcarius (Herbst.), apple, pear.
- Rhynchites æreipennis Debr., apple.
- Rhynchites bacchus L. (= Rhynchites auratus  
(Scop.)), apricot, cherry, almond, plum, ap-  
ple.
- Rhynchites lenæus Forst., apple.
- Rhynchites smyrnensis Debr., stone fruits.

- Sitona crinitus (Herbst.), alfalfa, peas, clover, vetch.
- Sitona humiralis Steph., lucerne.
- Sitona limosus Rossi., beans.,
- Sitona lineatus (L.), beans, vetch, peas, other legumes.
- Sitophilus granarius (L.) (= Calandra granaria L.),  
flour, wheat, rice, barley, other stored cereals.
- Sitophilus oryzae (L.) (= Calandra granaria L.)  
flour, wheat, rice, barley, other stored cereals.
- Strophosomus breviusculus Mars., apple.
- Strophosomus melanogrammus Forster., pine, quercus.

#### CUCUJIDAE ¶.64

- Læmophloeus pusillus Olive. (= Cryptolestes  
pusillus (Schön.)), flour, damaged wheat.
- Oryzæphilus surinamensis (L.), stored products of  
pine seeds, wheat flour, wheat, walnut, hazelnut,  
sesame, almond, corn, dried red pepper, sweets,  
pistachio nuts, macroni, zaater, chocolate, other  
stored food products.

#### DERMESTIDAE

- Dermestes maculatus De Geer\*\* (= Dermestes  
vulpinus F.), stored sheep wool, sheep lea-  
ther.
- Trogoderma granarium Everts., stored food such as  
wheat, corn, others.

## **DRYOPIDAE ( == PARNIDAE )**

Dryops luridus Er., hosts are unknown.

Dryops rufipes Kryn., hosts are unknown.

Potamophilus acuminatus F., hosts are unknown.

## **DYTISCIDAE**

Agabus bipustulatus L., hosts are unknown.

Agabus conspersus Marscham., hosts are unknown.

Agabus nebulosus Forst., hosts are unknown.

Bidessus exorantus Reiche., hosts are unknown.

Bidessus geminus F., hosts are unknown.

Coelambus confluens F., hosts are unknown.

Coelambus parallelogrammus var. lerneus Schum.,  
hosts are unknown.

Gybister laterali-marginalis De Geer ( == Cybister jordanalis Reiche.), hosts are un-  
known.

Dytiscus circumflexus F., hosts are unknown.

Dytiscus pisarus ?, hosts are unknown.

Hydroporus (Deronectes) airumlus Kol., hosts are  
unknown.

Hydroporus multiguttatus Reg., hosts are unknown.

Hydroporus (Deronectes) piochardi Reg., hosts  
are unknown.

Hydroporus tessellatus Drapiez., hosts are unknown.

Laccophilus testaceus Aube., hosts are unknown.

Laccophilus variegatus Germ., hosts are unknown.

Noterus leavis Sturm., hosts are unknown.

## ELATERIDAE

Agriotes lineatus (L.), potato, beets, corn, wheat.

Athous haimorrhoidalis F., potato, tomato.

Lacon punctatus Herbst., hosts are unknown.

Melanotus rufipes Herbst. fruit. trees.

Melanotus torosus Er., potato, beets.

Pittonotus thescus Germ.. fruit trees.

## GYRINIDAE

Aulonogyrus concinnus Kl., hosts are unknown.

Gyrinus columbus var. distinctus Aube., hosts are un-  
known.

Gyrinus dejeani Brulle., hosts are unknown.

Orectochilus involvens Faid., hosts are unknown.

## **HALLIPIDAE**

Haliphus fulvus F., hosts are unknown.

Haliphus lineaticollis Marsham., hosts are unknown.

## **HYDROPHILIDAE**

Anacæna globulus F., hosts are unknown.

Berosus affinis Brulle., hosts are unknown.

Berosus signaticollis var. dispar Reich., hosts are  
unknown.

Berosus bispina Reiche., hosts are unknown.

Helochares lividus Forst., hosts are unknown.

Helophorus aquaticus var. syriacus Kuw., hosts are  
unknown.

Helophorus glacialis Villa., hosts are unknown.

Helophorus granularis L., hosts are unknown.

Helophorus micans Faid., hosts are unknown.

Hydræna damascena Pic., hosts are unknown.

Hydrophilus (Hydrocharis) sartus Sem., hosts are  
unknown.

Laccobius gracilis Motsch., hosts are unknown.

Laccobius scutellaris Motsch., hosts are unknown.

Laccobius sinuatus Motsch., hosts are unknown.

Philydrus agrigentinus Rott., hosts are unknown.

## **LUCANIDAE**

Lucanus cervus L., hosts are unknown.

## **MELOIDAE (= CANTHARIDAE)**

Zonabris calida Pall., apple.

## **NITIDULIDAE**

Carpophilus hemipterus (L.), stored fig fruits, raisin,  
other dried fruits.

## **OSTOMATIDAE**

Tenebroides mauritanicus (L.), stored food.

## **SCARABAEIDAE**

Amphimallon majalis Razm., hosts are unknown.

Anisoplia austriaca (Herbst.) (= Anisoplia fructicola Ol.), cereals.

Anisoplia leucaspis Lap., cereals.

Anisoplia segetum (Herbst.), wheat.

- Anomalæneæ De Geer., hosts are unknown.
- Anoxia orientalis Kyrn., polyphagous, grape.
- Anoxia villosa F., hosts are unknown.
- Aphodius cognatus Fairm., hosts are unknown.
- Aphodius hydrochœris Fairm., hosts are unknown.
- Ateuchus sacer L., (= Scarabeussacer L.) hosts  
are unknown.
- Autoserica castanea Arrow, legumes.
- Cetonia aurata var. præclara Muls. (= Cetonia  
nobilis Schrank), rose.
- Copris hispanus L., hosts are unknown.
- Copris lunaris L., hosts are unknown.
- Epicometis hirta Poda., hosts are unknown.
- Epicometis squalida Scop., polyphagous plant feeder.
- Heteronychus excavatus Forst., hosts are unknown.
- Melolontha melolontha L., cereals, potato, beet.
- Oryctes nascornis L., hosts are unknown.
- Oxythyrea einctella Schaum., hosts are unknown.
- Oxythyrea funesta Poda., hosts are unknown.
- Pentodon bispinosus Kust. (= Pentodon dispar  
Baud.), wheat, fruit trees.
- Pentodon punctatus Villers., hosts are unknown.

Phyllopertha dionysius (F.), wheat, other winter cereals.

Phyllopertha lineata F. (= Blitopertha lineata Reit.), sunflower, vetch, beet.

Phyllopertha nazarena Mars. (= Blitopertha nazarena Medv.), winter cereals.

Polyphylla crinita Lee., hosts are unknown.

Polyphylla fullo (L.), wheat, tobacco, vegetables, nursery stock.

Polyphylla olivieri (Lap.), cherry, pear, apple, grape, beets.

Potosia cuprea F., rose.

Potosia morio F., hosts are unknown.

Potosia sepiossima Scop., hosts are unknown.

Rhizotrogus caucasicus Gyll., wheat.

Tropinota squalida (Scop.), rose, other plants hosts.

## SCOLYTIDAE

Carphoborus (Estenoborus) perrisi (Chap.) pistachio.

Chaetoptelius vestitus (Muls. & Rey) (= Hylesinus vestitus Muls.), pistachio.

Hylesinus oleiperda F., olive.

Hypoborus ficus Er., fig.

Phloeotribus scarabaeodes (Bern.) (= Phloeotribus olea F.), olive.

Ruguloscolytus amygdali Guer., (= Scolytus amygdali Guer.), stone fruits.

Ruguloscolytus mediterraneus (Eggers.), (= Ruguloscolytus pomarius Bedel., stone fruits, apple.

Scolytus rugulosus (Ratz.) (= Ruguloscolytus rugulosus (Ratz.)), apple, cherry, apricot.

## TENEBRIONIDAE

Adelostoma cordatum Sol., hosts are unknown.

Adesmia carinata Sol., hosts are unknown.

Adesmia procerata Mill., hosts are unknown.

Akis latreillei Sol., hosts are unknown.

Amnodeis giganteus Reiche., hosts are unknown.

Balps cribrosa Sol., hosts are unknown.

Balps tæniolata Menetr., hosts are unknown.

Cabirus ampliatus Desbr., hosts are unknown.

Cabirus minutissimus Muls. (= Cabirus rectangularis Desbr.), hosts are unknown.

- Calyptopsis solieri Reiche., hosts are unknown.
- Gonocephalum rusticum Ol., hosts are unknown.
- Ocnera philistina Reiche., hosts are unknown.
- Opatrioides judaicus Baudi., hosts are unknown.
- Opatrioides punctulatus Brull., tobacco, water melon,  
other plants.
- Phylax (Rhizalus) nitidulus Seidlitz. , hosts are un-  
known.
- Pimelia bajula Kl., hosts are unknown.
- Pimelia errans Mill., hosts are unknown.
- Pimelia prolongata Mill., hosts are unknown.
- Tenebrio molitor L., stored food.
- Tentyria puncticeps Mill., hosts are unknown.
- Tribolium castaneum (Herbst.), stored wheat, and other  
stored cereals.
- Tribolium confusum du Val , wheat flour, wheat, corn,  
dry pepper, other stored foods.
- Zophosis osmanlis Deyr., hosts are unknown.

## HYMENOPTERA

### AGAONIDAE

- Blastophaga psenes (L.), pollination of fig flowers.

## **APHELINIDAE**

Aphelinus mali Hald., a parasite of Eriosoma lanigerum, introduced 1927.

## **ANDRENIDAE**

Andrena emesiana Perez., hosts are unknown.

Andrena fulvicerus Kby., hosts are unknown.

Andrena lampronota Pereze., hosts are unknown.

Andrena limata Sm., hosts are unknown.

Andrena wilkella Kby., hosts are unknown.

Nomada kervilleana Perez., hosts are unknown.

## **APIDAE**

Anthophora atro-alba Lep., hosts are unknown.

Anthophora crinipes Sm., hosts are unknown.

Anthophora fulvitaris Brule., hosts are unknown.

Anthophora soror Perez., hosts are unknown.

Apis mellifica L., abenificial insect producing honey.

Apis mellifica var. fasciata Latr.

Bombus eyanesceus ?, hosts are unknown.

Bombus lapidarius L., hosts are unknown.

Bombus terrestris L., hosts are unknown.

Bombus sp., hosts are unknown.

Ceratina cuerbitina Rossi., hosts are unknown.  
Eucera aciculata Pereze., hosts are unknown.  
Eucera aeolopus Pereze., hosts are unknown.  
Eucera bipartita Pereze., hosts are unknown.  
Eucera longicornis F., hosts are unknown.  
Eucera gracilipes Pereze., hosts are unknown.  
Eucera kervillei Pereze., hosts are unknown.  
Eucera obsoleta Pereze., hosts are unknown.  
Eucera pumila Pereze., hosts are unknown.  
Eucera speculifera Pereze., hosts are unknown.  
Melecta grandis Lep., hosts are unknown.  
Xylocopa aestuans L., hosts are unknown.  
Xylocopa valga Gerst., hosts are unknown.  
Xylocopa violacea L., hosts are unknown.

## **ARGIDAE**

Arge cyaneocrocea Forsts hosts are unknown.

## **APHIDIIDAE**

Aphidius sp.\*\*, a parasite of peach aphid.  
Lysiphlebus sp.\*\*, a parasite of Aphis sp.  
Praon sp.\*\*, a parasite of Therioaphis maculata.

## **BRACONIDAE**

- Chelonus* sp.\*\*, a parasite of pink bollworm.  
*Chelonus* sp.\*\*, a parasite of *Ephestia kuhniella*.  
*Microbracon hebetor* Say.\*\*, a parasite of *Plodia interpunctella*.  
*Microbracon kirkpatricki* Wilk., a parasite of pink bollworm.

## **CEPHIDAE**

- Cephus pygmaeus* (L.), wheat, barley.

## **CHALCIDIDAE**

- Brachymeria* sp.\*\*, a parasite of pink bollworm.  
*Ooencyrtus telenomicidus* (Vasilev.) a parasite of  
*Eurygaster integriceps* eggs.

## **CHRYSIDAE**

- Chrysis annulata* Ab-Buyss., hosts are unknown.  
*Chrysis desertorum* Ab-Buyss., hosts are unknown.  
*Ellampus auratus* L., hosts are unknown.  
*Ellampus biaccinctus* Buyss., hosts are unknown.  
*Ellampus punctulatus* Dahlb., hosts are unknown.  
*Spinolia dournovi* Rad., hosts are unknown.

## **CIMBICIDAE**

Cimbyx quadrimaculata (Mueller), almond, apricot,  
other stone fruit.

## **ENCYRTIDAE**

Blastothrix sp.\*\*, a parasite of Pseudococcus sp.

Leptomastidea sp.\*\*, a parasite of Pseudococcus sp.

## **EULOPHIDAE**

Tetrastichus coccinellæ Kurd.\*\*, a parasite of Coccinella septempunctata.

## **EUMENIDAE**

Eumenes pomiformis L., hosts are unknown.

Odynerus reniformis Gm., hosts are unknown.

Odynerus melanocephalus Gm., hosts are unknown.

## **EURYTOMIDAE**

Eurytoma poltnikovi Nikols., pistachio.

Eurytoma amygdali End., almond, other stone fruits.

## **EVANIIDAE**

Evania appendigaster L., a parasite of cockroach  
eggs.

Evania punctata Brull., a parasite of cockroach eggs.

## FORMICIDAE

Acantholepis frauenfeldi Mayr., hosts are unknown.

Aphaenogaster kervillei Forel, hosts are unknown.

Aphaenogaster schmitzi Forel, hosts are unknown.

Bothriomyrmex merioionalis var. syriacus Forel,  
hosts are unknown.

Camponotus maculatus subsp. sancus Forel, hosts  
are unknown.

Camponotus maculatus subsp. thoracicus var. fel-  
lah Emery, hosts are unknown.

Cremastogaster auberti Emery, hosts are unknown.

Formica fusca subsp. rufibaris var. clara Forel,  
hosts are unknown.

Lasius niger subsp. alienus Forst., hosts are unknown.

Messor barbarus subsp. merioionalis Ern., hosts  
are unknown.

Messor barbarus subsp. semirufus Ern., hosts are  
unknown.

Messor barbarus subsp. semirufus var. ebeninus  
Forel, hosts are unknown.

Messor barbarus subsp. semirufus var. interme-  
dius Forel, hosts are unknown.

Messor barbarus subsp. structor var. orientalis  
Emery, hosts are unknown.

Monomorium pharaonis L. stings man.

Monomorium salomonis var. subnitidum Emery,  
hosts are unknown.

Myrmecocystus viaticus subsp. niger Ern., hosts  
are unknown.

Pheidole pallidula Nyl., hosts are unknown.

Plagiolepis pygmæa Latr., hosts are unknown.

Tapinoma erraticum var. erratico-nigerrimum  
Forel, hosts are unknown.

Tapinoma erraticum Latr. hosts are unknown.

Tetramorium caespitum subsp. punicum Smith.,  
hosts are unknown.

Tetramorium caespitum var. schmidti Forel, hosts  
are unknown.

Tetramorium caespitum subsp. semileve Ern.  
hosts are unknown.

## **HALICTIDAE**

Halictus damascenus Pereze., hosts are unknown.

Halictus divergens Pereze., hosts are unknown.

Halictus emesianus Pereze., hosts are unknown.

Halictus kervilleanus Pereze., hosts are unknown.

Halictus obscuratus Mor., hosts are unknown.

Halictus spretus Pereze., hosts are unknown.

Halictus syriacus Pereze., hosts are unknown.

## **ICHNEMONIDAE**

Ichnemion sp., hosts are unknown.

Ophion luteus L.\*\*, hosts are unknown.

## **MASARIDAE**

Celonites abbreviatus Vill., hosts are unknown.

## **MEGACHILIDAE**

Anthidium manicatum L., hosts are unknown.

Chalicodoma (Megachile) nigerrima Pereze. (Chalicodoma aterrima Pereze.), hosts are unknown.

Megachile ericetorum Lep., hosts are unknown.

Megachile sp. rose, cherry.

Osmia damascena Pereze., hosts are unknown.

Osmia rufa L., hosts are unknown.

## **PTEROMALIDAE**

Dibrachys cavus Walk a parasite of Carpocapsa larvae.,  
Sitotroga larva ??

Habrocytus cerealellae Ashm.,\*\* a parasite of Sitotroga cerealella.

Pteromalus puparum L.\*\*, a parasite of Pieris rapae pupae.

### SCELIONIDAE

Asolcus grandis (Thoms.), a parasite of Eurygaster integriceps eggs.

Asolcus (Microphanurus) semistriatus (Nees), a parasite of Eurygaster.

Asolcus simoni subsp. reticulatus Delucc., a parasite of Eurygaster integriceps.

Asolcus vassilievi (Mayr.), a parasite of eggs of Eurygaster ??

### SPHECIDAE

Ammophila assimilis Kohl., hosts are unknown.

Ammophila (Psammophila) hirsuta var. mervensis Rad. (= Ammophila ebenina Costa), hosts are unknown.

Elis (Dielis) ciliata var. b Sauss., hosts are unknown.

Myrmilla erythrocephala Latr. (= Myrmilla cornuta) Ol.) hosts are unknown.

Myrmilla lezginica Rad., hosts are unknown.

Sphex (Sphex) maxillosus F., hosts are unknown.

Tiphia major Mocs., hosts are unknown.

### **TENTHREDINIDAE**

Allantus nazareensis Edm. (= Allantus serratus Knw.), hosts are unknown.

Allantus pectoralis Krie., hosts are unknown.

Caliroa limacina Retz. (= Caliroa cerasi (L.)  
Eriocampoides limacina Ratz.) cherry,  
pear, stone fruits.

Hoplocampa brevis (Klug.), pear major host, plum,  
apple.

Hoplocampa flava (L.), plum.

Hoplocampa testudinea (Klug.), apple.

Macrophya consobrina Mocs., hosts are unknown.

Macrophya postica Brull., hosts are unknown.

### **TORYMIDAE**

Megastigmus pistaciae Wlk., pistachio.

### **TRICHOGAMMATIDAE**

Trichogamma sp., a parasite of cotton worm.

## **VESPIDAE**

Polistes gallicus L., hosts are unknown.

Vespa orientalis L., stings man, fruits, vegetables.

Vespula germanica (F.) stings man, fruits, vegetables.

## **DIPTERA**

### **AGROMYZIDAE**

Melanagromyza phaseoli (Coq.), beans, other legumes.

### **ANTHOMYIIDAE**

Antherigona varia Meig., hosts are unknown.

Anthomyia pluvialis L., hosts are unknown.

Calliophrys patellifera Villen., hosts are unknown.

Calliophrys riparia hosts are unknown.

Chortophila cilicrura Rond., hosts are unknown.

Chortophila cinerella Fall., hosts are unknown.

Chortophila flavibasis Stein., hosts are unknown.

Coenosia tigrina F., hosts are unknown.

Coenosia tricolor Zett., hosts are unknown.

Dorycera syriaca Beck., hosts are unknown.

Fannia canicularis (L.), hosts are unknown.

- Hylemyia antiqua (Meig), onion.
- Hylemyia genurufa Vill., hosts are unknown.
- Hylemyia pullula Zett., hosts are unknown.
- Hylemyia spinosa Rond., hosts are unknown.
- Hylemyia strigosa F., hosts are unknown.
- Muscina stabulans (Fall.), animals
- Pegomyia albigena Vill., hosts are unknown.
- Pegomyia hyoscyami (Panz.), beets, spinach, other Chenopodiaceae.
- Perconmatia limpidipennis Beck., hosts are unknown.
- Stomoxyx calcitrans (L.), animals.

#### ASILIDAE

- Antiphrisson trifarium Loew., hosts are unknown.
- Asilide sp., hosts are unknown.
- Dioctria valida Loew., hosts are unknown.
- Epitriptus senex Meig., hosts are unknown.
- Epitriptus syriacus Schin., hosts are unknown.
- Machimus rusticus var. spinifemoratus Villen,  
hosts are unknown.
- Polyphonius laevigatus Loew., hosts are unknown.

#### BIBIONIDAE

- Bibio hortulanus L., hosts are unknown.

Bibio hortulanus var. hirtipes Loew., hosts are  
unknown.

Bibio sp.\*\*, hosts are unknown.

## **BOMBYLIIDAE**

Anthrax halteralis Kow., hosts are unknown.

Anthrax hottentota L., hosts are unknown.

Anthrax micrargyra Walk., hosts are unknown.

Anthrax velutina Meig., hosts are unknown.

Argyramoeba virgo Egg. hosts are unknown.

Bombylius ater Scop. hosts are unknown.

Bombylius canecens Mikan, hosts are unknown.

Bombylius cinerascens Mikan., hosts are unknown.

Bombylius major L., hosts are unknown.

Bombylius nubilus Mikan, hosts are unknown.

Bombylius pumilus Meig., hosts are unknown.

Bombylius quadrifarious Loew., hosts are unknown.

Geron gibbosus Meig., hosts are unknown.

Lomatia abbreviata Villen., hosts are unknown.

Lomatia belzebul F., hosts are unknown.

Lomatia infernalis Loew., hosts are unknown.

Lomatia scabaea F., hosts are unknown.

Mulio alexandrinus Beck., hosts are unknown.

Tomomyza fornicata Loew., hosts are unknown.

Usia aurata F., hosts are unknown.

### **BORBORIDAE**

Borborus pallipes Stenh., hosts are unknown.

### **CALLIPHORIDAE**

Calliphora erythrocephala (Meig.), meat, dead  
animal matter.

Nyctia halterata Panz., hosts are unknown.

Onesia agilis Meig. (= Onesia vespillo Rond.),  
hosts are unknown.

Pollenia dasyopoda Ports., hosts are unknown.

Pollenia rudis (F.), hosts are unknown.

Pollenia semicinerea Vill., hosts are unknown.

Pseudopyrellia (Cryptolucilia) cornicina F.,  
hosts are unknown.

Pseudopyrellia (Cryptolucilia) sericata Meig  
(= Lucilia sericata (Meig.) hosts are  
unknown.

Stomatorrhina (Idia) lunata F., hosts are unknown.

### **CECIDOMYIIDAE (ITONIDIDAE).**

Apiomyia bergenstammi (Wachtl), pear, hawthorn.

Clinodiplosis oleisuga Trag., olive.

Dasyneura affinis (Kieff.), violet.

Dasyneura oleae (Locw.) (= Perrisia oleae Loew.), olive.

Odinadiplosis amygdali (Anagnos), almond.

Phytophaga destructor (Say.), cercals.

Prolasioptera belesiana (Paoli), olive.

## CHIRONOMIDAE

Chironomus plumosus L., hosts are unknown.

Chironomus viridulus L., hosts are unknown.

## CONOPIDAE

Dalmannia marginata Meig., hosts are unknown.

Myopa picta Panz., hosts are unknown.

## CULICIDAE

( The following species of this family are considerd of medical importance. )

Aedes aegypti (L.) (= Stegomyia aegypti) ??

Aedes dorsalis Meig.

Aedes (Stegomyia) fasciatus F.

Aedes geniculatus Ol. (= Finlaya geniculatus Theo.).

- Aedes lutescens F.  
Aedes mariae Serg. (= Ochlerotatus mariae Arr.).  
Aedes niveus Ludl. (= Finlaya niveus Theo.)  
Aedes punctatus Meig.  
Aedes vittatus Bigot. (= Stegomyia vittatus  
Theo.)  
Anopheles bifurcatus L.  
Anopheles costalis Lœm.  
Anopheles elutus Edwards.  
Anopheles maculipennis Meig.  
Anopheles mauritanus De Gran.  
Anopheles pulcherrimus Theo.  
Anopheles sergenti Theo.  
Anopheles sinensis Weid.  
Anopheles superpictus Grass.  
Culex hortensis (Fical.)  
Culex impudicus (Fical.)  
Culex laticinctus Edwards.  
Culex laurenti News.  
Culex mimeticus Nœ.  
Culex pipiens (L.)  
Theobaldia (Theobaldia) annulata Schr.

Theobaldia (Allotheobaldia) longeareolata

Macq.

### **DOLICHOPODIDAE**

Dolichopus syriacus Beck., hosts are unknown.

Hydrophorus balticus Meig., hosts are unknown.

Hydrophorus præcox Lehm., hosts are unknown.

Orthiochile unicolor Lœw., hosts are unknown.

Syntormon pallipes Meig., hosts are unknown.

### **DROSOPHILIDAE**

Drosophila melanogaster Meig., fruits.

### **EMPIDAE**

Empis damascena Bezzi., hosts are unknown.

Empis spiralis Bezzi., hosts are unknown.

### **EPHYDRIDAE**

Balioptera pictipennis Rond., hosts are unknown.

Balioptera tripunctata Fall., hosts are unknown.

Ditænia cinarella Fall., hosts are unknown.

Ephydra riparia Fall., hosts are unknown.

Notiphila cinerea Fall., hosts are unknown.

## **GASTEROPHILIDAE**

Gasterophilus equi (Clark) ( = Gasterophilus intestinalis (De Geer)), horse.

## **HELOMYZIDAE**

Helomyza variegata Meig., hosts are unknown.

Oecotaea fenestralis Fall., hosts are unknown.

## **HIPPOBOSCIDAE**

Hippobosca equina L., horse, mule, donkey, some times cattle, man.

Hippobosca longipennis F., dog, man.

Melophagus ovinus (L.), sheep, goat.

## **HYPPDERMATIDAE**

Hypoderma bovis (De Geer), cattle.

Hypoderma lineatum (de Villers), cattle.

## **LONCHAEIDAE**

Lonchaea aristella Beck ( = Silba virescens Macq.), fig other fruits.

Lonchaea lasiophthalma Macq., hosts are unknown.

## **MICROPEZIDAE**

*Micropeza nigra* Loew. (= *Micropeza diversipes* Vill.), hosts are unknown.

## **MUSCIDAE**

*Graphomyia maculata* Scop., hosts are unknown.

*Musca domestica* L., medical importance

*Musca corvina* F., medical importance

*Musca nebula* F., medical importance.

*Musca sorbens* Weid. medical importance

*Musca tempestiva* Fall., medical importance

*Musca vitripennis* Meig., medical importance

*Musca vicina* Maq., medical importance

*Ophyra leucostoma* Weidem., hosts are unknown.

## **MYDAIDAE**

*Mydæa (Spilogaster) duplicata* Meig., hosts are unknown.

## **OESTRIDAE**

*Oestrus ovis* L., noses of sheep.

## **PHORIDAE**

*Dasyphora saltuum* Rond., hosts are unknown.

## **PIOPHILIDAE**

Piophila affinis Fall., cheese,

## **PSILIDAE**

Psila villosula Meig., hosts are unknown.

## **PSYCHODIDAE**

Phlebotomus major ? , man

Phlebotomus papatasii Scop., vector of oriental sore  
(Baghdad boil) caused by Lischmania tropica (Wright)

## **SAPROMYZIDAE (= LANXANIIDAE)**

Sapromyza apicalis Loew., hosts are unknown.

Sapromyza flavipalpis Loew., hosts are unknown.

## **SARCOPHAGIDAE**

Blaesoxypha (Gesneriodes) lineata Fall., hosts  
are unknown.

(~~The following species are of medical importance~~) :

Sarcophaga carnaria L.,

Sarcophaga exuberans Pand.,

Sarcophaga lacrymans Vill.,

- Sarcophaga melanura Meig.,  
Sarcophaga protuberans Pand.  
Sarcophaga setinervis Rond.,  
Sarcophaga sinuata Meig.,  
Sarcophaga soror Rond. (= Sarcophaga nigriventris Meig.)  
Sarcophaga spinasa Vill.,  
Sarcophaga striata F. (= Sarcophaga hematodes Meig.)  
Wohlfahrtia (Agria) bella Macq.,

**SCATOPHAGIDAE (= CORDYLURIDAE)**

- Scatophaga lutaria F., hosts are unknown.  
Scatophaga stercoraria Stenn \*\*., hosts are unknown.

**SCIOMYZIDAE (= TETANOCERIDAE)**

- Elgiva truguii Rond., hosts are unknown.  
Limnia recta Loew., hosts are unknown.  
Pherbina coryleti Scop., hosts are unknown.  
Sepedon spinipes (Scop.) hosts are unknown.

**SEPSIDAE**

- Sepsis cynipsea L., hosts are unknown.

## **STRATIOMYIIDAE**

- Odontomyia damascena Vill., hosts are unknown.  
Stratiomyia kervillei Vill., hosts are unknown.

## **SYRPHIDAE**

- Chrysotoxum intermedium Meig., hosts are unknown.  
Eristalis arbustorum L., hosts are unknown.  
Eristalis pratorum Meig., hosts are unknown.  
Eristalis tenax (L.)\*\*, hosts are unknown.  
Eumerus rubescens Vill., hosts are unknown.  
Melanostoma mellinum L., hosts are unknown.  
Melanostoma scalare (F.), hosts are unknown.  
Merodon crassicornis Sack., hosts are unknown.  
Merodon hirsutus Sack., hosts are unknown.  
Merodon testaceus Sack., hosts are unknown.  
Orthoneura frontalis Loew., hosts are unknown.  
Paragus bicolor (F.), hosts are unknown.  
Paragus tibialis (Fall.), hosts are unknown.  
Sphaerophoria flavicauda var. nitidicollis  
Zett., hosts are unknown.  
Sphaerophoria scripta L., hosts are unknown.  
Syritta pipiens (L.), hosts are unknown.

- Syrphus albomaculatus Macq., aphids ?  
Syrphus balteatus De Geer., aphids ?  
Syrphus corollae (F.),\*\* aphids.,,  
Syrphus latifasciatus Macq., aphids ?  
Syrphus pyrastris L.,\*\* aqhids ?  
Xanthogramma ornatum Meig., hosts are unknown.

### TABANIDAE

- Chrysops punctifer Loew., hosts are unknown  
Tabanus decorus Loew., hosts are unknown.  
Tabanus gigas Herbst., hosts are unknown.  
Tabanus kervillei Surco. , hosts are unknown.  
Tabanus mendicus Vill., hosts are unknown.  
Tabanus nemoralis Meig., hosts are unknown,  
Tabanus taeniola P. d. B., horses, camels, vector of El  
..... Debab disease.  
Tabanus unifasciatus Locw., hosts are unknown.

### TACHINIDAE

- Ernestia argyrocephala Vill., hosts are unknown.  
Mintho isis Wiedem., hosts are unknown.  
Morphomyia caliendrata Rond., hosts are unknown.

*Myxodexia macronychia* Br., hosts are unknown.

*Nemorilla floralis* var. *maculosa* Meig., hosts are unknown.

*Phasia crassipennis* (F.), a parasite of *Eurygaster integriceps*

*Rhacodineura antiqua* Fall., hosts are unknown.

*Stevenia angustifrons* Villen., hosts are unknown.

*Stevenia melania* Meig., hosts are unknown.

*Trichaeta (Thryptocera) securicornis* Strobl.,  
hosts are unknown.

#### **THEREVIDAE**

*Phycus fuscipennis* Costa, hosts are unknown.

*Thereva arcuata* Loew., hosts are unknown.

*Thereva nobilitata* F., hosts are unknown.

#### **TIPULIDAE**

*Gonomyia tenella* Meig., hosts are unknown.

*Limnophila ferruginea* Meig., hosts are unknown.

*Pachyrrhina imperialis* Meig., hosts are unknown.

*Tipula lateralis* Meig., hosts are unknown.

*Tipula macroselene* Strobl., hosts are unknown.

*Tipula ochracea* Meig., hosts are unknown.

Tipula oleracea L., beets, crucifers, cereals, legumes,  
potato.

**TRYPETIDAE (= TEPHRITIDAE)**

Ceratit is capitata (Wied.), (=Trypet a citri-  
perda Mac Leay), citrus, stone fruits, other  
fruits, such as apple, vegetables.

Dacus ciliatus Loew., (Dacus brevistylus Bezzi.),  
cucurbits.

Dacus oleae (Gmel.), olive.

Myiopardalis pardalina (Bigot.), melons.

Tephritis matricariae Loew., hosts are unknown.

Trypet a jaceae Desv., hosts are unknown.

Urellia augur Frauenf., hosts are unknown.

Urellia eluta Meig., hosts are unknown.

Urellia perfecta Beck., hosts are unknown.

Urophora quadri fasciata Meig., hosts are unknown.

**SIPHONAPTERA (=APHANIPTERA)**

**PULICIDAE**

Archaeopsylla erinacei Leach., (Erinaceus aur-  
tus).

Ctenocephalides canis (Curtis), dogs.

Ctenocephalides felis (Bouke), cats.

Ctenopsyllus musculi Duges., mouse (Mus norve-  
gicus).

Echidnophaga gallinaceus Westw., Erinaceus  
auritus.

Pulex irritans L., man.

Xenopsylla cheopis (Roths.), mouse (Mus norve-  
gicus).

## PART II

### OLIVE

#### ACARINA

Phyllocoptes sp. (Eriophyidæ).

#### THYSANOPTERA

Liothrips oleæ (Costa) (Phlaeothripidæ).

#### HOMOPTERA

Saissetia oleæ (Bern.) (Coccidæ == Lecaniidæ).

Aspidiotus britannicus Newst. (Diaspididæ).

Aspidiotus hederæ (Vall.) (Diaspididæ).

Chrysomphalus ficus (Asm.) (Diaspididæ).

Lepidosaphes beckii (Newn.) (Diaspididæ).

Lepidosaphes palestinensis Bodenh. (Diaspididæ).

Lepidosaphes ulmi (L.) (Diaipididæ).

Leucaspis riccæ Targ.—Tozz. (Diaspididæ).

Parlatoria oleæ (Clov.) (Diaspididæ).

Mysteropterum grylloides F. (Fulgoridæ).

Euphyllura olivina (Costa) (Psyllidæ).

## **LEPIDOPTERA**

- Zeuzera pyrina (L.) (Cossidæ).  
Prays oleellus (F.) (Hyponomeutidæ).  
Acherontia atropos L. (Sphingidæ).

## **COLEOPTERA**

- Otiorrhynchus cibricollis (Gyl.) (Curculionidæ).  
Hylesinus oleiperda F. (Scolytidæ).  
Phloeotribus scarabaeoides (Bern.) (Scolytidæ).

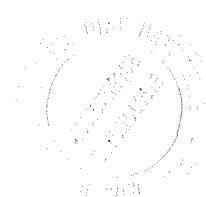
## **DIPTERA**

- Clinodiplosis oleisuga Trag. (Cecidomyidæ).  
Dasyneura oleæ (Löw.) (= Perisia oleæ Löw.)  
(Cecidomyidæ).  
Prolassoptera bellesiaana (Paoli) (Cecidomyidæ).  
Dacus oleae (Gmel.) (Tephritisidæ).

## **POME**

### **ACARINA**

- Eriophyes pyri (Pagst.) (Eriophyidæ), pear, apple.  
Cenopalpus pulcher (C. & F.) (Tenuipalpidæ), apple,  
pear, quince.



Bryobia praetiosa Koch. (Tetranychidae), apple, pear.

Panonychus ulmi (Koch.) (Tetranychidae), apple.

### THYSANOPTERA

Retithrips syriacus Mayet (Thripidae), pear.

### HETEROPTERA

Monosteira lobulifera Reut. (Tingidae), pear.

Monosteira unicostata (Muls. & Rey) (Tingidae),  
pear, apple.

Stephanitis pyri (F.) (Tingidae), pear, apple.

### HOMOPTERA

Siphoninus finitimus (Silv.) (Aleyrodidae), apple.

Aphis pomi De Geer (Aphididae), apple, pear, quince.

Dysaphis plantaginea (Pass.) (Aphididae), apple.

Lecanium corni Bouche (Coccidae), pear.

Eriosoma lanigerum (Haussm.) (Eriosomatidae), apple.

Eriosoma lanuginosum (Hartig) (Eriosomatidae), pear,

Aspidiota hederae (Vall.) (Diaspididae), apple.

Lepidosaphes ficus (Sign.) (Diaspididae), apple.

Melanaspis inopinatus (Leonardi) (Diaspididae), apple.

Parlatoria oleae (Clov.) (Diaspididae), pear, apple.

Psylla pyricola Forest. (Psyllidae), pear.

#### **LEPIDOPTERA**

Synanthedon myopaeformis Borkh. (Aegeriidae), apple.

Zeuzera pyrina (L.) (Cossidae), pear. apple.

Anarsia lineatella Zell. (Gelechiidac), apple.

Recurvaria nanella (Hbn.) (Gelechiidae), apple, quince.

Hyponomeuta malinellus Zall. (Hyponomeutidae), apple,  
pear.

Hyponomeuta padellus (L.) (Hyponomeutidae), apple.

Lyonetia clerkella (L.) (Lyonetiidae), pear, apple.

Episema caeruleocephala (L.) (Noctuidae), apple.

Heliothis nubigera H. S. (Noctuidae), apple.

Archips rosana (L.) (Olethreutidae == Tortricidae ),  
apple, pear, quince.

Carpocapsa pomonella (L.) (Olethreutidae), apple,  
pear.

Grapholitha funebrana Treits. (Olethreutidae), apple.

Hedya nubiferana (Haw.) (Olethreutidae), quince.

Aporia crataegi (L.) (Pieridae), apple, pear.

Acrobasis noctuana (Hbn.) (Pyralidae), pear.

Saturnia pyri (Schiff.) (Saturniidae), apple, pear.

## COLEOPTERA

- Sinoxylon perforans (Schr.) (Bostrichidae), apple.
- Agrilus sinuatus (Ol.) (Buprestidae), apple, pear.
- Agrilus viridis L. (Buprestidae), apple, pear.
- Capnodis semisuturalis Mars. (Buprestidae).
- Capnodis tenebricosa Ol. (Buprestidae), apple.
- Perotis (Aurigena) chlorana (Lap. & Gory) (Buprestidae), apple.
- Ptosima undecimmaculata (Hbst.) (Buprestidae).
- Cerambyx cerdo L. (Cerambycidae), pear.
- Cerambyx miles Bon. (Cerambycidae), apple.
- Anthonomus pomorum (L.) (Curculionidae), apple, pear.
- Curculio nucum L. (Curculionidae), apple, pear.
- Otiorrhynchus (Tourniera) ovalipennis Boh. (Curculionidae), apple.
- Peritelus sphaerooides Germ. (Curculionidae), apple.
- Rhamphus pulicarius (Hbst.) (Curculionidae), apple, pear.
- Rhynchites aereipennis Debr. (Curculionidae) apple.
- Rhynchites bacchus L. (Rhynchites auratus (Scop.)) (Curculionidae), apple.
- Rhynchites lenaeus Forst. (Curculionidae), apple.
- Strophosoma breviusculum Mars. (Curculionidae),

apple.

Zonabris calida Pall. (Meloidae), apple.

Polyphylla olivieri Costa (Scarabaeidae), apple, pear.

Ruguloscolytus mediterraneus (Eggers) (Scolytidae),  
apple, pear.

Scolytus amygdali Guer. (Scolytidae), apple, quince.

Scolytus rugulosus (Ratz.) (Scolytidae), apple.

## **HYMENOPTERA**

Caliroa limacina Retz. (Tenthredinidae), pear.

Hoplocampa brevis (Klug.) (Tenthredinidae), pear, apple

Hoplocampa testudinea (Klug.) (Tenthredinidae), apple

## **DIPTERA**

Apiomyia bergenstammi (Wachtl) (Cecidomyiidae), pear

Ceratitis capitata (Weid.) (Tephritidae), apple.

## **STONE FRUITS**

### **ACARINA**

Aceria phloeoecoptes (Nal.) (Eriophyidae), almond.

Eriophyes pyri (Pagst.) (Eriophyidae), plum.

Phytoptus phloeoecoptes typicus Nalepa?? (Eriophyidae), almond, plum.

Bryobia praetiosa Koch. (Tetranychidae), peach.

**THYSANOPTERA**

Retithrips syriacus Mayet (Thripidae), plum.

**HETEROPTERA**

Monosteira unicostata (Muls. & Rey) (Tingidae),  
almond, apricot.

**HOMOPTERA**

Brachycaudus amygdalinus (Schtdn.) (Aphididae),  
peach, apricot.

Brachycaudus helichrysi (Kltb.) (Aphididae).

Hyalopterus pruni (Geoff.) (Aphididae), peach.

Myzus persicae (Sulz.) (Aphididae).

Pterochloroides persicae (Chold.) (Aphididae),  
almond, apricot, plum.

Lecanium corni Bouche (Coccidae), apricot.

Melanaspis inopinatus (Leonardi) (Diaspididae),  
almond.

Parlatoria oleae (Clov.) (Diaspididae).

Pseudaulacaspis pentagona (Targ. & Tozz.) (Diaspididae).

## **LEPIDOPTERA**

- Synanthedon myopaeformis Borkh. (Aegeriidae), plum,  
apricot.
- Cossus cossus (L.) (Cossidae), apricot, peach.
- Zeuzera pyrina (L.) (Cossidae), cherry.
- Anarsia lineatella Zell. (Gelechiidae), peach, almond,  
apricot.
- Recurvaria nanella (Hbn.) (Gelechiidae), apricot.
- Hyponomeuta padellus (L.) (Hyponomeutidae), cherry,  
apricot, almond.
- Nygmia phaeorrhoea (H. S.) (Lymantriidae), almond.
- Lyonetia clerkella (L.) (Lyonetiidae), cherry.
- Episema caeruleocephala (L.) (Noctuidae).
- Archips rosana (L.) (Olethreutidae=Tortricidae), plum,
- Grapholitha funebrana Treits. (Olethreutidae), plum.
- Aporia crataegi (L.) (Pieridae), cherry, almond.
- Saturnia pyri (Schiff.) (Saturniidae), plum, cherry.

## **COLEOPTERA**

- Sinoxylon perforans (Schr.) (Bostrychidae).
- Capnodis anthracina Fisch. (Buprestidae).
- Capnodis carbonaria Klug. (Buprestidae), almond,  
apricot, plum, cherry.

Capnodis henningi Fald. (Buprestidae) apricot, plum.

Capnodis porosa Klug. (Buprestidae), almond, plum,  
peach.

Capnodis tenebrionis (L.) (Buprestidae), peach, cherry,  
plum.

Perotis (Aurigena) chlorona (Lap. & Gory) (Bu-  
prestidae), almond.

Ptosima undecimmaculata (Hbst.) (Buprestidae),  
apricot.

Sphenoptera (Tropea peltis) kambyses Oben. (Bu-  
prestidae), apricot.

Cerambyx cerdo L. (Cerambycidae), cherry, apricot.

Cerambyx dux (Fald.) (Cerambycidae), plum, peach,  
almond, apricot.

Cerambyx miles Bon. (Cerambycidæ), almond.

Anthonomus amygdali Hust. (Curculionidæ), almond.

Anthonomus gentilis Faust. (Curculionidæ), almond.

Anthonomus ornatoides Reitter (Curculionidæ), almond

Polydrosus ponticus Faust. (Curculionidæ).

Rhynchites bacchus L. (= Rhynchites auratus  
(Scop.)) (Curculionidæ), apricot, cherry, almond,  
plum.

Rhynchites smyrnensis Debr. (Curculionidæ).

- Polyphylla olivieri Coss. (Scarabæidæ), cherry.  
Ruguloscolytus amygdali Guer, (Scolytidæ).  
Ruguloscolytus mediterrnæus ( Eggers. ) ( Scolytidæ ).  
Scolytus rugulosus (Ratz.) (Scolytidæ), apricot, etc.

#### **HYMENOPTERA**

- Cimbyx quadrimaculata (Mueller) (Cimbicidæ), almond,  
apricot, cherry.  
Eurytoma amygdali End. (Eurytomidæ), almond.  
Megachile sp. (Megachilidæ), cherry.  
Caliroa limacina Retz. (Tenthredinidæ), plum, cherry.  
Hoplocampa brevis (Klug.) (Tenthredinidæ), plum.  
Hoplocampa flava (L.) (Tenthredinidæ), plum.

#### **DIPTERA**

- Odinadiplosis amygdali (Anagnos) (Cecidomyiidæ) ,  
almond.  
Ceratitis capitata (Weid.) (Tephritidæ).

## PISTACHIO

### THYSANOPTERA

Retithrips syriacus Mayet (Thripidae).

Thrips iranicus Yakhontov (Thripidae).

Thrips pistaciæ Yakhontov (Thripidae).

### HOMOPTERA

Aploneura lentisci (Passerini) (Eriosomatidae), Pistacia lentiscus.

Baizongia pistaciæ (L.) (Eriosomatidae).

Forda follicularia (Passerini) (Eriosomatidae), Pistacia palaestina.

Forda formicaria Heyden (Eriosomatidae), Pistacia palaestina

Forda riccobonii (Stef.) (Eriosomatidae).

Forda trivialis (Passerini) (Eriosomatidae), Pistacia palaestina.

Geoica urticularia (Passerini) (Friosomatidae), Pistacia palaestina

Paracletus cimiciformis Heyden (Eriosomatidae),  
Pistacia palaestina, P. vera.

- Slavum wertheimae Hille Ris Lambers (Eriosomatidae).
- Smynthurodes betae Westw. (Eriosomatidae).
- Ceroplastes floridensis Comst. (Coccidae).
- Pulvinaria pistaciae Bod. (Coccidae).
- Diaspis syriaca Lind. (Diaspididae), Pistacia terebinthus.
- Epidiaspis gennadii Leonardi (Diaspididae).
- Lepidosaphes pistaciae Arch. (Diaspididae).
- Melanaspis inopinatus (Leonardi) (Diaspididae).
- Parlatoria oleas (Clov.) (Diaspididae).
- Suturaspis pistaciae Lind. (= Salicicola pistaciae Lind.) (Diaspididae).
- Idiocerus stali Fieb. (Jassidae).
- Agenoscena targionii (Licht.) (Psyllidae).

#### LEPIDOPTERA

- Recurvaria pistacicola ? (Gelechiidae).
- Schneidereria pistacicola (Danil.) (= Schneidereria pistaciella Weber.) Gelechiidae).
- Pachypasa otus (Drury) (Lasiocampidae).
- Tinea pistaciae Asrag. (Tineidae).

## **COLEOPTERA**

- Scobicia chevrieri Villa. (Bostrychidae).
- Agrilus viridis L. (Buprestidae).
- Agrilus sp. (Buprestidae).
- Anthaxia brevis Cast. & Gory (Buprestidae), Pistacia mutica.
- Capnodis anthracina Fisch. (Buprestidae).
- Capnodis carbonaria Klug. (Buprestidae).
- Capnodis cariosa Pall. (Buprestidae).
- Melanophila cuspidata (Klug.) (Buprestidae).
- Carphoborus (Estenoborus) perrisi (Chap.)  
(Scolytidae).
- Chaetoptelius vestitus (Muls. & Rey) (Scolytidae).

## **HYMENOPTERA**

- Eurytoma plotnikovi Nikolskaya (Eurytomidae).
- Megastigmus pistaciae Wlk. (Torymidae).

## **GRAPÉ**

## **ACARINA**

- Eriophyes vitis (Pagst.) (Eriophyidae).

## **THYSANOPTERA**

Retithrips syriacus Mayet. (Thripidae).

## **HOMOPTERA**

Chloropsalta viridiissima (Walker) (Cicadidae).

Hysteropterum grylloides F. (Fulgoridae).

Empoasca discipiens Paoli. (Jassidae).

Viteus vitifolii (Fitch) (Phylloxeridae).

Pseudococcus citri (Risso) (Pseudococcidae).

## **LEPIDOPTERA**

Cossus cossus (L.) (Cossidae).

Clysiaina ambiguella (Hbn.) (Olethreutidae) == Tortricidae).

Lobesia botrana (Schiff.) (Olethreutidae).

Sparganothis pilleriana Schiff. (Olethreutidae) == Tortricidae).

Celerio lineata livornica (Esp.) (Sphingidae).

Theresimima ampelophaga (Bayle) (Zygaenidae).

## **COLEOPTERA**

Apate monacha F. (Bostrichidae).

Schistocerus bimaculatus (Bostrichidae).

- Sinoxylon perforans (Schr.) (Bostrychidae).  
Agrius viridis L. (Buprestidae).  
Chlorophorus varius Mull. (Cerambycidae).  
Rhopalopus calvipes F. (Cerambycidae).  
Cyaniris viridana Lac. (Chrysomelidae).  
Haltica ampelophaga Guer. (Chrysomelidae).  
Curculio nucum L. (Curculionidae).  
Otiorrhynchus peregrinus Stier. (Curculionidae).  
Peritelus sphaerooides Germ. (Curculionidae).  
Anoxia orientalis Kyrn. (Scarabaeidae).  
Polyphylla olivieri Costa (Scarabaeidae).

#### **HYMENOPTERA**

- Vespa orientalis L. (Vespidae).

## **CITRUS**

#### **ACARINA**

- Aceria sheldoni (Ewing) (Eriophyidae), lemon.  
Phyllocoptrus oleivora Ashm. (Eriophyidae), lemon,  
orange.  
Brevipalpus obovatus Donn. (= Brevipalpus  
incarnatus (Banks) (Tenuipalpidae), lemon.

Brevipalpus sp. (Tenuipalpidae), orangé.

Eutetranychus orientalis (Klein) (Tetranychidae).

Tetranychus telarius (L.) (Tetranychidae).

## THYSANOPTERA

Heliothrips haemorrhoidalis (Bouche) (Thripidae).

## HETEROPTERA

Dionconotus cruentatus (Brulle) (Miridae).

## HOMOPTERA

Dialeurodes kirkaldyi (Kot.) (Aleyrodidae).

Siphoninus finitimus (Siv.) (Aleyrodidae), orange.

Aphis craccivora Koch. (Aphididae).

Aphis gossypii Glov. (Aphididæ).

Myzus persicae (Sulz.) (Aphididæ).

Toxoptera aurantii (Fonsc.) (Aphididæ.)

Ceroplastes floridensis Coms. (Coccidæ).

Coccus hesperidum (L.) (Coccidæ).

Saissetia oleæ (Bern.) (Coccidæ = Lecaniidæ).

Aonidiella aurantii (Mask.) (Diaspididæ).

Aspidiotus hederæ (Vall.) (Diaspididæ).

Chrysomphalus dictyospermi (Morgan) (Diaspididæ).

Chrysomphalus ficus (Ashm.) (== Chrysomphalus  
aonidum (L.) (Diaspididæ).

Lepidosaphes beckii (Newm.) (Diaspididæ).

Parlatoria oleae (Clov.) (Diaspididæ).

Parlatoria pergandii Coms. (Diaspididæ).

Empoasca disciplina Paoli. (Jassidæ).

Icerya purchasi Mask. (Margarodidæ).

Pseudococcus citri (Risso) (Pseudococcidæ).

#### **LEPIDOPTERA**

Prays citri Mill. (Hyponomeutidæ).

Ectomyelois (Myelois) ceratoniae (Zell.) (Pyralidæ).

#### **COLEOPTERA**

Apate monacha F. (Bostrichidæ).

#### **DIPTERA**

Ceratitidis capitata (Weid.) (Tephritidæ).

### **WALNUT, FIG, POMEGRANATE**

#### **ACARINA**

Aceria granati (Can. & Mass.) (Eriophyidæ), pome-  
granate.

## **THYSANOPTERA**

Reticlithrips syriacus Mayet (Thripidae), walnut.

## **HETEROPTERA**

Stephanitis pyri (F.) (Tingidae), walnut.

## **HOMOPTERA**

Siphoninus finitimus (Silv.) (Aleyrodidae), fig.

Aphis gossypi Glov. (Aphididae), pomegranate.

Aphis puniceæ Pass. (Aphididae), pomegranate.

Ceroplastes rusci (L.) (Coccidae), fig and Ficus sp.

Coccus hesperidum (L.) (Coccidae), fig.

Aspidiota lataniæ (Sign.) (Diaspididae). fig.

Lepidosaphes beckii (Newn.) (Diaspididae), fig.

Lepidosaphes ficus (Sign.), (Diaspididae), fig.

Hysteropterum grylloides F. (Fulgoridae). fig.

Homotoma ficus (L.) (Psyllidae), fig.

Trioza buxtoni Laing. (Psyllidae), fig.

## **LEPIDOPTERA**

Zeuzera pyrina (L.) (Cossidae), pomegranate.

Virachola livia (Klug.) (Lycaenidae), pomegranate.

- Carpocapsa pomonella (L.) (Olethreutidæ), walnut.  
Grapholitha funebrana Treit. (Olethreutidæ), walnut.  
Euzophera sp.\*\* (Pyralidæ). pomegranate.

#### **COLEOPTERA**

- Melanophila cuspidata (Klug.) (Buprestidæ), fig.  
Batocera rufomaculata De Geer (Cerambycidæ), fig.  
Cerambyx dux (Fald.) (Cerambycidæ), walnut.  
Hesperophanes griseus (F.) (Cerambycidæ), fig.  
Hypoborus ficus Er., (Scolytidæ), fig.

#### **DIPTERA**

- Lonchaea aristella Beck. (= Silba virescens  
Macq. (Lonchaeidae), fig.

#### **FORESTS**

#### **ACARINA**

- Cenopalpus pulcher (C. & F.) (Tenuipalpidæ), loquat,  
poplar.

#### **THYSANOPTERA**

- Retithrips syriacus Mayet (Thripidæ), eucalyptus.

## HETEROPTERA

Monosteira unicostata (Muls. & Rey) (Tingidæ),  
hawthron, willow, poplar.

Stephanitis pyri (F.) (Tingidæ), oak, poplar.

## HOMOPTERA

Aphis nerii Boyer (Aphididæ), oleander.

Phloeomyzus passerinii (Signoret) (Aphididæ), poplar.

Coccus hesperidum (L.) (Coccidæ), acacia, oleander.

Saissetia oleæ (Bern.) (Coccidæ), oleander.

Aspidiotus hederae (Vall.) (Diaspididæ), oleander.

Pseudococcus sp.\*\* (Pseudococcidæ), Cypress.

Eriosoma lanuginosum (Hartig) (Eriosomatidæ), elm.

Pemphigus bursarius (L.) (Eriosomatidæ), poplar.

Pemphigus lichtensteini Tullgren (Eriosomatidæ),  
poplar.

Pemphigus spirothecæ Passerini (Eriosomatidæ), poplar.

Tetraneura gallarum (Gmelin) (Eriosomatidæ),

Ulmus sp.

## LEPIDOPTERA

Aegeria apiformis (Clarck) (= Trochitium apiformis Clarck) (Aegeriidæ), poplar.

Cossus cossus (L.) (Cossidæ), elm, willow.

Lithacolletis populifoliella (Gracilariidæ),  
poplar.

Hyponomeuta padellus (L.) (Hyponomeutidæ), willow.

Pachypasa otus (Drury) (Lasiocampidæ), wild pistachio,  
oak, cypress, thuja.

Virachola livia (Klug.) (Lycenidæ), loquat, acacia.

Nygma phœorrhœa (H.-S.) (Lymantriidæ), many forest  
trees.

Prothetria dispar (L.) (= Lymantria dispar) (Lyman-  
triidæ).

Lyonetia clerkella (L.) (Lyonetiidæ), birch.

Hedya nubiferana (Haw.) (Olethreutidæ), hawthorn.

Aporia cratægi (L.) (Pieridae), hawthorn, wild rosaceous.

Ectomyelois (Myelois) ceratoniae (Zeller) (Pyra-  
lidae) carob.

Saturnia pyri (Schiff.) (Saturniidae), willow.

Thaumetopoea pityocampa (Denis & Schiff.) (Thaume-  
topoeidae), pine.

Thaumetopoea processionea L. (Thaumetopoeidae),

## COLEOPTERA

Apate monacha F. (Bostrychidae), acacia.

- Scobicia chevrieri Villa (Bostrychidae), eucalyptus.
- Pachymerus lallemandi Marseul (Bruchidæ), acacia.
- Agrius sinuatus (Ol.) (Buprestidæ), hawthorn.
- Agrius viridis L. (Buprestidæ), willow, quercus,  
Fagus sp.
- Anthaxia brevis Cast. & Gory (Buprestidae), pine,  
Fagus sp., willow, wild pistachio.
- Capnodis miliaris Klug. (Buprestidae), poplar.
- Capnodis porosa Klug. (Buprestidae), poplar.
- Julodis onopordi F. (Buprestidae), poplar.
- Melanophila cuspidata (Klug.) (Buprestidae), poplar,  
juniper.
- Cerambyx cerdo L. (Cerambycidæ), oak.
- Cerambyx dux (Fald.) (Cerambycidae).
- Cerambyx nodulosus Germ. (Cerambycidae), oak.
- Cerambyx velutinus Br. (Cerambycidae), oak.
- Chlorophorus varius Mull. (Cerambycidae).
- Penichora fasciata Steph. (Cerambycidae), oak.
- Phoraoantha semipunctata F. (Cerambycidae),  
eucalyptus.
- Plagionotus detritus L. (Cerambycidae). oak.
- Rhesus serricollis Motsch. (Cerambycidae).

Rhopalopus calvipes F. (Cerambycidæ), poplar, willow.

Rhopalopus macropus Germ. (Cerambycidæ), oak.

Stromatium fulvum Villers. (Cerambycidæ), oak and  
willow woods.

Plagiодера versicolor Laich. (Chrysomelidae), poplar,  
willow.

Strophosomus melanogrammus Forster. (Curculionidae),  
pine, quercus.

#### **DIPTERA**

Apiomyia bergenstammi (Wachtl) (Cecidomyiidae),  
hawthorn.

#### **COTTON**

#### **ACARINA**

Tetranychus telarius (L.) (Tetranychidae).

#### **COLLEMBOLA**

Lepidocyrtinus incertus Hand. (Sminthuridae).

#### **ORTHOPTERA**

Acrida bicolor (Thunb.) (Acrididae).

Calliptamus italicus (L.) (Acrididae).

Dociostaurus maroccanus (Thunb.) (Acrididae).

- Euprepocnemis plorans (Charp.) (Acrididae).  
Liogryllus bimaculatus De Geer (Gryllidae).  
Gryllotalpa gryllotalpa (L.) (Gryllotalpidae).

## THYSANOPTERA

- Retithrips syriacus Mayet (Thripidae).  
Thrips tabaci Lind, (Thripidae).

## HETEROPTERA

- Adelphocoris rapidus Say.  
Lygaeus sp. (Lygaeidae).  
Oxycarenus hyalinipennis (Costa) (Lygaeidae).  
Creontiades pallidus (Ramb.) (Miridae).  
Unidentified two species \*\* (Miridae).  
Eurydema ornata (L.) (Pentatomidae).  
Nezara viridula (L.) (Pentatomidae).

## HOMOPTERA

- Bemisia tabaci (Genn.) (Aleyrodidae).  
Aphis gossypii Glov. (Aphididae).  
Empoasca discipiens Paoli (Jassidae).  
Empoasca lybica (Berg.) (Jassidae).

## LEPIDOPTERA



## **COLEOPTERA**

- Rhaphidopalpa floveicollis* (Lucas) (Chrysomelidæ).

## CEREALS

## **ORTHOPTERA**

- Calliptamus italicus (L.) (Acrididæ).  
Docistaurus maroccanus (Thunb.) (Acrididæ).

Liogryllus bimaculatus De Geer (Gryllidae).

## THYSANOPTERA

Limothrips cerealeum (Haliday) (Thripidae).

## HETEROPTERA

Creontiades pallidus (Ramb.) (Miridæ), corn.

Aelia rostrata Boh. (Pentatomidæ).

Eurydema ornata (L.) (Pentatomidae).

Eurygaster austriacus (Schr.) (Pentatomidae).

Eurygaster integriceps Put. (Pentatomidae), barley,  
wheat.

Eurygaster maurus (L.) (Pentatomidae).

Nezara viridula (L.) (Pentatomidae).

## HOMOPTERA

Rhopalosiphum maidis (Fitch.) (Aphididae).

Schizaphis graminum (Rond.) (Aphididae).

Porphyrophora polonica (L.) (Margarodidae).

## LEPIDOPTERA

Agrotis segetum Schiff. (= Euxoa segetum Schiff.)  
(Noctuidæ).

Heliothis armigera (Hb.) (Noctuidae).

Heliothis dipsacea (L.) (Noctuidae), corn.

Sesamia creticea Led. (Noctuidae), corn.

Ostrinia nubilalis (Hbn.) (Pyralidae).

Syringopais (Scythris) temperatella (Led.)  
(Seythrididae), wheat, barley.

## **COLEOPTERA**

Zabrus tenebrioides (Goeze) (Carabidae), wheat, barley.

Chaetocnema chlorophana Duf. (Chrysomelidae),  
maize, sorghum.

Marseulia dilativentris (Reiche) (Chrysomelidae),  
wheat, barley.

Psylliodes sp. (Chrysomelidae).

Pachytychius latipes Debr. (Curculionidae), wheat.

Agriotes lineatus (L.) (Elateridae), wheat.

Anisoplia austriaca (Hbst.) (Scarabacidae), wheat.

Anisoplia leucaspis Lap. (Scarabacidae), wheat.

Anisoplia segetum Hbst. (Scarabaeidae), wheat.

Melolontha melolontha L. (Scarabaeidae).

Pentodon bispinosus Kust. (Scarabaeidae), wheat.

Phyllopertha dionysius (F.) (Scarabaeidae), wheat.

Phyllopertha nazarena Mars. (Scarabacidae), wheat.

Polyphylla fullo (L.) (Scarabaeidæ).

Rhizotrogus caucasicus Gyll. (Scarabaeidæ), wheat.

#### **HYMENOPTERA**

Cephus pygmaeus (L.) (Cephidæ), wheat, barley.

#### **DIPTERA**

Phytophaga destructor (Say) (Cecidomyiidae), wheat,  
barley.

### **FORAGE LEGUMES**

#### **COLLEMBOLA**

Sminthurus viridis Lubb. (Sminthuridæ), alfalfa,  
clover.

#### **ORTHOPTERA**

Calliptamus italicus (L.) (Acrididæ).

Euprepocnemis plorans (Charp.) (Acrididæ), berseem.

Liogryllus bimaculatus De Geer (Gryllidæ), alfalfa.

#### **HETEROPTERA**

Creontiades pallidus (Ramb.) (Miridæ), alfalfa, clover.

Nezara viridula (L.) (Pentatomidæ), alfalfa.

## **HOMOPTERA**

- Acyrthosiphon pisum (Harris) (Aphididae), alfalfa.  
Therioaphis maculata (Buckton)\*\* (Aphididae), alfalfa.

## **LEPIDOPTERA**

- Heliothis dipsacea (L.) (== Chloridæ dipsacea L.) (Noctuidæ), alfalfa.  
Prodenia litura F\*\* (Noctuidæ), alfalfa.  
Spodoptera (Laphygma) exigua (Hbn.) (Noctuidæ),  
alfalfa.  
Colias corceus (Fourc.) (== Colias edusa F.) (Pieridae),  
alfalfa.

## **COLEOPTERA**

- Phytodecta fornicatus Brug. (Chrysomelidae), alfalfa.  
Hypera brunneipennis Boh. (Curculionidae), lucerne,  
alfalfa.  
Hypera variabilis Herbst. (Curculionidae), lucerne,  
alfalfa.  
Sitona crinitus (Herbst.) (Curculionidae), clover, alfalfa.  
Sitona humiralis Steph. (Curculionidae), lucerne.

## EDIBLE LEGUMES

### ACARINA

Tetranychus telarius (L.) (Tetranychidae), beans.

### ORTHOPTERA

Gryllotalpa gryllotalpa (L.) (Gryllotalpidae).

### HOMOPTERA

Acyrthosiphon pisum (Harris) (Aphididae), lentil.

Aphis craccivora Koch. (Aphididae), lentil, beans.

Aphis fabae Scop. (Aphididae), broadbeans, beans, lentil.

### LEPIDOPTERA

Lampides boeticus (L.) (Lycaenidae).

Agrotis flammatra (Denis & Schiff.) (Noctuidae), peanut.

Heliothis armigera (Hb.) (Noctuidae).

Heliothis dipsacea (L.) (Noctuidae), chickpeas,  
soyabean.

Prodenia litura F. (Noctuidae), peanut.

Vanessa cardui (L.) (Nymphalidae), beans.

Etiella zinckenella (Treit.) (Pyralidae), lima - bean  
(lobia).

Herse convolvuli (L.) (Sphingidae), beans.

## **COLEOPTERA**

- Rhaphidopalpa foveicollis (Lucas) (Chrysomelidæ),  
beans.
- Apion arrogans Wenk. (Curculionidæ), broadbean.
- Hypera striatus (Boh.) (Curculionidæ), broadbean.
- Sitona limosus Rossi. (Curculionidæ), beans.
- Sitona lineata (L.) (Curculionidæ), beans, other legumes.
- Autoserica castanea Arrow. (Scarabaeidæ).
- Phyllopertha lineata F. (Scarabaeidæ), lobia.

## **DIPTERA**

- Melanagromyza phaseoli (Coq.) (Agromyzidæ), beans.

## **SOLANACEOUS PLANTS**

(EGGPLANT, PEPPER, POTATO, TOBACCO, TOMATO)

## **ACARINA**

- Aculus lycopersici (Massee) (Eriophyidæ), tomato,

## **ORTHOPTERA**

- Liogryllus bimaculatus De Geer (Gryllidae), potato.
- Gryllotalpa gryllotalpa (L.) (Gryllotalpidae), po-  
tato, tomato.

## **THYSANOPTERA**

Thrips tabaci Lind. (Thripidae), tobacco.

## **HETEROPTERA**

Eurydema ornata (L.) (Pentatomidae), potato.

Nezara viridula (L.) (Pentatomidae), tomato.

## **HOMOPTERA**

Bemisia tabaci (Genn.) (Aleyrodidae), tomato.

Aphis fabae Scop. (Aphididae), tobacco.

Aphis gossypii Glov. (Aphididae), tobacco.

Myzus persicae (Sulz.) (Aphididae), tobacco.

## **LEPIDOPTERA**

Gnorimoschema operculella (Zell.) (Gelechiidae), potato, tobacco.

Agrotis flammatra (Denis & Schiff.) (Noctuidae), tobacco.

Agrotis segetum Schiff. (Noctuidae), tobacco, potato.

Heliothis armigera (H.S.) (Noctuidae), tobacco, tomato.

Heliothis dipsacea (L.) (Noctuidae), tobacco, tomato.

Heliothis nubigera H.S. (Noctuidae), tobacco, tomato.

Heliothis virescens (F.) (Noctuidae), tobacco.

- Prodenia litura F. (Noctuidae), tobacco.  
Spodoptera exigua (Hbn.) (Noctuidae), potato.  
Euzophera osseatella (Tr.) (Pyralidae), eggplant, potato, tomato, pepper, tobacco.  
Ostrinia nubilalis (Hbn.) (Pyralidae), pepper.  
Protoparce sexta (Joh.) (Sphingidae), tobacco.

#### **COLEOPTERA**

- Epitrix parvula (Chrysomelidae), tobacco.  
Agriotes lineatus (L.) (Elateridæ), potato.  
Athous haimorrhoidalis F. (Elateridæ), potato, tomato.  
Melanotus torsus Er. (Elateridæ), potato.  
Opatrioides punctulatus Brulle., (Tenebroioidæ), tobacco.  
Melolontha melolontha L. (Scarabaeidae), potato.  
Polyphylla fullo (L.) (Scarabaeidae), tobacco.

#### **CRUCIFERS**

#### **ORTHOPTERA**

- Liogryllus bimaculatus De Geer (Gryllidae).

#### **THYSANOPTERA**

- Thrips tabaci Lind. (Thripidae), cabbage.

## **HETEROPTERA**

- Eurydema ornata (L.) (Pentatomidæ), radish, others.  
Eurydema rugulosum Chrm. (Pentatomidæ).

## **HOMOPTERA**

- Brevicoryne brassicæ (L.) (Aphididæ).  
Myzus persicae (Sulz.) (Aphididæ), radish, others.

## **LEPIDOPTERA**

- Plutella maculipennis (Curt.) (Hyponomeutidæ).  
Agrotia segetum Schiff. (Noctuidæ).  
Mamestra brassicæ L. (Noctuidæ).  
Pieris brassicæ (L.) (Pieridæ).  
Pieris rapæ (L.) (Pieridæ).  
Hellula undalus (F.) (Pyralidæ).

## **COLEOPTERA**

- Phyllotreta atra (F.) (Chrysomelidæ).  
Phyllotreta cruciferæ (Goeze) (Chrysomelidæ).  
Lixus anguinus (L.) (Curculionidae).

## CUCURBITS

### ACARINA

Tetranychus telarius (L.) (Tetranychidae), water-melon.

### ORTHOPTERA

Liogryllus bimaculatus De Geer (Gryllidae).

### HETEROPTERA

Coridius viduatus (F.) (Pentatomidæ), melons.

Nezara viridula (L.) (Pentatomidæ), melons.

### HOMOPTERA

Bemisia tabaci (Genn.) (Aleyrodidæ).

Aphis craccivora Koch. (Aphididæ).

Aphis gossypii Glov. (Aphididæ).

Empoasca discipiens Paoli (Jassidæ).

### LEPIDOPTERA

Heliothis nubigera H.S. (Noctuidæ), watermelon.

Vanessa cardui (L.) (Nymphalidæ).

### COLEOPTERA

Raphidopalpa foveicollis (Lucas) (Chrysomelidæ).

Epilachna chrysomelina (F.) (Coccinellidæ).

Baris granulipennis (Tour.) (Curculionidæ), water-melon.

Opatroides punctulatus Brulle. (Tenebrionidae), water-melon.

#### DIPTERA

Dacus ciliatus Loew. (Trypetidae).

Myiopardalis pardalina (Bigot.) (Trypetidae).

### BEETS AND RELATED CROPS

#### THYSANOPTERA

Thrips tabaci Lind. (Thripidae), beets.

#### HOMOPTERA

Aphis fabae Scop. (Aphididae), beets, chard.

Myzus persicae (Sulz.) (Aphididae), beets.

Circulifer opacipennis (Lech.) (Jassidae), beets.

Empoasca discipiens Paoli (Jassidae), beets.

#### LEPIDOPTERA

Ognogyna lœwi (Zell.) (Arctiidæ), beets.

Gnorimoschema ocellatella (Boyd.) (Gelechiidae),  
beets.

Euxoa segetum Schiff. (Noctuidae), beets.

Heliothis dipsacea (L.) (Noctuidae), beets.

Prodenia litura F. (Noctuidae), sugarbeet.

Spodoptera exigua (Hbn.) (Noctuidae), beets.

Hymenia recurvalis (F.) (Pyralidae), beets.

#### **COLEOPTERA**

Cassida nobilis L. (Chrysomelidae), beets.

Cassida vittata Vill. (Chrysomelidae), beets.

Chaetocnema tabialis (III.) (Chrysomelidae), beets.

Lixus junci Bohm. (Curculionidae), beets.

Agriotes lineatus (L.) (Elateridae), beets.

Melanotus torosus Er. (Elateridae), beets.

Phyllopertha lineata F. (Scarabacidae), beets.

Polyphylla olivieri Costa (Scarabaeidae), beets.

#### **DIPTERA**

Pegomyia hyoscyami (Panz.) (Anthomyiidae), beets,  
spinach.

**OKRA, SESAME, MINT, GARLIC, ONION, ARTICHOKE,  
CARROT, LETTUCE.**

#### **ORTHOPTERA**

Calliptamus italicus (L.) (Acrididae).

Gryllotalpa gryllotalpa (L.) (Gryllotalpidae).

#### **THYSANOPTERA**

Retithrips syriacus Mayet (Thripidae),

Thrips tabaci Lind. (Thripidae), onion.

#### **HETEROPTERA**

Oxycarenus hyalinipennis (Costa), (Lygacidae), okra.

Nezara viridula (L.) (Pentatomidae).

#### **HOMOPTERA**

Bemisia tabaci (Genn.) (Aleyrodidae).

Aphis gossypii Glov. (Aphididae), mint.

Gapitophorus elaeagni (Del Guerico) (Aphididae), Ar-tichoke.

Circulifer opacipennis (Lech.) (Jassidae), sesame.

#### **LEPIDOPTERA**

Dyspessa ulula (Bork.) (Cossidae), garlic, onion.

Pectinophora gossypiella (Saund.) (Gelechiidae), okra.

Agrotis ipsilon (Hufn.) (Noctuidae).

Earias insulana Boisd. (Noctuidae). okra.

Heliothis armigera (Hb.) (Noctuidæ), okra.

Prodenia litura (F.) (Noctuidæ) okra.

Spodoptera exigua (Hbn.) (Noctuidæ), okra

Vanessa cardui (L.) (Nymphalidæ), artichoke.

Acherontia atropos L. (Sphingidæ), sesame.

## **COLEOPTERA**

Agapanthia cardui (L.) (Cerambycidæ), artichoke.

Exosoma collare Humm. (Chrysomelidæ), onion.

Agriotes lineatus (K.) (Elateridæ).

Polyphylla fullo (L.) (Scarabaeidæ).

## **DIPTERA**

Hylemyia antiqua (Meig.) (Anthomyiidæ), onion,  
garlic.

## **ORNAMENTALS**

### **ACARINA**

Tetranychus telarius (L.) (Tetranychidæ).

### **THYSANOPTERA**

Haplothrips cottei (Vuillat) (Phlaeothripidæ), carna-  
tion.

## **HOMOPTERA**

- Dialeurodes kirkaldi (Kot.) (Aleyrodidæ).  
Aphis nerii Boyer (Aphididæ), Asclepias sp.  
Brachycaudus helichrysi (Kltb.) (Aphididae).  
Macrosiphum rosæ (L.) (Aphididæ), rose.  
Microsiphoniella sanborni (Gill.) (Aphididæ).  
Ceroplastes sinensis Del Guerico (Coccidæ).  
Orthezia insignis (Ortheziidæ).

## **LEPIDOPTERA**

- Cacæcimorpha pronubana (Hbn.) (Tortricidæ), carna-  
tion. violet.

## **COLEOPTERA**

- Agrius aurichalceus Red. (Buprestidæ). rose.  
Anthonomus rubi Herb. (Curculionidae), rose.  
Lixus brevipes Bris. (Curculionidae).  
Cetonia aurata var. præclara Muls. (Scarabaeidae),  
rose.  
Potosia cuprea F. (Scarabacidae), rose.  
Tropinota squalida (Scop.) (Scarabaeidae).

## **HYMENOPTERA**

Megachile sp. (Megachilidae), rose.

## **DIPTERA**

Dasyneura affinis (Kieff.) (Cecidomyiidae), violet.

## **STORED PRODUCTS**

### **ACARINA**

Tyroglyphus sp\*\*. (Tyroglyphidae) ( == Acarus sp.,  
Acaridae), flour.

### **THYSANURA**

Thermobia domestica L. (Lepismidae).

### **ORTHOPTERA**

Blatta orientalis (L.) (Blattidae).

Periplaneta americana (L.) (Blattidae).

Polyphaga egyptiaca (L.) (Blattidae).

Polyphaga (Heterogamia) africana (Blattidae).

Acheta domesticus (L.) ( == Gryllus domesticus  
L. ) (Gryllidae).

Liogryllus bimaculatus De Geer (Gryllidae), furni-  
shers.

## **CORRODEOTIA — PSOCPTERA**

Liposcelis (Troctes) sp.\*\*, stored grains.

## **LEPIDOPTERA**

Gnorimoschema operculella (Zell.) (Gelechiidæ),  
stored potatoes.

Sitotroga cerealella (Ol.) (Gelechiidæ), stored grains.

Anagasta (Ephestia) kuhneilla (Zell.) (Pyralidæ),  
flour, dry quince fruit, others.

Ephestia cautella (Wlk.) (Pyralidæ), stored fig, others.

Ephestia elutella (Hbn.) (Pyralidæ), stored tobacco,  
others.

Ephestia figulilella Greg. (Pyralidæ), fig, raisins.

Galleria mellonella (L.) (Pyralidæ), beewax.

Plodia interpunctella (Hbn.) (Pyralidæ), flour, dry  
pepper, other products.

Pyralis farinalis L. (Pyralidæ), flour.

Tinea pellionella (L.) (Tineidæ).

Tineola bisselliella (Hbn.) (Tineidæ).

Triophaga tapetzella (L.) (Tineidæ).

## **COLEOPTERA**

Lasioderma serricorne (F.) (Anobiidæ), stored to-  
bacco, others such as dried milk.

Rhizopertha dominica (F.) (Bostrychidæ), stored wheat.

Acanthoscelides spiniger Baudi. (Bruchidæ), bean seeds.

Bruchidius albopictus Allard (Bruchidæ), pea seeds.

Bruchidius biguttatus Ol. (Bruchidæ).

Bruchidius histrio Boh. (Bruchidæ), legumes.

Bruchidius incarnatus Boh. (Bruchidæ), broadbean seeds.

Bruchidius obscuripes Gyll. (Bruchidæ).

Bruchidius seminarius (Baudi) (Bruchidæ).

Bruchidius trifolii (Motsch) (Bruchidæ), alfalfa, berm seed seeds.

Bruchidius tuberculatus Hoch. (Bruchidæ).

Bruchus affinis Froel. (Bruchidæ), vetch, sweet pea seeds.

Bruchus brachialis Fahrs. (Bruchidæ), legumes.

Bruchus dentipes Baudi. (Bruchidæ), chickpea, beans.

Bruchus emarginatus Allard (Bruchidæ), peas, vetch, other legumes.

Bruchus ervi Froel. (Bruchidae), vetch, lentil, cultivated beans, other legumes.

- Bruchus hamatus Mill. (Bruchidae).
- Bruchus laticollis Boh. (Bruchidae).
- Bruchus lentis Froel. (Bruchidae), lentil.
- Bruchus pisorum L. (Bruchidæ), peas.
- Bruchus rufimanus Boh. (Bruchidæ), broadbean. peas
- Bruchus signaticornis Gyll. (Bruchidæ), lentil.
- Bruchus tristis Boh. (Bruchidæ). peas, beans, lentil.
- Bruchus tristiculus Fahrs. (Bruchidæ).
- Bruchus ulicis Muls & Rey (Bruchidæ), lentil.
- Bruchus viciæ Ol. (Bruchidæ).
- Callosobruchus chinensis (L.) (Bruchidæ), stored legumes.
- Euspermophagus sericeus Geoff. (Bruchidæ), legumes.
- Pseudocastalia egyptiaca (Gmel.) (Buprestidæ), structural timber, furniture.
- Hylotrupes bajulus (L.) (Cerambycidae), timber chiefly coniferous.
- Stromatium fulvum Vill. (Cerambycidae), furniture.
- Cryptolestes pusillus (Schon.) (Cucujidae), stored grains.
- Oryzephilus surinamensis (L.) (Cucujidae), stored grains, dried fruits.
- Sitophilus granarius (L.) (Curculionidae), stored grains.

- Sitophilus oryzæ (L.) (Curculionidae), stored grains.
- Dermestes maculatus De Geer\*\* (Dermestidae), leather  
and other products.
- Trogoderma granarium Everts (Dermestidae), stored  
grains, other products.
- Carpophilus hemipterus (L.) (Nitidulidae), fig, raisin,  
other products.
- Tenebroides mauritanicus (L.) (Ostomatidae), stored  
grains, others.
- Tenebrio molitor L. (Tenebrionidae), stored products.
- Tribolium castaneum (Herbst.) (Tenebrionidae), flour,  
stored wheat, barley.
- Tribolium confusum J. du Val. (Tenebrionidae), flour,  
other stored products.

## **HYMENOPTERA**

- Monomorium pharaonis L. (Formicidae).

## **MEDICAL AND VETERINARY**

### **ACARINA**

- Argas persicus (Oken) (Argasidae), poultry, vector of  
spirochaetosis.

Borrelia anserina (Sakh.) (=Spirochaeta gallinarum Blanch.), (Argasidae), chickens, geese, turkeys, other birds.

Ornithodoros sp. (Argasidae).

Demodex folliculorum Simon (Demodicidae), man, dog, other animals.

Dermanyssus gallinae De Geer (Dermanyssidae), chickens, other poultry.

Boophilus calcaratus (Birula) (Ixodidae), cattle, sheep.

Dermacentor sp. (Ixodidae), animals,

Haemaphysalis sp. (Ixodidae), dog, other animals.

Hyalomma aegyptium L. (Ixodidae), gamels, cattels, horses, other animals.

Hyalomma anatomicum Koch. (Ixodidae), sheep, other domestic animals.

Ixodes ricinus (L.) (Ixodidae), wide range of domestic animals.

Margaropus sp. (Ixodidae), cattle, sheep, other animals.

Rhipicephalus sp. (Ixodidae), domestic animals.

Chorioptes equi (Hering) (Psoroptidae), horse legs.

Otodectes cynotis (Hering) (Psoroptidae), ears of dogs and cats.

Psoroptes equi (Hering) (Psoroptidae), domestic farm animals.

Psoroptes equi var. ovis (Hering), sheep.

Psoroptes equi var. bovis (Gerlach), cattle.

Psoroptes equi var. caprae (Delafond), goat.

Pyemotes ventricosus (New.) (Pyemotidae), insects, man.

Knemidokoptes mutans (Robin & Lanq.) (Sarcoptidae), poultry legs.

Notoedres cati (Hering) (Sarcoptidae), dog.

Notoedres cati var. cuniculi Gerl. (Sarcoptidae), rabbits.

Sarcoptes scabiei (De Geer) (Sarcoptidae), man and domestic animals.

Sarcoptes scabiei var. hominis (Hering), man.

Sarcoptes scabiei var. equi Gerl., horse, mule.

Sarcoptes scabiei var. canis Gerl., dog.

Sarcoptes scabiei var. ovis Meg., sheep face.

Sarcoptes scabiei var. caprae Furst., goat.

## ORTHOPTERA

Blatta orientalis (L.) (Blattidae), troublesome to man.

Blatella germanica (L.) (Blattidae), troublesome to man.

Periplaneta americana (L.) (Blattidæ), troublesome to man.

### **MALLOPHAGA**

Columbicola columbae (L.) (= Lipeurus baculus Nitz.) (Trichodectidæ), pigeon.

Menopon gallinæ (L.) (Trichodectidæ), chickens.

### **ANOPLURA**

Haematopinus asini (L.) (Haematopinidæ), horse, mule.

Haematopinus eurysternus (Nitz.) (Hæmatopinidæ), cattle.

Haematopinus ovinus L. (Hæmatopinidæ), sheep.

Pediculus humanus capitis De Geer (Pediculidæ), man head.

Pediculus humanus humanus L. (Pediculidae), man body.

Phthirus pubis (L.) (Pediculidæ), pubic regions, other parts of the body of man.

### **HETEROPTERA**

Cimex columbarius Jen. (Cimicidæ), pigeons, chickens.

Cimex lectularius L. (Cimicidæ), man.

## **LEPIDOPTERA**

Thaumetopoea pityocampa Seh. (Notodontidæ), man  
skin.

Thaumetopoea processionea L. (Notodontidæ), man  
skin.

## **HYMENOPTERA**

Apis mellifera L. (Apidæ), stings man.

Bombus sp. (Apidæ), stings man.

Monomorium pharaonis L. (Formicidæ), stings man.

Vespa orientalis L. (Vespidae), stings man.

Vespula germanica F. (Vespidae), stings man.

## **DIPTERA**

Fannia canicularis (L.) (Anthomyiidæ).

Aedes (Stegomyia) aegypti (L.) (Culicidæ).

Aedes dorsalis Meig. (Culicidæ).

Aedes (Stegomyia) fasciatus F. (Culicidæ).

Aedes geniculatus Ol. (= Finlaya geniculatus  
Theob.).

Aedes lutescens F. (Culicidae).

- Aedes mariae* Serg. (= *Ochlerotatus mariae* Arrib.)  
(Culicidae).
- Aedes niveus* Ludl. (= *Finlaya nibeus* Theob.)  
(Culicidae).
- Aedes punctatus* Meig. (Culicidae).
- Aedes vittatus* Bigot. (= *Stegomyia vittatus* Theob.) (Culicidae).
- Anopheles bilureatus* L. (Culicidae).
- Anopheles elutus* Edwa. (Culicidae).
- Anopheles maculipennis* Meig. (Culicidae).
- Anopheles mauritianus* de Gran, (Culicidæ).
- Anopheles pulcherrimus* Theob. (Culicidæ).
- Anopheles sergenti* Theob. (Culicidæ).
- Anopheles sinensis* Weid. (Culicidæ).
- Anopheles superpictus* Grass. (Culicidæ).
- Culex hortensis* Fica. (Culicidæ).
- Culex impudicus* (Fica.) (Culicidæ).
- Culex laticinctus* Edwa. (Culicidæ).
- Culex laurenti* News. (Culicidæ).
- Culex mimeticus* Nœ (Culicidæ).
- Culex pipiens* (L.) (Culicidæ),
- Theobaldia* (*Theobaldia*) *annulata* Schr. (Culicidæ).
- Theobaldia* (*Allotheobaldia*) *longeareolata* Schr. (Culicidae).

Drosophila melanogaster Mg. (Drosophilidae).

Gasterophilus equi (Clark.) (= Gasterophilus intestinalis De Geer) (Gasterophilidae)  
horse.

Hippobosca equina L. (Hippoboscidae), horse, mule,  
donkey, sometimes cattle.

Hippobosca longipennis F. (Hippoboscidae), dog.

Melophagus ovinus (L.) (Hippoboscidae), sheep, goat.

Hypoderma bovis (De Geer) (Hypodermatidae), cattle.

Hypoderma lineatum (Vill.) (Hypodermatidae),  
cattle.

Limnophora sp (Muscidae).

Musca domestica L. (Muscidae).

Musca nebulo F. (Muscidae).

Musca sorbens Wied. (Muscidae).

Musca vicina Maq. (Muscidae).

Muscina sp. (Muscidae).

Pollenia sp. (Muscidae).

Stomoxys calcitrans (L.) (Muscidae), domestic ani-  
mals.

Oestrus ovis L. (Oestridae), sheep nose.

Phlebotomus major Ann. (Psychodidae).

Phlebotomus papatasii Scop. (Psychodidæ), vector of  
oriental sore (Baghdad boil) caused by protozoa.

Sarcophaga carnaria Meig. (Sarcophagidæ), flesh.

Tabanus taeniola P. D. B. ( Tabanidae ), vector of el  
Debab disease of horses and camels.

### **SIPHONAPTERA**

Ctenocephalides canis (Curtis) (Pulicidæ), dog.

Ctenocephalides felis (Bouke) (Pulicidæ), cat.

Pulex irritans L. (Pulicidæ). man.

Xenopsylla cheopis (Roths.) (Pulicidæ), plague dis-  
ease vector.

## **ENTOMOPHAGOUS INSECTS**

### **ORTHOPTERA**

Mantis religiosa L. (Mantidæ), hosts are unknown.

Sphodromantis bioculata Burn. ( Mantidæ ), hosts  
are unknown.

Ehippiger sp. (Tettigoniidæ), a predator of Eury-  
gaster.

### **ODONATA**

Crocothemis erythraea Brull. (Libellulidæ), hosts are  
unknown.

Orhtetrum brunneum Fonsc. (Libellulidæ), hosts are unknown.

#### **HETEROPTERA**

Lithocerus niloticum Stal. (Belasmomtidæ), hosts are unknown.

#### **NEUROPTERA**

Chrysopa vulgaris Schneid. (Chrysopidæ), aphids, coccids, cotton worms, others.

Palpares cephaloress Klug. (Myrmeleonidæ), hosts are unknown.

#### **COLEOPTERA**

Adalia bipunctata (L.)\*\* (Coccinellidæ), aphids.

Adalia decempunctata (L.)\*\* (Coccinellidæ), aphids.

Adonia variegata (Goeze)\*\* (Coccinellidæ), aphids.

Chilocorus bipustulatus (L.)\*\* (Coccinellidæ), pseudococcids.

Coccidula sp\*\* (Coccinellidæ), hosts are unknown.

Coccinella septempunctata L. (Coccinellidæ), aphids, pseudococcids.

Coccinella undecimpunctata L. (Coccinellidae), aphids.

Coccinula quatuordecimpustulata (L.)\*\* (Coccinellidae), hosts are unknown.

Exochomus quadripustulatus (L.)\*\* (Coccinellidae), pseudococcids.

Hyperaspis polita Weise., a predator of Pseudococcus citri.

Hyperaspis sp.\*\* (Coccinellidæ). aphids, pseudococcids.

Rodolia cardinalis Muls. (Coccinellidæ), Icerya purchasi.

Scymnus includens Kirsch.\*\* (Coccinellidæ), Pseudococcus, aphids.

Scymnus suturalis Thunberg.\*\* (Coccinellidæ), Pseudococcus, aphids.

Scymnus sp.\*\* (Coccinellidæ), pseudococcids.

Simiadalia undecimnotata (Schneid)\*\*. (Coccinellidæ), aphids.

Thea vigintiduopunctata (L.)\*\* (Coccinellidæ), hosts are unknown.

## HYMENOPTERA

Aphelinus mali Hald. (Aphelinidae), a parasit of Eriosoma lanigerum, introduced 1927.

Aphidius sp.\*\* (Aphidiidæ), a parasite of peach aphid.

- Lysiphlebus sp.\*\* (Aphidiidæ), a parasite of Aphis sp.
- Praon sp.\*\* (Aphidiidæ), a parasite of Therioaphis ma-  
culata.
- Chelonus sp.\*\* (Braconidæ), a parasite of Anagasta  
kuhniella.
- Chelonus sp.\*\* (Braconidae), a parasite of pink bollworm.
- Microbracon hebetor Say\*\* (Braconidae), a parasite  
of Plodia interpunctella.
- Microbracon kirkpatricki Wilk (Braconidæ), a pa-  
rasite of pink bollworm.
- Brachymeria sp.\*\* (Chalcididæ), a parasite of pink bol-  
lworm.
- Ooencyrtus telenomicidus (Vasilev) (Chalcididae),  
a parasite of Eurygaster integriceps.
- Blastothrix sp.\*\* (Encyrtidae), Pseudococcus.
- Leptomastidea sp.\*\* ((Encyrtidae), Pseudococcus.
- Tetrastichus coccinellæ Kurd.\*\* (Eulophidae), a  
parasite of Coccinella septempunctata  
pupae.
- Evania appendigaster L.\*\* (Evaniidae), a parasite of  
cockroach eggs.
- Evania punctata Brull. (Evaniidae), a parasite of co-  
ckroach eggs.

- Ichnemion sp. (Ichneumonidae), hosts are unknown.
- Ophion luteus L.\*\* (Ichneumonidae), hosts are unknown.
- Dibrachys cavus Walk. (Pteromalidae), a parasite of  
Carpocapsa larvæ, Sitotroga larvæ??
- Habrocytus cerealellæ Ashm.\*\* (Pteromalidæ), a pa-  
rasite of Sitotroga cerealella larvæ.
- Pteromalus puparum L.\* \* (Pteromalidæ), a parasite of  
Pieris rapæ pupæ.
- Asoleus grandis (Thoms.) (Scelionidæ), a parasite of  
Eurygaster integriceps eggs.
- Asoleus (Microphanurus) semistriatus (Nees)  
(Scelionidæ), a parasite of Eurygaster in-  
tegriceps eggs.
- Asoleus simoni subsp. reticulatus Delucc. (Scel-  
ionidæ), a parasite of Eurygaster intgr-i-  
ceps eggs.
- Asoleus vassilievi (Mayr.) (Scelionidæ), a parasite  
of Eurygaster eggs??
- Trichogramma sp. (Trichogrammatidæ), a parasite of  
cotton worms.

## DIPTERA

- Mydæa duplicata Meig. (Mydaidæ), hosts are unknown.

Paragus bicolor (F.) (Syrphidæ), hosts are unknown.

Paragus tibialis (Fall.) (Syrphidæ), hosts are unknown.

Sphaerophoria flavicauda var. nitidicollis  
Zett. (Syrphidæ), hosts are unknown.

Sphaerophoria scripta L. (Syrphidæ), hosts are un-  
known.

Syrphus albomaculatus Macq. (Syrphidæ), hosts are  
nnknown.

Syrphus blateatus De Geer (Syrphidæ), hosts are un-  
known.

Syrphus corollæ (F.) (Syrphidæ), aphids.

Syrphus latifasciatus Macg. (Syrphidæ), hosts are  
unknown.

Syrphus pyrastri L. (Syrphidae), hosts are unknown.

Xanthogramma ornatum Meig. (Syrphidae), hosts are  
unknown.

Ernestia argyrocephala Vill. (Tæchinidae), hosts are  
unknown.

Nemorilla floralis Fall. (Tachinidae), hosts are un-  
known.

Phasia crassipennis (F.) (Tachinidae), a parasite of  
Eurygaster integriceps.

## CITED AND SELECTED REFERENCES

- ABOU NASSER, A. (1962) . Agricultural insects in Lebanon.  
Insects and mites of fruit trees and  
their control. (In Arabic).
- ALKAN, B. (1956) . Antep fistiginin hayvanî zararliları  
uzerine incelemeler. A. U. Ziraat Fakultesi  
1956 yılı Fasikul 4'den ayrı basım  
208 — 231 .
- ALKAN, B. (1966) . Türkiyein zararlı tohum böcekleri  
(Coleoptera-Bruchidae) fauna'sı Üzerinde  
Çalışmalar. Ankara Uniuersitesi , Ziraat  
Fakultesi Tayinlari : 227, Çalışmalar : 174.  
56 pp.
- BALACHOWSKY. A.S. (1962, 1963) . Entomologie appliquée à l'Agriculture. Tome I Coleoptères, premier volume , second volume,  
1391 pp. Masson et Cie Edit., Paris.
- BODENHEIMER, F.S. (1926) . Première note sur les Cochenilles de Syrie. Bull. Soc. ent. Fr.  
1926 : 41—47.

FOCKEU, H. (1893) . Etude sur quelques galles de Syrie.

Rev. biol. Nord Fr. 5 : 242 — 245.

GENTRY, J.W. (1965) . Crop insects of Northeast Africa-Southwest Asia. Agricultur Handbook No 273. , U.S.D.A.. Washington, 210 pp.

HOUSSEINY, M. (1966) . The economic insects of Syria, (In Arabic).

KNORR, L.C. & VAUGHN, J.R. (1964) . World citrus preblems III. Syria.

Pl. Prot. Bull. F.A.O. 12 (2) : 3 — 7.

EL MISTIKAWY. A.M. (1956) . Report to government of Syria on insect pests of cotton. F.A.O. Rep. 572, 14 pp.

OZER, M. (1957) . Türkiyede depo, ambar, fabrika ve silolarda muhtelif hububat taneleri, un ve mamulleri ile kuru meyvalar ve tütülerde onemli zarar yapan koçek tülerinin morfolojileri, kısa biyolojilere ve yayılışları üzerinde arastimalar. Ankara Univ. Ziraat Fakultesi Yayınları: 125, Çallşmalar : 75 . 136 pp.

OZER, M. (1961). Research on some pests of stored grain and products in Turkey. Univ. Ankara Yearbook, Facul. Agric. 1961 : 81 — 95.

PEYRELONGUE, J.Y. (1966) . Rapport de mission en Syrie, cotonnier entomologie. Inst. Res. Coton Tex. Exo. Paris, 71 pp.

REMAUDIÈRE, G. & SKAF, R. (1963) Analyse du complexe des hymenopteres parasites oophages d'Eurygaster integriceps Put. (Het. Pentatomidae) en Syrie. Revue Path. vég. Ent. agric. Fr. 42 (1) : 15 — 25 .

RIVNAY, E. (1962) . Field crop pests in the Near East. Mon. Biol. vol. 10. Dr. Junk, Den Haag, 450 pp.

SCHNEIDER, F. (1957) . Report to the government of Syria on insect pests of fruit trees and some other crops. F.A.O. Rep. No. 661, 20 pp., Rome.

SCHNEIDER, F. (1957) . Aufreten und bekämpfung einiger obstschadlinge in Syrien. Z. Pflanzensc. 64 : 613 — 619.

SCHNEIDER, F. (1958) . Some insect pests of pistachio in Syria. Pl. Prot. Bull. F.A.O. 6 (5) : 65 — 71 .

SEGUY, E. (1924) . Les moustiques de l'Afrique Mineure  
de l'Egypte et de la Syrie. Encyc. Entomo  
1 : 1 — 257., Paul Lechevalier ed., Paris.

SKAF, R. et al (1964) . Liste preliminaire des Coleop-  
ieres nuisibles de Syrie. Minis. Agric.,  
Rep. Arab Syrienne, 23 pp.

SPULER, A. (1908 - 1910) . Die Schmetterlinge Europas.  
Vol. 1, 385 p., Vol. 2, 523 p., Stuttgart.

TALHOUK, A.S. (1954) . A list of insects found on plants  
of economic importance in Syria. Bull.  
Soc. ent. Egypte 38 : 305 — 309.

TALHOUK, A.S. (1961) . Additional records of insect  
pests from Lebanon and Syria. Bull. Soc.  
ent. Egypte 45 : 405 — 406.

TOPSENT, E. et al (1926) . Voayge zoologique d'Henri  
Gadeau de Kerville en Syrie (Avril, Juin  
1908). Tom premier, Paris, J. B. Bailliere  
et Fils, 365 pp.

U. S. D. A. (Agricultural Research Service) (1957 - 1960) .  
Insects not known to occur in the United  
States. Coop. Econ. Insect Rep. Vol.  
7 to 10.

## **فَائِمَّةُ الْحَسَرَاتِ وَالْقَرَادِيَّاتِ السُّورِيَّةِ الْمُسْجَلَةُ**

ان المسجل من الحشرات والقراديات السورية منتشر في المراجع المختلفة . لم تجتمع السجلات المنتشرة لاحشرات والقراديات في قائمة واحدة لغاية تاريخه (على حد علمنا) ولذلك عمدنا الى العمل على صياغة غور المراجع المختلفة والميسرة لدينا بدأً من نهاية القرن التاسع عشر حتى تاريخه ، وذلك لوضع قائمة موحدة تجمع بها الحشرات والقراديات السورية مع عوائلها المسجلة .

ان الحشرة او الحيوان المشار اليه (★) يعتبر مسجلًا للمرة الأولى من سورية .

تقع القائمة في قسمين . القسم الاول وبه سجلات الحشرات والقراديات فيما لوضعها التصنيفي مع مراعات التسلسل الابجدي ، وذلك لتسهيل المطالعة والدراسة وقد كتب بجانب كل حشرة الموائل المسجلة أما القسم الثاني فرتبت حسب المحاصيل الاسمافية واضيف الى هذا القسم سجلات بالمفترسات والمتغولات والاحشرات الطبية والبيطرية .

