

CICADELLIDAE of Lebanon: records and bio-ecological
notes

by

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ecology, zoogeography, Lebanon, Near East, Middle East.

Abstract: Up to now, 47 species of Auchenorrhyncha (among which
only 24 species of Cicadellidae) were known in Lebanon.
This work is the result of intensive collecting, trap-
ping, field observations and laboratory breeding carried
on by the author since the beginning of 1983, along with
some observations and results of previous work (unpub-
lished data) already done between 1972 and 1975.
73 species of Cicadellidae are listed, 60 of them being
new records for Lebanon.

The oldest records on the Lebanese Auchenorrhyncha that were available
to the author is the very curious book "Voyage Zoologique d' Henri
GADEAU de KERVILLE en Syrie (avril-juin 1908)", published in 1926.
In a delightful nineteenth century literary style, this eccentric
gentleman describes his zoological journey in the mountains of
Lebanon and in Syria, giving the complete list of the Arthropoda he
collected and had them identified by specialists. In the chapter

Hemiptera, he points out that the identifications and descriptions of new species were made by Dr. G. HORVATH in 1911. Thirteen species of Auchenorrhyncha are mentioned as being collected in Lebanon (Beit-Mery, Broummana and Baalbeck). In NAST's check list (1972) some of them have been omitted from the Syro-lebanese region, while others are said to exist only in Syria. The thirteen species are as following (written down as they were picked up from the original text, with their present taxonomical status and comments between brackets):

Hysteropterum grylloides F., Hysteropterum asiaticum LETH., Hyalesthes obsoletus SIGN., Cercopis sanguinolenta F. (sic) (= probably Cercopis intermedia KIRSCHBAUM), Aphrophora exoleta HORV., Philaenus campestris FALL. (= Neophilaenus campestris (FALLEN)), Cicadula fasciifrons (sic) STAL (= Macrosteles fasciifrons (STAL); in NAST's check list, this species is recorded only from Finland and the Nearctic region, so it is certainly a misidentification, Cicadula sexnotata FALL. (= Macrosteles sexnotatus (FALLEN)), Thamnotettix loratus HORV., n.sp. (=uncertain generic position), Selenocephalus giseus F. (= Selenocephalus obsoletus (GERMAR)), Agallia sinuata MULS. et REY (= Austroagallia sinuata (MULSANT et REY)), Oligoglana libanotica HORV., n.sp. (= Cicadetta tibialis (PANZER)), Cicadatra atra OL.

Those species, except for Cercopis intermedia (?) and Cicadatra atra, are first records for Lebanon. With the latest recordings of DLABOLA (1974) and NAST (1972 and 1982), the total number of Auchenorrhyncha species known in Lebanon is 47 among which there are only 24 Cicadellidae in the Near East. What follows are the species collected by the author himself (and friendly colleagues), mentioning their local distribution and bio-ecological characteristics whenever that was available.

The species recorded for the first time in Lebanon are marked with an asterisk (*).

1, * Ulopa trivia GERMAR, 1821

Well-known species in the Near East; recorded by DLABOLA (1981) in Iran. Two specimens (1 ♂, 1 ♀) collected from low-growing vegetation at QARTABA (1300m, 29-6-84).

2, * Megophthalmus scabripennis EDWARDS, 1915

Well distributed in the Middle East; recorded by DLABOLA (1981) in Iran. Caught on glue traps from sea level up to 1300 m, in April and May.

3, * Macropsis spec. cf. albae WAGNER, 1950

In the Mediterranean region this species is recorded from France, Italy and Yugoslavia. One male was caught in water traps at TELL AMARA (Beqaa plateau, 900 m, summer 1975).

4, * Anaceratagallia laevis (RIBAUT, 1935)

Widely distributed species recently recorded by DLABOLA (1981) in Iran. In Lebanon it is found nearly in all biotopes where Trifolium sp. or Medicago sp. are present. This species has been well studied by the author since 1973; it can have two to three generations per year, depending on the mean temperature in the biotope or in the breeding cage; it appears to be polyphagous in the natural biotopes, but successful monophagous breedings have been made on Trifolium sp. Medicago sp. and Dactylis glomerata (graminae). At Ammiq (Beqaa plateau) it is parasitized by the Strepsiptera Halictophagus haydari ABDUL-NOUR (in press). This cicadellid species overwinters in the adult stage.

5, * Anaceratagallia ribauti (OSSIANNILSSON, 1938)

In the Middle East it was known only in Anatolia until DLABOLA recorded it recently from Iran (1981). One male was caught on glue traps on the coast (ABDEH, summer 1973).

6,* Anaceratagallia venosa (FOURCROY, 1785)

Recorded by DLABOLA (1981) from Iran. One male caught on Trifolium sp. at MAZRAAT KFAR ZEBIANE (1600m, 17-6-84).

7, Austroagallia sinuata (MULSANT et REY, 1855)

Well-known species in the Middle East and recently reported from Iran by DLABOLA (1981). Recorded in Lebanon by GADEAU de KERVILLE (1926), more precisely at Broummana (800m); I found it on Trifolium sp. at JANNE (600 m, 16-10-83).

8,* Dryodurgades anatolicus DLABOLA, 1957

Known only in Turkey (Anatolia) until now (NAST, 1972). This species has been found from the coast up to 1600 m and was well studied by the author. On the coast, the first larvae appear on Ononis spinosa in the first two weeks of June; at QARTABA (1300 m) this happens only one month later (first two weeks of July). They progressively become adult after four or five weeks; the adults are then mostly found on Ononis spinosa, but sometimes on Medicago sp. and Trifolium sp.

By the end of August (or later, depending of the altitude and humidity of the biotope) these leguminous plants begin to wither because of the rainless summer, and the adults move to evergreen trees which are different according to the biotope: In Quercus woods it will be found mostly on Quercus calliprinos, more rarely on Quercus infectoria, while in coniferous forests Juniperus oxycedrus will be the preferential refuge tree (with some individuals rarely found on Pinus pinea). With the occurrence of the first autumnal rains of November, the leguminous plants grow again and D. anatolicus may return on them.

In the mountains (QARTABA, 1300 to 1500 m) the snow usually starts covering the ground by the end of December, and this species moves again on Quercus calliprinos where it will overwinter in the

adult stage. What happens then on the coast, where winter conditions are different (no snow and mild temperatures) has not been studied yet. However, in April of the next year on the coast, about one month later at 1300 m, adults are found again on Ononis spinosa. It is interesting to note that since October, over 90% of the adults are females; males are more numerous in early summer, but accurate sex-ratio figures were not studied.

This species was bred in laboratory on Ononis spinosa and Medicago sp.. On both plants it could accomplish its whole cycle as a monophagous species, though the adults of the first generation on Medicago sp. were smaller and more pale.

9, Idiocerus ustulatus (MULSANT et REY, 1855)

Already reported from Lebanon. A great number of specimens were caught in water traps on the Beqaa plateau (TELL AMARA, 900 m, July and August 1974).

10, * Balcanocerus balcanicus (HORVÁTH, 1903)

Known only from Turkey (Anatolia) in the Middle East. Two male specimens were caught on glue traps in Quercus calliprinos woods (MEEYANE, 600m, 29-7-83 and 2-9-83). This tree doesn't seem to be the normal biotope of that species which was probably caught by chance during a dispersal flight.

11, * Eupelix cuspidata (FABRICIUS, 1775)

Widely distributed species in the Palaearctic region and already known in Israel and Syria; reported from Iran by DIABOLA (1981). It was collected at all altitudes up to 1300 m. In a series of net sweepings (20-5-83 to 3-6-83, MEEYANE, 600m) on graminac, the author caught 38 adults among which 34 were males; at the same time, few 5th instar larvae were also collected. A study of the sex-ratio in this species would certainly give interesting results.

12, Aphrodes makarovi (ZACHVATKIN, 1948)

Recorded in Lebanon by DLABOLA (1974). Collected from sea level up to 1400 m, mostly in grassy biotopes. Some adults have been seen feeding on Quercus calliprinos.

13, * Grypotes staurus (IVANOFF, 1885)

Well distributed species in the Near East. Caught from the coast up to 1300 m on Pinus pinea, from May to November.

14, Goniagnathus brevis (HERRICH-SCHAFFER, 1835)

Widely distributed in the Mediterranean region and recorded in Lebanon by DLABOLA (1974). Two male specimens were caught at LASSA (1100 m, 8-10-83) and MAZRAAT KFAR ZEBIANE (1600m, 24-7-83).

15, * Opsius stactogalus (FIEBER, 1866)

Widely distributed species in the Palaearctic and Nearctic regions. Large populations were found on Tamarix sp. along the Nahr Ibrahim river banks at JANNÉ (600m, 16-10-83).

16, * Nealiturus fenestratus (HERRICH-SCHAFFER, 1834).

Widely distributed species; in Lebanon it was found from sea level up to 1600 m, from May to October.

17, Nealiturus haematoceps (MULSANT et REY, 1855)

Already recorded in Lebanon (NAST, 1972). Numerous larvae in grassy biotopes at RAACHINE (1400m) in April, and first adults by the end of that month.

18,* Balclutha punctata (FABRICIUS, 1775)

Worldwide distributed species; caught at all altitudes up to 1700 m, on numerous herbaceous and ligneous plants, from May to September.

19,* Macrosteles quadripunctulatus (KIRSCHBAUM, 1868)

Well distributed in the Middle East; in Lebanon, a few adult and larva specimens were found on humid low-growing vegetation at LASSA (1100 m, 9-10-83).

20, Macrosteles sexnotatus (FALLEN, 1806)

Recorded from Lebanon by GADEAU de KERVILLE (1926); extremely dense populations of adult and larvae were found on cultivated cress (Nasturtium officinale) at LASSA (1100 m, 8-10-83).

21,* Recilia angustisectus (LINNAVUORI, 1962)

Recorded only from Israel where LINNAVUORI found it in June and July. One male was caught on the lebanese coast in grass vegetation (Nahr Ibrahim river's bank, 3-12-83).

22,* Recilia schmidtgeni (WAGNER, 1939)

Well-known in the Middle East; it was collected at all altitudes up to 1300 m, from May to November, on various low-growing herbaceous plants.

23,* Chiasmus conspurcatus (PERRIS, 1857)

Well-known in the Middle East; it was found on the Beqaa plateau (TELL AMARA, 900 m, August 1975) and on the coast (Nahr Ibrahim river's bank, 21-4-84).

24,* Doratura homophyla (FLOR, 1861)

Widely distributed in the Middle East; it was caught in dry biotopes from 1000m to 1600 m. Adults and larvae were seen at 1600 m on the 14-8-83, and 3rd or 4rth stage larvae at 1300 m on the 10-6-83.

25,* Fieberiella macchiae (LINNAVUORI, 1962)

In the Near East this species is already known in Anatolia and Israel; in Lebanon it was caught from the coast up to 1700 m on Quercus calliprinos, Quercus infectoria, Quercus cerris, Styrax officinalis and low-growing ligneous vegetation, from May to August.

26, Synophropsis lauri (HORVÁTH, 1897)

Already recorded in Lebanon by DLABOLA (1974); adults were found from sea level up to 1300 m mostly on Quercus calliprinos, but also on Myrtus communis, Ceratonia siliqua, Laurus nobilis and low-growing vegetation. Numerous larvae and adults were caught in July 1984 on a glue trap that was hanged on a Laurus nobilis (Nahr-el-Kalb river, coast).

(This species was kindly identified for me by Dr. M. ASCHE (Marburg)).

27,* Exitianus capicola (STÅL, 1855)

Already known in the Middle East; it was collected in grassy biotopes from the coast up to 1200 m. On the coast (BATROUN) eggs were laid on Setaria verticillata (graminae), in a Citrus orchard, by the end of June and the first larvae hatched by the end of July; they were bred in a cage on this gramineae and the last larvae became adult on the 25 September. The adults could not live long on this plant and the last one died three weeks later. The author believes that the adult is polyphagous on various gramineae and trees, and probably feeds also on Citrus. It overwinters in the adult stage; one generation per year.

28,* Eohardya fraudulentus (HORVÁTH, 1903)

Well-known in the Middle East; caught from 800 m up to 1400 m (May to December) on grasses.

29,* Mocydia spiculum ABDUL-NOUR (in press)

This newly described species is found wherever grows the graminiae.

Brachypodium pinnatum; until now it has been collected from sea level up to 1300 m and it seems to be monophagous on that plant. On the coast, the first adults are caught at the beginning of July, while they are found only one month later at 1300 m. One generation per year.

30,* Mocydiopsis monticola (REMANE, 1961)

Already recorded in the Middle East; it was found near the coast (AINTOURA, 3-5-84) and at 1100 m (LASSA, 29-10-83) in humid grass vegetation near water (river or pool).

31,* Thamnotettix agilis ABDUL-NOUR (in press)

This newly described species is found only above 800 m. Adults are captured on Quercus infectoria and Quercus cerris, and to a lesser extent on low-growing vegetation associated with leguminosae (Psorilea bituminosa, Ononis spinosa, Trifolium sp.). Larvae have been seen developing on Psorilea bituminosa. At 1300 m, the larvae become adult by the end of May. One generation per year.

32,* Thamnotettix klapperichi (DLABOLA, 1965)

Already recorded from Jordan and Syria (NAST, 1972). It is very common in Lebanon where it was caught from the coast up to 1800 m; near the coast (AINTOURA) last stage larvae were found on graminiae and Trifolium on the 10-4-83, while at RAACHINE (1400 m) 2nd to 4th stage larvae were caught on the 1-5-83. On the 24-5-83, 4th to 5th stage larvae were caught alive and bred in a cage on a mixed vegetation composed by Bramus japonicus, Anthemis arvensis and Trifolium sp.. On the following days, they were seen feeding on those three

plants and they all became adult by the 30-5-83. About ten days later all the adults were dead. In the field (RAACHINÉ) numerous adults were found on Quercus calliprinos on the 7-6-83, few of them on grasses or more specifically on Medicago sp. and Trifolium sp. In July, adults were found on Quercus calliprinos, Quercus infectoria, Quercus cerris and Spartium junceum, as well as on low-growing leguminosae like Psorilea bituminosa. Other breeding experiments were made: 4-5th stage larvae were reared successfully on Andropogon distachyus until they became adult, but these died a few days later; adults could not live also more than one week on Medicago sp..

All these observations and experiments show that Thamnotettix klapperichi is a polyphagous herbaceous-feeding species in the larval stage, while the adults have to move to ligneous plants or trees for survival. Numerous field observations suggests that it is probably the same for Thamnotettix wittmeri, T. agilis and T. seclusus.

33, Thamnotettix seclusus (LINNAVUORI, 1958)

This species was known from Israel and Jordan; recorded from Lebanon by DLABOLA (1974). I found it from sea level up to 1000 m, on Quercus calliprinos and in grassy biotopes, in May and June.

34, Thamnotettix wittmeri (DLABOLA, 1971)

This species was described from Anatolia and not yet recorded out of this geographical area. In Lebanon it is a very common species which is found from the coast up to 1700 m. The larvae develop on low-growing vegetation including leguminosae; the first adults appear in the beginning of May on the coast, and at the end of this month at 1300 m. Adults are mostly found on Quercus calliprinos and Quercus infectoria; they are caught sometimes on papilionaceae: Ceratonia siliqua (Caroub tree), Medicago sp. and Trifolium sp..

On the coast, many adults were captured on glue traps in Citrus

orchards to where they seem to migrate in search of shady and humid biotope. One generation per year.

35,* Handianus procerus (HERRICH-SCHÄFFER, 1835)

Widely distributed in the Mediterranean region and recently recorded from Iran by DLABOLA (1981). One male was caught on Berberis libanotica at QAMES (Nabeh el Hadid, 1600 m, 10-7-83)

36,* Euscelidius mundus (HAUPT, 1927)

Well-known species in the Middle East. Numerous larvae were caught in the beginning of December on the coast (Nahr Ibrahim river's bank) on grasses, and a great number of adults by mid-December; adults were also captured on glue traps in Citrus orchards on the coast (BATROUN, summer 1983).

37,* Euscelis alsius (RIBAUT, 1952)

In the Near East it was already known from Anatolia and Israel, and recently recorded in Iran by DLABOLA (1981). It was found from sea level up to 1300 m on low-growing vegetation, from May to October.

38,* Euscelis lineolatus (BRULLÉ, 1832)

Known from Jordan in the Near East and lately recorded from Iran (DLABOLA, 1981). One male found near the coast along the Nahr Ibrahim river's bank, on the 3-13-83, in grassy vegetation mixed with Trifolium sp..

39, Artianus manderstjerii (KIRSCHBAUM, 1868)

Recorded from Lebanon by DLABOLA (1974). It is very common on grasses in dry biotopes between 1000 m and 1800 m, particularly on Aegilops sp. where numerous larvae were seen feeding in June (at

1400 m). Adults have been caught from June to October. One generation per year.

- 40,* Psammotettix spec. cf. notatus (MELICHAR, 1896) var. diluta (sensu RIBAUT, 1959)

First record in the Middle East. A few specimens were collected on grasses at AJALTOUN (1000 m, April 1984).

- 41,* Psammotettix provincialis (RIBAUT, 1925)

Widely distributed species in the Palaearctic and Oriental regions. In Lebanon it was found from sea level up to 1800 m on grasses, from April to December.

- 42,* Alebra albostricella (FALLÉN, 1826)

Widely distributed species in the Palaearctic and Nearctic regions. Caught on glue traps in an Quercus infectoria wood (ZFBDM), 600 m, 8-6-84).

- 43,* Liguropia juniperi (LEHIERRY, 1876)

Already recorded from Cyprus and Anatolia in the Near East. One male specimen was caught on glue traps at MEEYANE (600 m, 7-7-84).

- 44,* Emelyanoviana naylae ABDUL-NOUR (in press)

This newly described species was collected from sea level up to 1300 m; it is associated with low-growing leguminous plants, particularly Ononis spinosa. Adults were caught from March to October.

- 45,* Micantulina acuticeps (LINNAVUORI, 1962)

Until now it was known only from Cyprus and Israel. It was collected from low-growing plants on the coast (Nahr-el-Kalb river, May 1984), and captured on glue traps in a Quercus calliprinos wood at MEEYANE (600 m, 4-11-83).

46,* Empoasca decedens (PAOLI, 1932)

Widely distributed in the Middle East. This species is known to cause injuries on the Citrus fruit rind in the Mediterranean region; it can reproduce on Citrus and a case of severe damage to young leaves was observed by the author in July 1974 (MINIEH, coast) when unusual high populations of this species infested young Citrus plants. It is present all the year round in Citrus orchards on the coast. Quite unexpectedly, one male was caught on a glue trap at QARTABA (1300 m, 4-11-84) in a Quercus infectoria wood.

47, Empoasca decipiens (PAOLI, 1930)

Already recorded in Lebanon. It is found from sea level up to 1800 m. This species can reproduce on Sambucus ebulus (in June at 1800 m). Adults are common in Citrus orchards on the coast, and in potato fields on the Beqaa plateau (900 m).

48, * Empoasca solani (CURTIS, 1846)

Recorded in the Middle East from Anatolia (NAST, 1972) and Iran (DLABOLA, 1981). It was found at LASSA (1100 m, October 1983) on low-growing plants, and on the Beqaa plateau (TELL AMARA, July-August 1975) in potato fields.

49,* Jacobiasca lybica (BERGEVIN et ZANON, 1922)

Well distributed in the Near East. It was caught on glue traps in Citrus orchards on the coast, from March to September.

50,* Edwardsiana rosae (LINNAEUS, 1758)

This almost world-wide distributed species was found at all altitudes up to 1500 m, from April to November.

51,* Edwardsiana tshinari (ZACHVATKIN, 1947)

In the Middle East it was recorded only from Israel. It was caught on Platanus orientalis (AINTOURA, coast) in June and July.

52,* Linnavuoriana sexmaculata (HARDY, 1850)

This widely distributed species was recorded only from Anatolia in the Middle East. Two male specimens were collected (LASSA, 1100 m, 23-7-83, on Salix aemophylla, and MAZRAAT KFAR ZEBIANE, 1600 m, on low-growing plants).

53,* Ficocyba ficaria (HORVÁTH, 1897)

In the Middle East it was known only from Israel (NAST, 1972). It was captured on glue traps in various biotopes from sea level up to 1800 m. On the coast it was found all the year round, while at 1300 m it was trapped from May to September. Adults were caught by the author on Quercus infectoria and Quercus cerris in June 1984.

54,* Lindbergina spoliata (HORVÁTH, 1907)

This western Palaearctic species was not recorded yet from the Middle East. One male and one female were caught at QARTABA (1300 m, 30-9-83) on glue traps in a Quercus infectoria forest.

55,* Lindbergina cretica (ASCHE, 1980)

This species was described by M. ASCHE (Marburg) from the Island of Creta, where he captured it on Quercus macrolepis (which is a form of Q. ithaburensis, both of them being deciduous trees). According to the observations made in Lebanon by the author, this Quercus doesn't seem to be the normal habitat for L. cretica. Intensive trapping and collecting in different Quercus biotopes showed that this species lives all the year round on Quercus calli-

prinos, from sea level up to 1600 m. Three months of trapping in a Cedar wood (JAJ, 1800 m) yielded only one specimen certainly caught by chance while being carried up by ascendant air flows.

56,* Lindbergina aurovittata (DOUGLAS, 1875)

The only record of this species in the Middle East was made by DIABOLA (1981, one female from Anatolia) under the name of Youngiada pandellei (LETHIERRY, 1878). One male was caught on a glue trap at QARTABA (1300 m, August 1983) in a Quercus infectoria wood.

57,* Lindbergina tarsalis (LINNAVUORI, 1962)

Previously known only from Israel. This species has the same ecological characteristics than Lindbergina cretica and is monophagous on Quercus calliprinos at all altitudes.

58,* Ribautiana alces (RIBAUT, 1931)

In the Near East it was recorded only from Anatolia (DLABOLA, 1981). Caught on glue traps in Quercus infectoria woods and other mixed biotopes from May to August; it was also collected on Quercus cerris (MAZRAAT KFAR ZEBIANE, 1700 m, 17-6-84).

59,* Ribautiana tenerrima (HERRICH-SCHÄFFER, 1834)

Widely distributed species in the world. Rare specimens caught on glue traps in Quercus infectoria (ZEBDINE, 600 m, 12-5-84) and Q. calliprinos (MEEYANE, 600 m, 12-5-84) woods.

60,* Eurhadina angulata (LINNAVUORI, 1962)

Previously known only from Israel. It is found from May-June to September on Quercus calliprinos with a population peak at the end of June, from sea level up to 1600 m. Probably monophagous on that tree.

61,* Eurhadina ribauti (WAGNER, 1935)

Recorded from Cyprus (NAST, 1972), Iran (DLABOLA, 1981), and more recently from Turkey (KARTAL, 1983). One male specimen was caught on a glue trap in a Quercus infectoria wood (ZEBDINE, 600 m, 24-6-84).

62,* Eupteryx stachydearum (HARDY, 1850)

Well distributed in the Middle East. According to DWORAKOWSKA (1982) the records of this species in the Mediterranean region would rather concern E. curtisii (FLOR). However the specimens collected in Lebanon fit exactly her description and drawings of E. stachydearum; it is to be stressed out that nearly all the specimens studied by her have an oval or irregularly semicircular basal patch on the vertex, only some of them having two fused basal patches (DWORAKOWSKA, 1972, page 728, fig. 4); This species was caught on the coast, in mixed populations with Eupteryx nemoricola on Labiatae (BATROUN, June 1983; AINTOURA, June 1984).

63,* Eupteryx cypria (RIBAUT, 1948)

Well distributed in the Near East, and recorded in Iran by DALABOLA (1981). Found from sea level up to 1300 m, from June to November on Mentha sylvestris and other Labiatae.

64,* Euperyx gyaurdagica (DLABOLA, 1957)

Known from Creta and Anatolia; It was caught from sea level up to 1300 m, from March to November, on various Labiatae. At LASSA (1100 m, 29-10-83) it was found in mixed populations with E. cypria on Mentha sylvestris.

65,* Eupteryx nemoricola (LINNAVUORI, 1962)

Previously known only from Israel. Large populations on the coast (AINTOURA, June-July 1984), on Labiatae.

66,* Zyginella pulchra (LÖW, 1885)

Already known in the Near East (Israel). It was caught from sea level up to 1300 m on glue traps. The greatest number of specimens was trapped in a wood where Acer syriacus was predominant (Nahr-el-Kalb river, coast), the maximum of abundance being in March-April.

67,* Zyginidia alexandrina (LINNAVUORI, 1964)

Until now, known only from Egypt; one male specimen was caught on a glue trap on the coast (BATROUN, summer 1983).

68, Zyginidia sohrab (ZACHVATKIN, 1947)

Already recorded from Lebanon (NAST, 1972). It was collected on low-growing plants at JANNÉ (600 m, 25-5-84) and QARTABA (1300 m, 29-6-84).

69,* Zygina rhamni (FERRARI, 1882)

Well distributed in the Near East, and known as an ampelophagous species in Israel. It was caught on glue traps on the coast (Nahr-el-Kalb, March 1984) and on the Beqaa plateau (TELL AMARA, 900 m, July 1974). Earlier observations made by the author (unpublished data) brings some new informations about the bio-ecology of this species: On the coast (JAL-EDDIB) large populations were observed in September 1973 on a rose-bush which leaves were heavily altered (numerous discolored dots along the veins underneath). At an undetermined period they laid eggs on a nearby vine (along the veins underneath the leaves) and the first larvae hatched out at the end of September, causing the same type of damage previously mentioned.

In January, numerous adults were found on the rose-bush where they laid eggs again underneath the leaves. Observations were then discontinued. It could be that this ampelophagous species could thrive on a monophagous diet on the rose-tree.

70,* Zygina rorida (MULSANT et REY, 1855)

It is surprising that this species was never recorded before from the Middle East; it is probable that it was confused with Z. krueperi FIEBER from which it is however quite different (DWORAKOWSKA, 1970 and LINNAVUORI, 1953). Zygina rorida was found from sea level up to 1700 m, on Quercus infectoria and Q. cerris. On the coast (Nahr-el-Kalb) it was trapped (glue traps) in February, April and May; at QARTABA (1300 m, 24-11-83) it was captured on Quercus infectoria, and at MAZRAAT KFAR ZEBIANE (1600 m, June) on Q. cerris.

Z. krueperi, which exists in Israel, has not yet been found in Lebanon.

71,* Arboridia versuta (MELICHAR, 1897)

Not recorded yet from the Middle East; Large populations were found on Quercus infectoria (QARTABA, 1300 m, 4-11-83) and a few specimens on Salix acmophylla (AINTOURA, coast, 30-6-84);

72, Imbecilla imbecilla (LINNAVUORI, 1962)

Already recorded from Lebanon (DLABOLA, 1965); large populations on Salix acmophylla on the coast (AINTOURA, June-July 1984).

73,* Frutioidia bisignata (MULSANT et REY, 1855)

Well distributed in the Middle East; one male was caught on glue traps on the coast (ABDEH, 1973, in summer).

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