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A preliminary catalogue of the Cerambycidae of Jordan (Coleoptera)

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Summary. – A survey of the Cerambycidae of Jordan was conducted from February 1998 to July 2000. A total of 56 species were collected during the study which raised the number of Cerambycidae recorded in Jordan to 60 species. Distribution range, collecting sites and dates, known host plants and notes about the biology are provided for each species. From the collected species, 25 are recorded for the first time from Jordan. Four species, previously recorded from Jordan due to misidentification, are excluded.

Résumé. – **Catalogue provisoire des Cerambycidae de Jordanie (Coleoptera).** Les auteurs donnent un inventaire commenté des Coléoptères Cérambycides de la faune de Jordanie; pour chaque espèce la nomenclature est actualisée et des informations sont données sur la répartition générale, les localités et dates de capture en Jordanie, les plantes hôtes et la bionomie. 60 espèces (dont 25 pour la première fois) sont recensées pour la région; quatre espèces, précédemment citées, sont à exclure de la faune jordanienne.

Key words. – Coleoptera, Cerambycidae, Jordan.

Very few studies are known about the Cerambycidae of Jordan. HEYROVSKY (1963) listed 24 species from Jordan and the former Jordanian West Bank. SHARAF *et al.* (1983) listed 4 species from Jordan. KATBEH-BADER (1996) listed 28 species and subspecies in 19 genera, 15 species were recorded for the first time; however, four of them (*Certallum thoracicum* Sharp, 1900, *Agapanthia osmanlis* Reiche & Saulcy, 1858, *Phytoecia paulusi* Holzschuh, 1971 and *Helladia plasoni* (Ganglbauer, 1884), recorded due to misidentification, must be excluded from the Jordanian fauna. SAMA (1999, 2000a, 2000b) described four new species three of them endemic to Jordan.

During the springs of 1998 and 1999, one of us (G. Sama), in collaboration with the Faculty of Agriculture of the Jordan University and with the Royal Society for Conservation of the Nature, had the opportunity to carry on field researches on Jordan Cerambycidae including immature stages. The study of the imagines collected on the field or emerged from wood showed a lot of species not previously found in Jordan, among which four were new to science. Moreover, the specimens preserved in the University of Jordan Insects Museum (UJ) have been revised and their identification verified. In addition, weekly field trips were conducted to more than 140 sites in Jordan. An effort was made to collect species from all the seven phytocological zones mentioned by LARSEN & NAKAMURA (1983). These are the North Mediterranean zone, the Southern Mediterranean zone and the Irano-Turanian belt surrounding the Mediterranean zone, the North Jordan Valley, the Eastern Desert and the Southern Desert. The visited site names and their coordinates are given in Table I. Names and coordinates of sites follow mainly the Gazetteer of Jordan (ANONYMOUS, 1990).

In the present paper, we give an updated preliminary catalogue of the Cerambycidae of Jordan, which includes the localities previously reported in the literature, all the specimens kept at the University of Jordan Insects Museum (UJ) and the material collected or studied by G. Sama (GS). For each species we give: previous references, distribution range, collecting dates and localities in Jordan, notes on host plants, biology and flight period.

After the records quoted in the literature, the new collecting localities are grouped according to the province, and within each province, localities are presented in alphabetical order.

Table I. – List of the visited sites and their coordinates

Sites	Coordinates	Sites	Coordinates
A'laan	32°07'N-35°45'E	Hisban Road	31°48'N-35°48'E
Abu al Waqqas	32°38'N-35°53'E	Hizazi Forest	30°41'N-35°37'E
Abu Nusayr	32°05'N-35°52'E	Houma Al Souriya	32°29'N-35°36'E
Abu Ubaydah Ghawr	32°12'N-35°36'E	Humrat As Sahn	32°06'N-35°41'E
Ad Disa	29°37'N-35°33'E	Ira and Yarqa	32°00'N-35°40'E
Adasiyah	32°40'N-35°37'E	Iraq al Amir	31°55'N-35°45'E
Ajlun	32°20'N-35°45'E	Irbid	32°33'N-35°31'E
Al Aridah	32°09'N-35°43'E	Ishtafayna	32°22'N-35°45'E
Al Azraq	31°52'N-36°50'E	Jarash	32°17'N-35°54'E
Al Bahhath	31°49'N-36°06'E	Jela'ad	32°07'N-35°46'E
Al Baqurah	32°39'N-35°36'E	Jisr Shu'ayb	31°09'N-36°08'E
Al Beit University	29°19'N-35°59'E	Jordan Valley	32°40'N-35°51'E
Al Buhayrah	32°21'N-35°54'E	Kafr Asad	32°36'N-35°43'E
Al Bunayyat	32°53'N-35°55'E	Kafr Huda	32°04'N-35°42'E
Al Buwaydah	32°21'N-36°03'E	Kafr Yuba	32°33'N-35°48'E
Al Fuhays	32°01'N-35°46'E	Kafrayn	31°51'N-35°35'E
Al Hashimiyah	32°08'N-36°07'E	Khilda	32°00'N-35°51'E
Al Hudayb	32°04'N-35°37'E	King Talal Dam	32°12'N-35°36'E
Al Jafr	30°18'N-36°13'E	Kufr Awan	32°26'N-35°41'E
Al Jubayhah	32°01'N-35°52'E	Kufrinjah	32°18'N-35°42'E
Al Karak	31°11'N-35°02'E	Kurayymah	32°16'N-35°36'E
Al Karamah	31°57'N-35°35'E	Ma'an (Ayn Ghadeer)	30°15'N-35°50'E
Al Mafraq	32°21'N-36°12'E	Mahis	31°59'N-35°46'E
Al Mudawwarah	29°19'N-35°59'E	Malka	32°41'N-35°45'E
Al Muqabalayn	31°54'N-35°54'E	Mount Nebo	31°46'N-35°45'E
Al Mushaqqar	31°48'N-35°47'E	Muzayrib	32°18'N-35°01'E
Al Muwaqqar	31°49'N-36°06'E	Na'ur	31°53'N-35°50'E
Al Muzayrib	32°18'N-35°41'E	Nadirah	32°19'N-35°59'E
Al Roweished	32°31'N-38°12'E	Nahlah	32°17'N-35°50'E
Al Wala	31°39'N-35°45'E	Palm Forest (Aqaba)	29°31'N-35°00'E
Al Yadudah	31°51'N-35°55'E	Petra	30°20'N-35°26'E
Amman	31°57'N-35°56'E	Qatranah	31°15'N-36°01'E
An Nu'ayyimah	32°25'N-35°36'E	Qweilbeh /Hartha	32°37'N-35°36'E
Anjarah	32°18'N-35°45'E	Ramtha	32°34'N-36°00'E
Aqaba	29°31'N-35°00'E	Ruwihat Al Ghawr	32°11'N-35°37'E
Ar Ramah	31°27'N-35°54'E	Safut	32°02'N-35°50'E
Ar Ramtha	32°34'N-36°00'E	Sakib	32°17'N-35°49'E
Ar Rumaymin	32°07'N-35°48'E	Salhub	32°09'N-37°37'E
Ar Rumman	32°10'N-35°50'E	Sayl az Zarqa'	31°59'N-35°59'E
Ar Rusayfah	32°01'N-36°03'E	Shallaleh	32°40'N-35°53'E
As Salt	32°03'N-35°44'E	Shunat Nimrin	31°54'N-35°37'E
As Simakiyah	31°18'N-35°48'E	Sihan	32°09'N-35°45'E
As Subayhi	32°09'N-35°42'E	Subayhi	32°09'N-35°42'E
As Sukhnah	32°08'N-36°04'E	Suf (Town)	32°19'N-35°36'E
Ash Shawbak	32°08'N-36°04'E	Sumaymah-Dead Sea	31°44'N-35°35'E
Ash Shunah (North)	32°37'N-35°36'E	Suwaylih	32°02'N-35°50'E
At Tafilah	30°50'N-35°36'E	Suwaylih dam	31°47'N-35°36'E
Ayn al Baydah	30°10'N-35°35'E	Syagha	31°45'N-35°37'E
Ayn ash Sharea'a	31°54'N-35°48'E	Tabaqat Fahl	32°27'N-35°37'E
Ayn Hazir	32°01'N-35°44'E	Tila' Al Ali	31°59'N-35°52'E
Az Zarqa'	32°05'N-36°06'E	Um Al Amad	31°47'N-35°54'E
Az Zarah	31°37'N-35°33'E	Um al Jimal	32°20'N-36°22'E
Az Zumaylah	31°34'N-36°04'E	Um Khashet Forest	32°18'N-36°48'E
Bayt Jaffa	32°31'N-35°47'E	Umm As Summaq	31°53'N-35°51'E
Birayn	32°16'N-32°50'E	Umm Qays	32°39'N-35°41'E
Birein Road	32°06'N-35°57'E	Wadi al Hawr	32°05'N-35°47'E
Burma	32°13'N-35°47'E	Wadi Al Mawjib	31°28'N-35°34'E
Canat al Ghawr (Dayr Alla)	32°12'N-35°37'E	Wadi Araba Dam	30°10'N-35°10'E
Damiya	32°06'N-35°33'E	Wadi As Sir	31°57'N-35°49'E
Dana Natural Reserve	30°41'N-35°37'E	Wadi Ash Shallalal	32°43'N-35°53'E
Dayr Abu Said	32°30'N-35°41'E	Wadi Ash Shita	31°55'N-35°47'E
Dayr Alla	31°59'N-35°49'E	Wadi el Yabes	32°31'N-35°36'E
Dead Sea bank	31°30'N-35°30'E	Wadi Musa	30°22'N-35°25'E
Dibbin	32°15'N-35°50'E	Wadi Rajib	32°15'N-35°37'E
Ein Rahoub	23°38'N-35°57'E	Wadi Rum	92°41'N-35°27'E
El Hammah	32°28'N-35°36'E	Wadi Shu'ayb	32°01'N-35°35'E
Ghawr As Safi	31°02'N-35°28'E	Wadi Yarmuk	32°38'N-35°34'E
Ghawr el Mazra'a	31°39'N-35°34'E	Wala	31°34'N-35°34'E
Ghawr Kabid	32°04'N-35°34'E	Yajuz	32°02'N-35°55'E
Hawwarah	32°32'N-35°54'E	Yubla	32°41'N-35°49'E
		Zabdash	32°33'N-35°50'E

Dates within each locality are arranged chronologically according to the month. If not stated otherwise, notes about distribution, host plants and biology are taken from authors archives or personal experiences.

A total of 60 species of Cerambycidae are recorded, 25 for the first time, marked in the list and in the text with an asterisk*. These belong to 42 genera in 6 subfamilies (Table II).

Table II. – List of the species of Cerambycidae actually recorded in Jordan (* recorded for the first time).

<p>1. *Subfamily Apatophyseinae</p> <p>1. *<i>Apatophysis caspica</i> Semenov, 1901 (?)</p> <p>2. Subfamily Prioninae</p> <p>2. <i>Prinobius myardi</i> Mulsant, 1842</p> <p>3. *<i>Anthracoentrus arabicus</i> (Thomsom, 1877)</p> <p>4. <i>Prionus besikanus</i> Fairmaire, 1855</p> <p>5. *<i>Monocladum aegypt. aegyptiacum</i> Guérin, 1844</p> <p>3. Subfamily Lepturinae</p> <p>6. <i>Pedostrangalia (Sphenalia) r. riccardoi</i> Holzschuh, 1984</p> <p>4. Subfamily Spondylidinae</p> <p>7. <i>Arhopalus ferus</i> (Mulsant, 1839)</p> <p>8. *<i>Arhopalus syriacus</i> (Reitter, 1895)</p> <p>9. *<i>Alocerus moesiacus</i> (Fridvaldszky, 1838)</p> <p>5. Subfamily Cerambycinae</p> <p>10. <i>Phoracantha semipunctata</i> (Fabricius, 1775)</p> <p>11. <i>Hesperophanes sericeus</i> (Fabricius, 1787)</p> <p>12. <i>Trichoferus griseus</i> (Fabricius, 1792)</p> <p>13. <i>Stromatium unicolor</i> (Olivier, 1795)</p> <p>14. <i>Icosium tomentosum atticum</i> Ganglbauer, 1882</p> <p>15. <i>Cerambyx cerdo</i> Linnaeus, 1758</p> <p>16. <i>Cerambyx dux</i> (Faldermann, 1837)</p> <p>17. <i>Cerambyx welsensii</i> (Brullé, 1832)</p> <p>18. *<i>Neoplocaederus</i> sp.</p> <p>19. *<i>Derolus</i> sp.</p> <p>20. *<i>Stenopterus flavicornis</i>; Küster, 1846</p> <p>21. *<i>Procallimus distinctipes</i> (Pic, 1906)</p> <p>22. <i>Certallum ebulinum</i> (Linnaeus, 1767)</p> <p>23. *<i>Deilus fugax</i> (Olivier, 1790)</p> <p>24. <i>Lygus becvari</i> Sama, 1999</p> <p>25. <i>Aromia moschata ambrosiaca</i> (Steven, 1809)</p> <p>26. *<i>Ropalopus ledereri</i> Fairmaire, 1866</p> <p>27. *<i>Semanotus russicus</i> (Fabricius, 1776)</p> <p>28. *<i>Calchaenesthes oblongomaculata</i> (Guérin, 1844)</p>	<p>29. <i>Purpuricenus dalmatinus</i> Sturm, 1843</p> <p>30. <i>Purpuricenus nabateus</i> Sama, 1999</p> <p>31. <i>Plagionotus bobelayei</i> (Brullé, 1832)</p> <p>32. *<i>Plagionotus floralis</i> (Pallas, 1773)</p> <p>33. <i>Chlorophorus sartor</i> (Müller, 1766)</p> <p>34. <i>Chlorophorus varius</i> (Müller, 1766)</p> <p>6. Subfamily Lamiinae</p> <p>35. *<i>Agapanthia lais</i> Reiche & Saulcy, 1858</p> <p>36. <i>Agapanthia cardui</i> (Linnaeus, 1767)</p> <p>37. *<i>Agapanthia pustulifera</i> Pic, 1905</p> <p>38. <i>Calamobius filum</i> (Rossi, 1790)</p> <p>39. <i>Niphona picticornis</i> Mulsant, 1839</p> <p>40. *<i>Monochamus galloprovincialis</i> (Olivier, 1795)</p> <p>41. <i>Batocera rufomaculata</i> (De Geer, 1775)</p> <p>42. *<i>Crossotus strigifrons</i> (Fairmaire, 1886)</p> <p>43. <i>Crossotus katbeh</i> Sama, 1999</p> <p>44. <i>Crossotus xanthoneurus</i> Sama, 1999</p> <p>45. *<i>Deroplia genei</i> (Aragona, 1830) (ssp. nova ?)</p> <p>46. *<i>Saperda quercus</i> ssp. <i>ocellata</i> Abeille, 1895</p> <p>47. <i>Coptosia sancta</i> (Reiche, 1877)</p> <p>48. <i>Helladia ferrugata</i> (Ganglbauer, 1884)</p> <p>49. *<i>Helladia insignata</i> (Chevrolat, 1854)</p> <p>50. <i>Helladia pontica</i> (Ganglbauer, 1884)</p> <p>51. <i>Helladia millefolii</i> ssp. <i>alziani</i> Sama, 1992</p> <p>52. <i>Musaria wachannui</i> (Mulsant, 1851)</p> <p>53. <i>Neomusaria merkli</i> (Ganglbauer, 1884)</p> <p>54. *<i>Neomusaria waltli</i> Sama, 1991</p> <p>55. <i>Opsilia coerulescens</i> (Scopoli, 1763)</p> <p>56. <i>Phytoecia geniculata</i> Mulsant, 1863</p> <p>57. *<i>Phytoecia manicata</i> Reiche & Saulcy, 1858</p> <p>58. *<i>Phytoecia croceipes</i> Reiche & Saulcy, 1858</p> <p>59. <i>Phytoecia coerulea bethseba</i> Reiche & Saulcy, 1858</p> <p>60. *<i>Phytoecia virgula</i> (Charpentier, 1825)</p>
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LIST OF THE SPECIES

**Apatophysis caspica* Semenov, 1901

Apatophysis caspica Semenov, 1901, *Rev. Russ. Entomol.*, 1: 31. Loc. typ.: «Transcaspija».

Apatophysis caspica is known from countries around the Caspian Sea: Azerbaïdjan, Turkmenia, Northern Iran. **In Jordan**: **Irbid**: Ein Rahoub, 23.VI.1997, leg. A. Katbeh, coll. G. Sama.

Larvae of *Apatophysis* feed in roots and stems of *Limoniastrum*, *Sueda*, *Zygophyllum* and maybe other halophyllous plants. Adults are nocturnal; males are frequently attracted to lights from May to August, females remain hidden under or near the host plants.

This genus is recorded for the first time from Jordan. The true taxonomic status of this specimen, differing from the Caspian population, needs further investigation.

Prinobius myardi Mulsant, 1842

Prinobius myardi Mulsant, 1842, *Ann. Sci. phys. nat. agr. Lyon*, 5: 207. Type locality: vallée d'Albatesco, Corse.
= *Prionus scutellaris* Germar, 1817 (nec Olivier, 1795). *Prinobius scutellaris*: Katbeh-Bader, 1996: 94.

Whole Mediterranean from Portugal, southern Europe and North Africa to Crimea, western Iran, Cyprus and Middle East (Jordan, Lebanon, Palestine, Syria) (SAMA, 2002). In **Jordan**: «locality unknown» (KATBEH-BADER, 1996); **Ajlun**: Ajlun env., 31.III.1999, ex larva from *Quercus calliprinos*, 31.VII.1999 (GS); **Balqa'**: Ar Rumaymin, 5.VII.1999, one female adult and one pupa (on Apricot) (UJ); As Salt, Wadi Shu'ayb, ex larva from Apple, adults emerged: 1.V.1989, 1.V.1990, 28.VII.1990 (UJ).

Polyphagous on deciduous trees, frequently on fruit plants, also recorded from *Acacia spp.*, *Ceratonia siliqua*, *Ligustrum ovalifolium*, *Fraxinus syriaca*, *Quercus spp.*, *Q. suber*, *Populus spp.*, *Salix spp.*, *Morus spp.* Development in dead trees; adults are nocturnal and frequently attracted to lights from June to September (VILLIERS, 1978; HALPERIN & HOLZSCHUH, 1993; SAMA, 2002).

***Anthracocentrus arabicus** (Thomson, 1877)

Acanthophorus arabicus Thomson, *Rev. Mag. Zool.*: 266. Type locality: Djeddah (Arabia).

= *Nothophysis rugosiceps* Pic, 1924, *Bull. Soc. roy. ent. Egypte*: 404. Type locality: Abou Simbel (Egypt).

Nothophysis rugosiceps: Bytinski-Salz, 1956.

Saudi Arabia, Egypt, Sudan, Djibouti, Yemen, Somalia, Ethiopia, Sahara (MATEU, 1972, QUENTIN & VILLIERS, 1983, HALPERIN & HOLZSCHUH, 1993), South Eastern Iran. In **Jordan**: **Aqaba**: Al Aqabah: date palm farm, VIII.1999, one male specimen collected by a light trap (UJ).

In the Sahara recorded from *Acacia spp.*, *Tamarix articulata* and *T. aphylla* (MATEU, 1972); in Palestine from *Acacia spp.* (BYTINSKI-SALZ, 1956). Flight period: July-October, frequently attracted to lights.

Prionus besikanus Fairmaire, 1855

Prionus besikanus Fairmaire, 1855, *Ann. Soc. ent. Fr.*, 3, 3: 319. Type locality: «Baie de Besika dans le Bosphore» (Turkey); *Prionus besicanus* auctorum.

= *Prionus lefeburei* Marseul, 1856, *Rev. Mag. Zool.*, 2, 8: 47. Type locality: «Syrie». *Prionus lefeburei*: Bodenheimer, 1937: 145, Bytinski, 1956: 210, Bytinski-Salz & Sternlicht, 1967: 134.

Eastern Mediterranean from Albania and Greece (including Crete) to the Middle East, Cyprus and Sinai. In **Jordan**: «O.Jordan, Fuhes, N.Amman», 1000 m, 17.VI.1956; «Zerka, S. Amman», 500 m, 3.VII.1956 (HEYROVSKY, 1963: 258); **Balqa'**: Ar Rumaymin, 29.III.1998, one female (UJ); **Irbid**: El Kharjah; 28.VI.1999, on pear tree, one female (UJ); 10 km W Irbid, 19.V.1999, one female crushed on the ground (GS); **Jarash**: Jarash: 11.VI.1998, on herbs, one female (UJ); Tafila: Dana, 20.VI.1998, one female collected by a light trap, leg. *D. Mahdi* (UJ);

Polyphagous on deciduous trees, frequently on fruit plants, also recorded from *Acacia mollissima* and *Ligustrum ovalifolium* (HALPERIN & HOLZSCHUH, 1993: 25). A secondary pest, feeding on roots and roots collar. In *L. ovalifolium*, it develops in plants previously affected by the fungus *Phellinus punctatus* (l. c.). Adults on the host plants, from May to August; very often attracted to light.

***Monocladum aegyptiacum aegyptiacum** (Guérin, 1844)

Polyarthron aegyptiacum Guérin, 1844, *Icon. Règne Anim., Ins.*: 214. Type locality: «Egypte».

Lybia (SCHATZMAYR, 1937); Sinai (ALFIERI 1976); Palestine (BYTINSKI-SALZ, 1956), Jordan. In **Jordan**: **Aqaba**: Wadi Araba, 12.VIII.97, one male (UJ).

Recorded as a pest of *Phoenix dactylifera* (BYTINSKI-SALZ, 1956); larvae underground feeding on living roots of Palms. Adults, chiefly males, attracted to lights, from August to November.

Pedostrangalia (Sphenalia) riccardoi Holzschuh, 1984

Pedostrangalia riccardoi Holzschuh, 1984, *Entom. Basil.*, 8: 344. Type locality: Amman; Katbeh-Bader, 1996: 94.

Jordan and southern Syria (GS) (nominative form), Palestine (ssp. *carmelita* Sama, 1996). In **Jordan**: **Balqa'**: Ar Rumaymin: 26.IV.1982 (UJ) (KATBEH-BADER, 1996); **Irbid**: Zubia env. (Kafr Yuba), larvae in *Quercus calliprinos* (adults not reared) (GS); **Jarash**: Jarash: 1.V.1993, 7.V.1998 (UJ); **Tafila**: Dana Nat. Res., larvae in *Quercus calliprinos* (adults not reared) (GS).

Only found on *Quercus calliprinos*. Larvae feed within dead stumps or branches or at the basis of died out branches or in dead parts of living trees, in moist dead parts (red wood) in contact with living tissues. Pupation occurs in the wood, early in the spring. Adults are found on the host plants, rarely on flowers, from the end of April to early June.

Arhopalus ferus (Mulsant, 1839)

Criocephalus rusticus var. *ferus* Mulsant, 1839, *Hist. nat. Coléopt. France, Longic.*: 64. Type locality: Bordeaux, Mont-de-Marsan (France).

= *Callidium tristis* Fabricius, 1787, *Mant. Ins.*, 1 : 154. Type locality : Europa.

Arhopalus tristis : Katbeh-Bader, 1996 : 94.

Europe, Caucasus, Transcaucasia, Siberia, China, North Africa, Turkey, Syria, Palestine, Jordan. In

Jordan : **Amman** : Amman (University of Jordan), 4.V.1995 (UJ). **Balqa'** : As Salt, 10.VII.1993 (UJ), 10.VIII.1993 (UJ); **Irbid** : Hawarah, 10.XI.1995 (UJ); **Madaba** : As Simakiyah (KATBEH-BADER, 1996)

Pinus spp. including *P. brutia*, *P. halepensis*. Attacks freshly cut or dying trees (SAMA, 2002).

Adults nocturnal found under barks or on the host plants; often attracted to light. It usually appears from June to September.

**Arhopalus syriacus* (Reitter, 1895)

Criocephalus syriacus Reitter, 1895, *Wien. entomol. Zei.*, 14, 3 : 85. Type locality : «Syrien : Haifa ; Akbes».

Widespread throughout Mediterranean area (mostly in coastal pine forests), Canary Islands, Madeira (SAMA, 2002). In **Jordan** : **Amman** : Al Jubayhah : 1.X.1995, 10.X.1977 (UJ).

Ecologically associated with *Pinus*; bionomics of immature stages and adults similar to *A. ferus*.

**Alocerus moesiacus* (Frivaldszky, 1838)

Callidium moesiacus Frivaldszky, 1838, *Magyar Turd. Tars. Euk.*, 3, 3 : 177. Type locality : «Macedonia».

Mediterranean, from North Africa, Iberian Peninsula to the Near East : Jordan, Iraq, Palestine, Cyprus. In **Jordan** : **Ajlun** : Anjarah, *ex larva* from *Quercus calliprinos*, emergence 10.VI.1999 (GS); **Irbid** : near Zobia (Kafr Yuba), *ex larva* from *Q. calliprinos*, emergences 15.VI.1999, 9.VI.2000, 16.VI.2001 (GS).

Polyphagous on deciduous trees : *Ulmus*, *Quercus*, *Acer*, *Platanus*, *Ficus* and others; larvae feed in dead wood of decayed parts of living deciduous trees. Adults mostly in June and July, frequently attracted to lights.

Lygrus becvari Sama, 1999

Lygrus becvari Sama, 1999, *Bioscosme Mésogéen*, 15 (2) (1998) : 178. Type locality : South Jordan : 50 km SE Ma'an.

Apparently endemic to **Jordan** : **Ma'an** : 50 km SE Ma'an, 1100 m, *ex larva* from *Acacia gerrardii*, VII/X.1994, *leg. S. Becvar* (GS); *idem*, *ex larva* from *Acacia gerrardii*, emergences : 27.IV-7.V.1998; 20.VII-20.XI.1998, *leg. G. Sama* (GS, UJ).

Only known from *Acacia gerrardii*. Emergences apparently twice a year, in spring and in summer, but in laboratory may occur throughout the year. Adults crepuscular or nocturnal, by day hidden (nearly invisible because of their coloration) on the bark of twigs and small branches of the host plants, from April to November (SAMA, 1999).

Phoracantha semipunctata (Fabricius, 1775)

Stenocorus semipunctatus Fabricius, 1775, *Syst. Entomol.* : 180. Type locality : «Nova Hollandia» (Australia).

Originally from Australia, introduced and established throughout Mediterranean region from Portugal and southern France to Greece, Cyprus and Middle East. In **Jordan** : «Jordantal, Dair Alla, Halabisfarm», 26.X.1958 (HEYROVSKY, 1963); Gawr Kabid (KATBEH-BADER, 1996); **Amman** : Al Jubayhah, 12.VII.1977 (UJ); Amman, University of Jordan, 19.XI.1992, 21.XI.1996 (UJ); **Balqa'** : As Salt, Wadi Shu'ayb, 28.X.1966 (UJ); Dayr Alla, 24.III.1954 (UJ); **Zarqa'** : Az Zarqa', 11.XI.1996 (UJ).

A well-known pest of *Eucalyptus*; larvae develop under bark of dying or suffering trees; life cycle usually of one year. Adults crepuscular and nocturnal, flying or running on the host plant, from March to December; in daytime hidden under dry loose bark or in crevices.

This species was introduced with *Eucalyptus* imported from Australia more than 50 years ago.

Hesperophanes sericeus (Fabricius, 1787)

Callidium sericeum Fabricius, 1787, *Mant. Ins.*, 1 : 152. Type locality : «Barbaria» (North Africa).

Whole Mediterranean area from North Africa (including Egypt) and Iberian Peninsula to southern France, Caucasus, southern Turkey, Iraq, Jordan, Palestine, Cyprus. In **Jordan** : **Amman** : Amman, 2.IX.1958 (HEYROVSKY, 1963 : 257); **Zarqa'** : Al Azraq, 24.III.1954, one specimen (UJ).

Polyphagous mostly on deciduous trees. In East Mediterranean recorded from *Ficus carica*, *Pistacia lentiscus*, *Populus euramericana* and fruit trees (BYTINSKI-SALZ, 1956, HALPERIN & HOLZSCHUH, 1993); larvae in dead dry wood often at ground level or underground. Emergence from June to September, adults frequently attracted to lights.

Trichoferus griseus (Fabricius, 1792)

Callidium griseum Fabricius, 1792, *Entomol. Syst.*, I (2) : 325. Type loc. «Barbaria» (North Africa).

Mediterranean area widespread from North Africa (including Egypt) and Iberian Peninsula to Crete,

Cyprus, southern Turkey, Jordan, Iraq, Palestine, Iran. In **Jordan**: Vadi: Sir b. Amman, 600 m, on *Ficus*, 4.VII.1958; Vadi Schaib, on *Ficus*, 2.VI.1958 (HEYROVSKY, 1963: 258); **Amman**: As Salt; Gawr Kabid (KATBEH-BADER, 1996: 95); **Amman**: Amman, 6.VI.1992 (UJ); **Balqa'**: Al Fuhays, 1.X.1989 (UJ); As Salt, 15.V.1995, 19.VI.1990, 5.VII.1993, 8.VIII.1994, 18.VIII.1993, 23.VIII.1994 (light trap) (UJ); As Salt, 21.V.1999, larvae, pupae and immature adults in pupal cells, emergences from 10.VI.1999 (GS); **Jarash**: Jarash 15.VIII.1996 (UJ); **Madaba**: Wala, 22-25.VI.2000, on *Ficus* (reared in lab.) (UJ); **Tafila**: Dana Natural Reserve, *ex larva* from *Ficus carica*, emergences from VI to VIII.1999 (GS).

Usually monophagous on *Ficus carica*; records of other host plants must be regarded as incorrect (rather regarding *T. fasciculatus* Faldermann, 1837) or occasional. Larvae may feed in living trees, starting from broken stems or damaged parts of trunks, as well as dead and dry wood. Adults in summer, frequently attracted to lights.

Stromatium unicolor (Olivier, 1795)

Callidium unicolor Olivier, 1795, *Entomologie*, 4, 70: 58, tav.7, fig.84. Type locality: «Barbarie, Asie Mineure, Mésopotamie».

Cerambyx fulvus Villers, 1789, *Linn. Entomol.*, 1: 256. Type loc. «circa nemausum» (*nec* Scopoli, 1763).

Stromatium fulvum: Katbeh-Bader, 1996: 95.

Widely distributed from North Africa and Portugal to Balkans, Ukraine, Crimea, Caucasus, southern Turkey, Near East including northern Iran, Iraq, Jordan and Palestine. In **Jordan**: **Az Zarqa'** (KATBEH-BADER, 1996); **Balqa'**: Al Balq'a: IV.1998 (UJ); Ar Rumaymin, 7.VII.1999 (on Apricot); As Salt: V.2000, 24.XI.1998 (UJ).

Development in old dry wood, also in seasoned timber, furniture, wooden structures such as roof timbers, fences. Adults on the host wood, from June to December, mostly in summer, sometimes attracted to lights.

Icosium tomentosum atticum Ganglbauer, 1882

Icosium tomentosum var. *atticum* Ganglbauer, 1882, *Verh. zool.-bot. Ges. Wien*, 31 (1881): 65. Type locality: Attica (Greece).

East Mediterranean from south-eastern Italy and western Balkans to southern Turkey, Cyprus, Jordan and Palestine. In **Jordan**: **Amman**, 15.VI.56 (HEYROVSKY, 1963: 258); Az Zarqa', 13.V.1996 (KATBEH-BADER, 1996: 95); **Amman**: Al Jubayhah, 4.VII.1979, 21.VIII.1999, 28.XII.1984 (UJ); **Amman**, 16.IV.1999 (UJ) 18.V.1992; **Balqa'**: As Salt, 8.V.1995 (on *Cupressus*) (GS); Dayr Alla, 16.VII.1979; **Tafila**: Dana Natural Reserve, *ex larva* from *Cupressus sempervirens*, emerged VII.1998, 8/31.VIII.1999 (GS).

Polyphagous on Cupressaceae: *Juniperus* spp., *Cupressus sempervirens*, *Thuja*, *Callitris propinqua*, *Tetraclinis articulata*; adults on the host plants mostly from May to July (HALPERIN & HOLZSCHUH, 1993).

Cerambyx cerdo Linnaeus, 1758

Cerambyx cerdo Linnaeus, 1758, *Syst. Nat.*, ed. 10, 1: 392. Type locality: «Italia, Germania».

Cerambyx cerdo acuminatus: Katbeh-Bader, 1996: 94.

Widespread in Europe, rather common in the whole Mediterranean area, including Middle East southward to Palestine. In **Jordan**: Recorded from unknown locality (KATBEH-BADER, 1996); **Ajlun**: Ajlun, 23.V.1999, *leg. A. Carapezza* (GS); **Amman**: Wadi As Sir, 14.I.1978 (UJ); **Balqa'**: Dayr Alla: IX.2000 (UJ).

Development mostly on *Quercus* spp., but also recorded on *Fraxinus*, *Castanea*, *Ulmus*. Adults overwinter in the pupal cells and emerge from May to October.

Cerambyx dux (Faldermann, 1837)

Hammaticherus dux Faldermann, 1837, *Fauna Transc.*, Col., 2: 263, Tav.7, Figg. 5. Type locality: Transcaucasia.

East Mediterranean: Macedonia, Bulgaria, Ukraine, Turkey, Lebanon, Palestine, Jordan. In **Jordan**: «Vadi as Sir bei Amman», 15.VI.1958, 600 m, «am Apricosenbaum» (HEYROVSKY, 1963); Jubeiha (SHARAF *et al.*, 1983); Al Jubayhah; As Salt; Gawr Kabed; Na'ur; Wadi as Sir (KATBEH-BADER, 1996); **Ajlun**: Anjarah, 24.XI.1998, on *Quercus* (UJ); **Amman**: Al Bunayyat, 12.VI.1994, under stone (UJ); Al Jubayhah, 6.VI.1988, 7.VII.1982, 29.XII.1991 (UJ); Na'ur, 20.V.1982, 20.V.1989 (UJ); Suwaylih, V.2000 (UJ); Tila' Al Ali, 14.VI.1989, IX.1992 (UJ); Wadi as Sir, 2.VI.1996, 18.VI.1992, 25.VIII.1996, under Fig tree; IV, V, VII, XII.1999, 3.X.1996 (UJ); **Balqa'**: Al Fuhays: 18.VI.1994 (UJ); As Salt, 25.II.1994, 2.V.1994, on Almond (UJ), 12.VI.1982, 18.VI.1994, on Peach (UJ), 24.VI.1997, on Apricot tree (UJ);

VI.1995, 24.XI.1998, on Peach (UJ); 20.X.1998, 11.XI.1996 (UJ); Jordan Valley, 24.X.1993, 29.XI.1993 (UJ); **Irbid**: Irbid, 11.X.1987 (UJ); **Jarash**: Jarash, 2.VII.1987, 9.XII.1987 (UJ).

Noxious to fruit trees of the genus *Prunus* (BYTINSKI-SALZ, 1956), recorded from *Cotoneaster*, *Crataegus*, *Pyracantha crenato-serrata* (HALPERIN & HOLZSCHUH, 1993). Adults appears from April to December. This is the most common and wide-spread species of all Cerambycidae of Jordan. Currently it is a serious pest on stone fruits.

Cerambyx welensii (Brullé, 1832)

Hammaticherus welensii Küster, 1846, *Käf. Eur.*, 2: 44. Type locality: «Illyrie, bei Triest» (Italy).

Cerambyx velutinus Brullé, 1832, *Exped. Sci. Morée, Ins.*, 3: 252 (*nec* Fabricius, 1775, Callichromini). Type locality: «Morée, env. de Marathonisi, Golfe de Laconie» (Peloponnese, Greece).

Cerambyx velutinus var. *centurio*: Bytinski-Salz, 1956: 211. *C. velutinus*: Heyrovsky, 1963: 258.

Mediterranean species occurring in Europe, southern Turkey, Near East (Jordan, Lebanon, Palestine). In **Jordan**: S. Jordan: Petra, 30.III.1957, 400 m, «am Apricosenbaum» (HEYROVSKY, 1963); **Balqa'**: Ar Rumaymin: 25.IV. 1999 (UJ); As Salt, Wadi Shu'ayb, VI.2000 (UJ).

Development on *Quercus*, mostly on *Q. ilex*, in Near East collected on *Q. ithaburensis* and *Q. coccifera* (BYTINSKI-SALZ, 1956). Larval morphology and bionomics similar to *C. cerdo*. Adults crepuscular, on the host plants from springtime to August.

**Neoplocaederus* sp.

Al Aqabah: Wadi Rum: 5.VI.2000, one specimen found on sand (UJ).

The genus is recorded for the first time from Jordan. The true species name needs further investigation.

**Derolus* sp.

Ma'an: Ad Disa, 20.VII.1996, on sand, *leg. A. Katbeh*, coll. G. Sama.

The genus is recorded for the first time from Jordan. The true species name needs further investigation.

**Stenopterus flavicornis* Küster, 1846

Stenopterus flavicornis Küster, 1846, *Käf. Eur.*, 6: 75. Type locality: «Dalmatien».

South-eastern Europe, Syria, Jordan, Lebanon, Palestine; replaced in Turkey by *S. kraatzi* Pic, 1892 and in East Turkey by *S. adlbaueri* Sama, 1995 (SAMA, 1995). In **Jordan**: **Irbid**: Umm Qays, 19.V.1999 (GS).

May be polyphagous on deciduous trees; the only known hosts plant are *Celtis australis* in Bulgaria (ADLBAUER, 1979; SVACHA & DANILEVSKY, 1989) and *Gleditschia triacanthos* in Romania (NEGRU, 1966). Adults on flowers from May to July.

**Procallimus distinctipes* (Pic, 1906)

Callimus distinctipes Pic, 1906, *L'Echange*, 22, n° 254: 11. Type locality. Bichfaya (Lebanon).

East Mediterranean, previously only known from Lebanon and Palestine. In **Jordan**: **Irbid**: Umm Qays, one adult on flower, 19.V.1999 (GS).

Reared from *Rhamnus punctata* (Lebanon) and *R. palaestina* (Palestine) (GS). Development on absolutely healthy twigs or stems; adults on flowers (Apiaceae) in May and June.

Certallum ebulinum (Linnaeus, 1767)

Cerambyx ebulinus Linnaeus, 1767, *Syst. Nat.*, 12, 1 (2): 637.83. Type locality: «Gallia» (southern France).

Cartallum ebulinum: Heyrovsky, 1963: 258.

= *Cartallum thoracicum*: Katbeh-Bader, 1996: 94.

Mediterranean area from Portugal and North Africa to Caucasus, Transcaucasia, northern Iran, Middle East. In **Jordan**: «Jordantal, Vadi Farrā», 28.III.1959 (HEYROVSKY, 1963); Al Jubayhah; Al Mafrāq; Al Wala; Amman; Ar Rumaymin; Dibbin; Gawr Kated; Wadi as Sir; Wadi Shu'ayb, II-V (KATBEH-BADER, 1996); **Ajlun**: Ajlun, 11.IV.1999 (GS); **Amman**: Al Jubayhah, 8.IV.1987 (UJ); Amman, University of Jordan, 21.II.1992, 5.IV.1999, 16.IV.1999, 6.IV.2000 (UJ); Amman Transi, 12.IV.1935, *leg. Wittmer* (GS); Amman (Wadi Sakhrah), 13.VIII.1990 (UJ); Ar Rusayfah, 4.I.1982 (UJ); Umm As Samaq, 24.III.2000 (UJ); **Balqa'**: Dayr Alla, 18.III.1974 (UJ); Humrat As Sahn, 20.III.2000 (UJ); Jordan Valley, 15.II.1991, 13.III.2000, 19.III.1999, 15.IV.1999, 24.IV.1999 (UJ); Wadi Shu'ayb, 15.II.1999 (UJ); **Irbid**: Adasiyah, 5.IV.2000, *leg. I. Zappi* (GS); **Jarash**: Jarash, 2.IV.2000, *leg. I. Zappi* (GS), 14.V.1994 (UJ); **Karak**: Ghawr as Safi, 1.II.1982 (UJ); Al Wala, 8.II.1982 (UJ);

Madaba: Nebo Mountain, 800 m, 25.III.1987, *leg. M. Bologna* (GS); Wadi Al Mawjib, 19.IV.1982 (UJ); Wadi Yarmuk bei Umm Qays, 6.IV.2000, *leg. I. Zappi* (GS); **Mafraq**: Al Mafraq, 1.V.1993 (UJ); Al Buwaydah, 4.IV.2000, *leg. I. Zappi* (GS); Nadirah, 4.IV.2000, *leg. I. Zappi* (GS).

Development in roots and stems of herbaceous plants, mostly Cruciferae such as *Erysimum grandiflorum*, *Sisymbrium crassifolium*, *Raphanus raphanistrum* (VILLIERS, 1978; DANILEVSKY & MIROSHNIKOV, 1985). Adults may be commonly found from February to May on stems and flowers of the host plants.

***Deilus fugax** (Olivier, 1790)

Callidium fugax Olivier, 1790, *Encycl. Méthod. Entom.*, 5 (Ins.): 253. Type locality: «Provence» (southern France).

Circum-Mediterranean species recorded from Europe (eastward to Ukraine and Urals), North Africa, Asia Minor, Caucasus, Cyprus, Syria, Lebanon, Jordan and Palestine. In **Jordan**: **Ajlun**: Ajlun, 1.IV.1998, adults in pupal cell on *Retama* sp. (GS); **Zarqa'**: Az Zarqa', 5.III.1952 (UJ).

Develops on dying or recently dead twigs, small branches or shoots of Fabaceae: *Spartium*, *Cytisus*, *Sarothamnus*, *Calycotome*, *Genista*, *Retama* and others. In Palestine found on *Calycotome villosa*, *Genista fasselata* and *Spartium junceum* (HALPERIN & HOLZSCHUH, 1993). Adults occur from March to May, often on flowers.

Aromia moschata ambrosiaca (Steven, 1809)

Cerambyx ambrosiacus Steven, 1809, *Mem. Soc. Nat. Mosc.*, 2: 40. Type locality: Russia.

= *Aromia moschata thoracica*: Bytinsky-Salz, 1956: 215.

Aromia moschata: Sharaf et al., 1983.

The nominative form (pronotum without red spots) in central and southern Europe; the subsp. *ambrosiaca* (Stevens, 1758) (pronotum with red spots or largely red) in southern and eastern Mediterranean from Portugal and North Africa to Iran, Iraq, Jordan and Palestine. In **Jordan**: Feisal Nursery, Jerash (SHARAF et al., 1983); Gawr Kated; Irbid (KATBEH-BADER, 1996); **Amman**: Wadi As Sir, 25.IV.1990 (UJ); **Balqa'**: Jordan Valley, 14.IV.1993 (UJ); Wadi Shu'ayb, 10.IV.1997, 23.IV.1996 (UJ), 25.IV.1996, 28.IV.1996; **Jarash**: Jarash, 17.IV.1978 (UJ).

Ecologically associated with *Salix*, occasionally recorded on different broadleaf trees such as *Populus nigra*, *Sorbus*, *Alnus*, *Acer*. Development in trunks of living trees; life cycle of two or more years. Adults on the host plants from April to September.

***Ropalopus ledereri** Fairmaire, 1866

Ropalopus ledereri, Fairmaire, 1866, *Ann. Soc. ent. Fr.*, 4, 6: 269. Type locality: «Bosz Dagh» (Asie mineure) (western Turkey).

South-western and south-eastern Turkey, Syria, Jordan, Lebanon, Palestine. In **Jordan**: **Ajlun**: Ajlun env., 31.III.1998, *ex larva* from *Quercus calliprinos*, emerged 25.IV.1999 (GS); *idem*, 18.V.1999, some specimens hatched from 1 to 18.IV.2000 (GS); **Irbid**: Zubia (Kafr Yuba), 18.IV.2000, *ex larva* from *Crataegus* sp., 1 specimen (GS).

This wonderful species develops in thin terminal twigs of living trees of *Crataegus* sp. and *Quercus calliprinos*. In Syria, Palestine and Lebanon it has been reared from the same plants (GS). According to HALPERIN & HOLZSCHUH (1993), in Palestine also on *Eriolobus trilobatus*.

***Semanotus ruscicus** (Fabricius, 1776)

Callidium ruscicum Fabricius, 1776, *Gen. Ins.*: 232. Type locality: «Rossia» (Russia).

Europe (from Italy and Austria to Hungary and Greece), Turkey, Transcaucasia, northern Iran, Syria, Lebanon. In **Jordan**: We refer to this species some old larval galleries observed under the bark of very old trees of *Cupressus sempervirens*, within the Dana Natural Reserve (GS).

Develops on trunks or big branches of living or dying Cupressaceae: *Juniperus* spp., *Cupressus* sp., *Thuja* spp. Life cycle one year; adults are ready in autumn, but overwinter in the pupal cell and emerge in March.

***Calchaenesthes oblongomaculata** (Guérin, 1844)

Callidium oblongomaculatum Guérin, 1844, *Icon. Règne Anim.*, Ins.: 234. Type locality: «Grèce».

Eastern Mediterranean from Greece to southern East Turkey, Cyprus, Irak. In **Jordan**: **Ajlun**: Sakib, 4.IV.1998, adult in pupal cell on *Quercus* sp., *leg. D. Baiocchi* (GS).

On deciduous plants, mostly on *Quercus* spp. including *Q. coccifera* and *Q. alnifolia*. Biology poorly known; eggs are laid on living twigs; life cycle two years. Adults from May on the leaves of the host plants or flying around them.

***Purpuricenens dalmatinus* Sturm, 1843**

Purpuricenens dalmatinus Sturm, 1843, *Catalog Kaefer-Sammlung*: 353. Type locality: «Dalmatien» (Croatia).

Purpuricenens dalmatinus mph. *hirsutus*: Heyrovsky, 1963: 259.

East Mediterranean, Balkans, Turkey, Syria, Jordan, Lebanon, Palestine, Egypt. In **Jordan**: «Wadi Sir bei Amman, 20.IV.1956, Steineiche, anfliegend» (HEYROVSKY, 1963); Mahis: 7.IV.1991 (KATBEH-BADER, 1996); **Amman**: Wadi Sir (Amman), 30.IV.1996.

Ecologically associated with *Quercus* sp., often on *Quercus coccifera*; in Palestine «bred from *Quercus calliprinos*» (BYTINSKI-SALZ, 1956), in Lebanon reared from *Quercus cerris* (GS). It develops on living stems and branches. Adults appear from April to June.

***Purpuricenens nabateus* Sama, 1999**

Purpuricenens nabateus Sama, 1999, *Biocosme Mésogéen*, 15, 2 (1998): 178. Type locality: Jordan, Tafila: Dana.

Endemic to Jordan. Chiefly common in mesomediterranean forests of Dana (Tafila) and residual population of *Quercus calliprinos* between Shawbak and Petra (Ma'an province), but also found near Ajlun. In **Jordan**: **Ajlun**: 3 km north of Ajlun, *ex larva* from *Quercus calliprinos*, 20.VI.1999 (GS); **Ma'an**: 12 km south of Ash Shawbak, reared from *Quercus calliprinos* and *Crataegus azarolus*, emergence 28.V.1998, 29.V.-13.VI.1999 (GS); **Tafila**: Dana, 6.VI.1999, 18.VI.1998, *leg. G. Sama* (UJ); Dana env., 1300-1500 m, *ex larva* from *Crataegus azarolus*, *Amygdalus korschinskii*, *Prunus* sp. and *Rhamnus punctata*, emergences 22.V - 13.VI.1998; 28.V. - 19.VI.1999 (GS).

Develops on *Crataegus azarolus*, *Amygdalus korschinskii*, *Prunus* sp., *Rhamnus punctata* and *Quercus calliprinos*. Larva feeds in living and absolutely healthy branches. Life cycle two years or more, pupation in May; emergences from late May to middle June (SAMA, 1999).

***Plagionotus bobelayei* (Brullé, 1832)**

Clytus bobelayei Brullé, 1832, *Exp. Morée, Ins.*: 253, Tav. 43, fig. 12. Type locality: «Morée» (southern Greece).

Callidius speciosus Adams, 1817, Mem. Soc. Imp. Nat. Moscou, 5: 309, Type locality: «Caucasus» (*neq* Schneider, 1787, *Isotomus*).

Plagionotus speciosus ab. *luristanicus*: Heyrovsky, 1963: 259. *P. speciosus*: Katbeh-Bader, 1996: 95.

East Mediterranean from Balkans to Palestine; Caucasus, Transcaucasia, northern Iran. In **Jordan**: «O. Jordan, Wald bei Jerash», 600 m, 18.IV.1959; 25.IV.1958, (HEYROVSKY, 1963); Gawr Kated; Kafr Huda; Muzayrib; Wadi ash Shita' (KATBEH-BADER, 1996); **Ajlun**: Dibbin, 19.V.1993 (on grass) (UJ); **Amman**: Amman, 25.IV.1998, 16.VI.1979 (UJ); Wadi Ash Shita, 1.IV.1994 (on Cruciferae) (UJ); **Balqa'**: 6-11.IV.1982, As Salt, 20.IV.1982 (UJ); Kafr Huda, 8.IV.1985 (UJ); Mahis, 17.V.1988 (UJ); Jordan Valley, 23.III.1991 (UJ); **Irbid**: Al Muzayrib, 25.VI.1994, on *Alcea acaulis* (UJ); **Jarash**: Jarash (on grass), 25.IV.1984, 6.V.1993 (UJ); **Zarqa'**: Az Zarqa', 29.IV.1993 (UJ).

Ecologically associated with Malvaceae; it develops on living stems of *Malva* sp. and *Alcea* sp. (DANILEVSKY & MIROSHNIKOV, 1985). Adults are usually found on flowers and leaves of the host plants from March to June. In Jordan found on flowers of *Notobasis syriaca* and *Alcea acaulis* (KATBEH-BADER, 1996). Larval morphology and biology poorly known.

****Plagionotus floralis* (Pallas, 1773)**

Cerambyx floralis Pallas, 1773, *Reisen Russ.*, 2. Type locality: «Russia mer.»

Europe (sporadic in central Europe, more widespread in southern Europe from western France to southern Urals and European Kazakhstan), Asia Minor, Caucasus, Transcaucasia, northern Iran, Siberia, Near East: Palestine (BYTINSKI-SALZ, 1956), Jordan. In **Jordan**: **Ajlun**: Ajlun env., 1000 m, 18.V.1999 (GS).

Develops on several herbaceous plants, such as *Medicago*, *Melilotus*, *Onobrychis*, *Euphorbia*, *Alhagi*, *Althea* (DANILEVSKY & MIROSHNIKOV, 1985); adults in May and June on different flowers.

***Chlorophorus sartor* (Müller, 1766)**

Leptura sartor Müller, 1766, *Mél. Philos. Math. Soc. r. Turin*, 3: 188. Type locality: not stated.

Central and southern Europe from Iberian Peninsula to Crimea and southern part of European Russia; Asia Minor, Caucasus, northern Iran, Turkestan Siberia; Near East southwards to Lebanon and Palestine. In **Jordan**: «Wadi Sir bei Amman», 8.VI.1956 (HEYROVSKY, 1963); **Irbid**: El Hamma, 20.V.1999 (GS); Kafr Huda 11.VI.1993 (UJ); Umm Qays, 19/20.V.1999 (GS).

An extremely polyphagous species which develops on dead branches of several deciduous plants: *Celtis australis*, *Cercis siliquastrum*, *Pistacia* spp., *Ulmus minor*, *Zizyphus spina-christi*, *Quercus calliprinos* and many others. Adults on flowers (chiefly Apiaceae) from March to June.

***Chlorophorus varius* (Müller, 1766)**

Leptura varia Müller, 1766, *Mél. Philos. Math. Soc. r. Turin*, 3: 188. Type locality: Europe.

Chlorophorus varius ssp. *damascenus*: Heyrovsky, 1963: 259; Katbeh-Bader, 1996: 94.

Europe, south-western Siberia (Urals), Asia Minor, Caucasus, Transcaucasia, northern Iran, Middle East (Iraq, Jordan, Lebanon, Palestine), western part of North Africa (Egypt), Cyprus (SAMA, 2002). In **Jordan**: «Vadi Sir bei Amman», 600 m, 8.VI.1956 (HEYROVSKY, 1963); As Salt (KATBEH-BADER, 1996); **Balqa'**: As Salt: VI.1995 (GS); **Irbid**: El Hamma, 20.V.1999 (GS); Umm Qays, 250 m, 20.V.1999 (GS).

Polyphagous on deciduous trees and bushes: in Near East frequently in *Ficus*, *Quercus*, *Cercis*, *Pistacia* a.s.o.; adults on several flowers in May - June.

****Agapanthia lais* Reiche & Saulcy, 1858**

Agapanthia lais Reiche & Saulcy, 1858, *Ann. Soc. Ent. Fr.*, 6: 21. Type locality: Morea (probably a wrong locality).

= *Agapanthia violacea* + *A. lais*: Bytinski-Salz, 1956: 220.

= *Agapanthia osmanlis*: Katbeh-Bader, 1996: 95.

Syria, Palestine and Jordan. In **Jordan**: **Irbid**: Muzayrib, 25.IV.1994 (KATBEH-BADER, 1996); **Irbid**: Umm Qays, 6.IV.1995 (GS); **Madaba**: Wadi El Mujib, 31.III.1994, *leg. S. Becvar* (GS).

Development in living stems of some herbaceous plants, mostly *Carduaceae*. Adults on the host plants from March to June.

***Agapanthia cardui* (Linnaeus, 1767)**

Cerambyx cardui Linnaeus, 1767, *Syst. Nat.*, 12: 633. Type locality: «Europa australis» (Southern France).

Central and southern Europe, Russia, North Africa, Middle East. In **Jordan**: Amman: «Deh Been b. Jerash», 3.IV.1958; «Zerkatal bei Romana», 17.IV.1959 (HEYROVSKY, 1963); Wadi as Sir (KATBEH-BADER, 1996); **Amman**: Amman, 10.IV.1993, 23.IV.1999 (GS); **Irbid**: Mashkar, 19.IV.1995 (UJ); Wadi Yarmuk near Umm Qays, 6.IV.2000, *leg. I. Zappi* (GS); Zabdah, 11.IV.1995 (UJ); **Jarash**: Jarash, 27.IV.1984 (GS); **Madaba**: Wadi Al Mawjib, 31.III.1994, *leg. S. Becvar* (GS); **Mafraq**: Al Buwaydah, 4.IV.2000, *leg. I. Zappi* (GS); 3 km E of Nadirah, 4.IV.2000, *leg. I. Zappi* (GS).

Highly polyphagous on herbaceous plants: *Urtica*, *Cirsium*, *Scolymus*, *Carduus*, *Melilotus*, *Heracleum*, *Senecio*, *Eupatorium*, *Chrysanthemum*, *Dipsacus*, *Pyrethrum*, *Valeriana*, *Salvia*, *Echium*, *Phlomis tuberosa* and many others. Adults may be found on the host plants from February to May.

****Agapanthia pustulifera* Pic, 1905**

Agapanthia pustulifera Pic, 1905, *Mat. Long.*, 5, 2: 12. Type locality: Jerusalem.

Endemic to Near East: southern Syria, Lebanon, Palestine, Jordan, Egypt. In **Jordan**: **Ajlun**: Ajlun, 22.IV.1981, 12.IV.1987, 7.V.1987; (UJ); Dibbin 29.IV.1993 (UJ); **Amman**: Al Jubayhah, 15.VII.1979, 15.VII.1996 (UJ); Amman, 20.IV.1998 (UJ); **Aqaba**: Jebel Arfa, Wadi Thalaia, circa 30 km North Wadi Rum 900 m, 15.IV.1992, *leg. F. Fabiano* (GS); **Balqa'**: As Salt, 16.V.2000 (UJ); Wadi Shu'ayb, 23.III.2000 (UJ); **Irbid**: Muzayrib (Mazreeb), 25.VI.1994 (GS); Kufr Awan, 18.V.1999 (GS); Umm Qays (UJ); Wadi Yarmuk near Umm Qays, 6.IV.2000, *leg. G. Zappi* (GS); **Jarash**: Jarash, 2.IV.2000, *leg. G. Zappi* (GS); **Madaba**: Mount Nebo, 1.IV.2000, 22.IV.1981 (UJ); Wadi Al Mawjib, 31.III.1994, *leg. S. Becvar* (GS); **Mafraq**: Al Buwaydah, 4.IV.2000, *leg. G. Zappi* (GS).

Polyphagous on herbaceous plants such as *Asphodelus*, *Carduus*, *Carthamus*, *Eremostachys laciniata* (HALPERIN & HOLZSCHUH, 1993). Adults can be found on leaves and stems of the host plants, mostly from March to May.

***Calamobius filum* (Rossi, 1790)**

Saperda filum Rossi, 1790, *Fauna etrusca*, 1: 152, Tav. 5, Fig. 10. Loc. class. «Etruria» (Italy).

Calamobius filum: Heyrovsky, 1963: 259; Sharaf et al., 1983: 63; Katbeh-Bader, 1996: 96.

Europe, North Africa, Asia Minor, Caucasus, Transcaucasia, northern Iran, Middle East, Cyprus. In **Jordan**: «O. Jordan, Homer n. Amman», 26.IV.1959 (HEYROVSKY, 1963); Al Jubayhah; Amman (KATBEH-BADER, 1996); **Ajlun**: Ajlun, 24.IV.1995 (UJ); Khuftrinjah, 1.IV.1999 (UJ); **Amman**: Al Jubayhah, 4.II.1996, 12.II.1978, 28.II.1993, 4.IV.1996, 12.IV.1978, 17.IV.1994, 18.IV.1984, 24.IV.1993, 28.IV.1997, 10.V.1997, 10.VI.1979 (UJ); Amman (Amman University), 2.IV.1988, 12/16.IV.1978, 14.IV.1996, 18.IV.1982, 24.IV.1995, 28.IV.1993, 16.IV.1996 (UJ); Amman, 5.IV.1990 (UJ); **Balqa'**: Al Fuhays, 16.IV.1978 (UJ); As Salt, 4.V.82 (UJ); Wadi As Sir, 17.VIII.1995 (UJ); Jordan Valley,

4.IV.1993 (UJ); Wadi Shu'ayb, 16.I.1995 (UJ); **Irbid**: Irbid, 25.IV.1994 (UJ); Wadi Yarmuk near Umm Qays, 6.IV.2000, *leg. G. Zappi* (GS); **Jarash**: Ar Rumman, 22.IV.1988 (UJ); Jarash, 2-14.IV.1984; 24.IV.1994 (UJ); Jarash (Old Road), 22.IV.1981 (UJ).

Develops in living stems of wild and cultivated graminaceous: *Dactylis glomerata*, *Arrhenatherum elatius*, *Calamagrostis pigeios*, *Avena longiglumis*. Adults on the stems of host plants in spring.

Niphona picticornis Mulsant, 1839

Niphona picticornis Mulsant, 1839, *Hist. nat. Coléopt. France, Longic.*: 169. Type locality: Draguignan (France).

Niphona picticornis: Heyrovsky, 1963: 259; Katbeh-Bader, 1996: 97.

Circum-mediterranean species, widespread from North Africa and Spain to the Middle East, Cyprus, Syria, Jordan, Palestine. Very common throughout the Mediterranean area, but apparently rare in Jordan. In **Jordan**: «Ain Musa bei Madaba», 700 m, 21.IV.1959, «*ex larva* Feigenbaum» (HEYROVSKY, 1963); «one unlabeled specimen» (KATBEH-BADER, 1996).

Polyphagous on many deciduous plants such as *Ficus carica*, *Quercus calliprinos*, *Spartium junceum*, *Ceratonia siliqua* (GS), *Calycotome villosa*, *Ceratonia siliqua*, *Cercis siliquastrum*, *Cotoneaster pannosa*, *Malus sylvestris*, *Morus alba*, *Pistacia*, *Rhamnus alaternus*, *Salix alba*, *Schinus terebinthifolius* (HALPERIN & HOLZSCHUH, 1993). Life cycle lasts two or three years; ~~in 2001~~ adult overwinters in pupal cell. Emergences mostly from February to July, but adults can be found throughout the year.

**Monochamus galloprovincialis* (Olivier, 1795)

Cerambyx galloprovincialis Olivier, 1795, *Entomologie*, 4, n° 67: 125, Tav. 3, Fig. 17. Type locality: «Provence» (southern France).

Widespread in the Mediterranean area from Iberian Peninsula and North Africa to the Middle East. In **Jordan**: **Amman**: Al Jubayhah, 24.III.1996 (UJ).

Development in *Pinus*; it preferably attacks recently cut branches and trunks. Life cycle of one year. Adults on the host plants in June and July.

A new species to Jordan, nevertheless, its occurrence in Jordan requires confirmation; collecting date of this specimen is also rather unusual.

Batocera rufomaculata (De Geer, 1775)

Lamia rufomaculata De Geer, 1775, *Mem. Ins.*, 5: 107. Type locality: «India».

East Africa, India, southern China, South East Asia, West Indies. Introduced into the coastal region of East Mediterranean: Syria, Jordan, Lebanon, Palestine (AVIDOV & HARPAZ, 1969). It was recently recorded from Turkey (TOZLU & ÖZBEK, 2000). In **Jordan**: «W. Jordan, Ras Karkar», 19.VI.1957 (HEYROVSKY, 1963; Deir Alla, X (SHARAF *et al.*, 1983); Irbid, Jarash, Wadi as Sir (KATBEH-BADER, 1996); **Balqa'**: Ghawr (Dayr Alla), VIII.1999 (UJ); **Irbid**: Irbid, 22.VIII.1989 (UJ); Bani Kananah, 30.VII.1998 (UJ); Kuraymah, 20.X.1999 (UJ)

This is a serious pest on fig trees. In Near East it develops on *Ficus carica*, *F. rubiginosa* and *Morus alba*; it also attacks mango, avocado, papaya and some ornamental trees in tropical regions. Adults are found on the host trees from June to September (AVIDOV & HARPAZ, 1969).

**Crossotus strigifrons* (Fairmaire, 1886)

Dichostathes strigifrons Fairmaire, 1886, *Ann. Soc. ent. Fr.* (6), 5: 457 (foot note). Type locality: Sudan.

= *Crossotus arabicus*: Bytinski-Salz, 1956: 218; Holzschuh, 1979: 145.

Ethiopian species widespread from East Africa through Saudi Arabia to southern Negev and Sinai. In **Jordan**: **Aqaba**: Wadi Araba, 30 km North of Aqaba, 20.III.1998, *ex larva* from *Acacia tortilis*, one adult emerged 31.VII.1998 (GS).

Development on *Acacia*; in Wadi Araba (both in Jordan and Palestine) it attacks *A. raddiana*, *A. tortilis* and *A. gerrardii negevensis*; in Palestine it is also recorded from *A. spirocarpa* and *A. cyanophylla* (HALPERIN & HOLZSCHUH, 1993). Eggs are laid in living twigs and branches which are cut by larvae to reduce sap circulation. Life cycle lasts two years or more; emergences from late March, adults on the host plants from June to October.

Crossotus katbeh Sama, 1999

Crossotus katbeh Sama, 1999, *Quad. Studi Nat. Romagna*, 13, suppl.: 107. Type locality: Arava Valley: En Tamar (Palestine).

= *Crossotus subocellatus*: Halperin & Holzschuh, 1993: 27.

Apparently endemic in Wadi Araba north of Aqaba, both in Jordan and Palestine, where it lives together with *C. strigifrons*. In **Jordan**: **Aqaba**: Al Aqabah, Date Palm Farm, VIII.1999, collected by light trap, *leg. H. Hamed* (UJ) (SAMA, 2000); Wadi Araba, 30 km North of Aqaba, 20.III.1998, *ex larva* from *Acacia tortilis*, adults emerged from 8.VIII to 10.XI.1998 (GS) (SAMA, 2000).

Host plants and bionomics of adults and immature stages similar to the preceding species.

***Crossotus xanthoneurus* Sama, 1999**

Crossotus xanthoneurus Sama, 1999, *Quad. Studi Nat. Romagna*, 13, suppl.: 92. Type locality: Jordan, Aqaba: Wadi Rum.

Apparently an endemic species from southern Jordan. **Ma'an**: Desert region between Ma'an (across to Aqaba) and Wadi Rum, 19.III.1998, larvae in stems of *Retama raetam* (*leg. G. Magnani & G. Sama*), adults emerged 3.VII.1998 (SAMA, 2000); Petra, 15.V.1999, pupae in dead stems of *Retama raetam*, adults emerged 10.VI.1999 (SAMA, 2000).

This interesting species develops on fresh branches and twigs of *Retama raetam*; life cycle lasts two years, emergence from the second half of May to early July.

****Deroplia genei* (Aragona, 1830) (ssp. nova ?)**

Saperda genei Aragona, 1830, *De quibusdam Col.*: 25. Loc. typ.: «Turbigo» (Italy).

Thermophilous species widely distributed in Europe from France to Ukraine and Crimea and in nearly all South Europe from Spain to the Balkans. Extremely rare and local in East Mediterranean, is was known from southern Turkey, Cyprus and Palestine. From North Iran is described a distinct subspecies (*D. genei* ssp. *naviauxi* Villiers, 1970). In **Jordan**: a new population (may be belonging to a new subspecies) has been recently found in northern Jordan; Ajlun, 1.IV.1998, *ex larva* *Pyrus sp.*, some adults emerged from 1 to 13.X.1998 (GS).

D. genei usually develops in twigs and small branches of many species of *Quercus*. In Jordan it has been reared from dead apical twigs of a living *Pyrus sp.*

****Saperda quercus . ocellata* Abeille, 1895**

Saperda (Compsidia) ocellata Abeille, 1895, *Bull. Soc. ent. Fr.*: 229. Loc. typ.: «Akbes» (southern Turkey).

East Mediterranean, Greece, east to Bulgaria and European Turkey. The ssp. *ocellata* from southern Turkey to Syria, Jordan, Palestine. In **Jordan**: one specimen from unknown locality, IV.1994, *leg. S. Becvar* (Coll. Siska) (GS).

Ecologically associated with *Quercus* spp. (deciduous). Adults appear from May to early June. In Palestine it was collected by beating living branches of *Quercus sp.* in April and May.

***Coptosia sancta* (Reiche, 1877)**

Phytoecia sancta Reiche, 1877, *Bull. Soc. ent. Fr.*: CXXXVI. Type locality: «Nazareth in Palaestina».

= *Conizonia compacta*: Heyrovsky, 1963: 259; Katbeh-Bader, 1996: 96.

Near East from southern Syria to Jordan and Palestine. In **Jordan**: «O. Jordan, Wald bei Jerash», 600 m, 23.IV.1956 (HEYROVSKY, 1963); Kafr Asad (KATBEH-BADER, 1996); **Balqa**: As Subayhi 27.V.1987 (UJ); **Irbid**: Kafr Assad, 28.V.1978, 12.VI.1994 (UJ); **Jarash**: Jarash, 2.IV.2000, *leg. I. Zappi* (GS).

Development on Borraginaceae, chiefly *Anchusa*; adults, very early in spring, on the host plants, usually hidden under leaves touching the ground.

***Helladia ferrugata* (Ganglbauer, 1884)**

Phytoecia ferrugata Ganglbauer, 1884, *Verh. zool.-bot. Ges.*, 33 (1883): 574. Type locality: «Syrien (Chaifa)» (currently Haifa in Palestine).

Phytoecia ferrugata + *P. plasoni*: Katbeh-Bader, 1996: 97.

Syria and Palestine (Breuning, 1951; Bytinsky-Salz, 1956). In **Jordan**: Irbid, Al Jubayhah, Amman (KATBEH-BADER, 1996); Ajlun: Ajlun, 11.IV.1999 (UJ); **Amman**: Amman (University), 4.IV.1993, 14.IV.1997 (UJ); Al Muqablayn, 26.IV.94 (UJ); **Jarash**: Sakib, 18.IV.1995 (UJ).

Adults are usually found in March - April on *Centaurea sp.*, where larvae probably develop.

****Helladia insignata* (Chevrolat, 1854)**

Phytoecia insignata Chevrolat, 1854, *Rev. Zool.*, 2: 485. Type locality: Saida (Lebanon).

Phytoecia humeralis ab. *insignata*: Plavilstshikov, 1926, *Ent. enc.*, serie B, 2, Col., 1: 65.

Phytoecia humeralis mph. *insignita*: Breuning, 1951, *Ent. Arb. Mus. Frey*, 2: 57.

East Mediterranean: Lebanon, Palestine, Syria and Jordan (SAMA, 1999); In **Jordan**: **Ajlun**: Dair Abu Said, 19.V.1999, *ex larva* from *Centaurea hyalolepis*, adults hatched X/XI (GS); Kufr Alma, 27.III.1998 (GS); **Amman**: Al Jubayhah, 26.III.1990 (UJ, GS); Amman, 8.III.1957, 28.III.1969 (GS); **Balqa'**: Wadi Shu'ayb, 11.IV.1999 (UJ); Irbid: **Kufr Awan**, 1.IV.1998 (GS); Zubia (Kafr Yuba), 17.V.1999, *ex larva* from *Silybum marianum*, adults hatched X/XI (GS); Wadi Yarmuk near Umm Qays, 6.IV.2000, *leg. G. Zappi* (GS); **Jarash**: Jarash, 2.IV.2000, *leg. G. Zappi* (GS); **Ma'raq**: Al Buwaydah, 4.IV.2000, *leg. G. Zappi* (GS); 3 km. E of Nadirah, 4.IV.2000, *leg. G. Zappi* (GS).

Larvae develop in living stems and roots of *Silybum marianum* (L.) Gaertn., *Centaurea hyalolepis* Boiss. (Asteraceae) and maybe other herbaceous plants. Life cycle of one year; adults hatch in autumn, overwinter in pupal cells and emerge in February-April.

Helladia pontica (Ganglbauer, 1884)

Phytoecia pontica Ganglbauer, 1884, *Verh. zool.-bot. Ges.*, 33 (1883) : 574. Type locality: Pontus, Caucasus.
= *Helladia paulusi*: Katbeh-Bader, 1996 : 96.

East Mediterranean: Turkey, Syria, Jordan and Palestine. In **Jordan**: «O. Jordan, Amman», 6.III.1958; «O. Jordan, Wadi Sir b. Amman», 15.IV.1956 (HEYROVSKY, 1963); Jarash (KATBEH-BADER, 1996); **Ajlun**: Ajlun (castle), 18/21.V.1999, *ex larva* from *Onopordum macrocephalum*, adults found in their pupal cells from X.1999 (GS); **Amman**: Jabal Amman, 8.IV.1984 (UJ, GS); **Balqa'**: As Salt, 14.V.1994 (UJ); Baqa' ah, 23.II.1994, 1.IV.1982, 1.V.1982 (UJ); **Jarash**: Burma, 22.IV.1982 (GS); Jarash, 2.IV.2000, *leg. G. Zappi* (GS); **Ma'an**: Petra env.: Beida, 800 m, 4.V.1992, *leg. F. Fabiano* (GS); **Madaba**: Nebo Mountain, 9.IX.1999 (reared in lab.) (UJ); Wadi Al Mawjib, 31.III/1.IV.1994, *leg. S. Becvar* (GS); **Tafila**: Dana Natural Reserve (UJ).

Only known from *Onopordum macrocephalum* Eig (Asteraceae). Bionomics of immature stages and adults similar to the preceding species.

Helladia millefolii ssp. *alziari* Sama, 1992

Helladia millefolii ssp. *alziari* Sama, 1992, *Lambillionea*, 92: 306. Type locality: Cyprus.
Phytoecia millefolii: Katbeh-Bader, 1996 : 96.

The nominative form is known from Bulgaria to northern Turkey and Caucasus. The subspecies *alziari* occurs in East Mediterranean, from south-eastern Turkey and Cyprus to Syria, Lebanon, Jordan and Palestine (Sama, 1992). In **Jordan**: Jarash (KATBEH-BADER, 1996); **Ajlun**: Ajlun, 2.IV.1977 (UJ); **Amman**: Na'our: 20.V.1982 (UJ).

Develops in the roots and in stems of living *Ditricchia viscosa* (L.) Aiton (Asteraceae). Adults on the host plants from March to May.

Musaria wachanrui (Mulsant, 1851)

Phytoecia wachanrui Mulsant, 1851, *Mem. Ac. sc. Lyon*, 1: 127. Type locality: «Turquie».
Phytoecia wachanrui: Katbeh-Bader, 1996 : 97.

East Turkey, Iran, Caucasus, Syria, Lebanon, Jordan, and Palestine (BREUNING, 1951). In **Jordan**: Al Jubayhah; Amman, 15.IV.1975 (KATBEH-BADER, 1996); **Amman**: Amman (University), 18.II.1984, 21.II.1990, 5.VI.94 (UJ); Amman (Jebel Amman), 6.IV.1981 (UJ); Amman, 3.V.1995 (UJ); **Balqa'**: Al Jubayhah, 2.IV.1990 (GS); Jordan Valley: Tabaqat Fah, 22.III.2000 (UJ).

Develops in the roots of *Eryngium* sp. (Asteraceae). Occasionally attracted to light (KATBEH-BADER, 1996). Adult occur from March to June.

[*Musaria puncticollis* (Faldermann, 1837)]

We know one specimen apparently collected in Jordan, labelled as follows: Tafila, Karak, 10 km. North of Laban, 1000 m, 26.III.1997, *leg. M. Bologna*, in coll. G. Sama. In consideration of distribution range of this species (Azerbaijan, Iran, Iraq and eastern Turkey), we regard this record as doubtful and its occurring in Jordan needs verification.

Neomusaria merkli (Ganglbauer, 1884)

Phytoecia merkli Ganglbauer, 1884, *Verh. zool.-bot. Ges.*, 33 (1883) : 560. Type locality: Turkey.
Phytoecia merkli: Katbeh-Bader, 1996 : 96.

East Mediterranean from Turkey to Jordan. In **Jordan**: Amman: Al Jubayhah, 8.V.90 (KATBEH-BADER, 1996).

Larvae feed on few species of *Salvia* (Lamiaceae); in Turkey found on *Salvia* cf. *tomentosa* Miller. Adults sitting on the host plants from May to June.

***Neomusaria waltli** Sama, 1991

Neomusaria waltli Sama, 1991, *Boll. Soc. ent. Ital.*, 123(2): 127, new name for *Saperda modesta* Waltl, 1838 (*nec* Fabricius, 1781). Type locality: Liban, Beirouth.

East Mediterranean from Turkey to Jordan, Syria and Palestine. In **Jordan: Amman:** Al Jubayhah, 8.V.90 (GS).

Development on *Salvia* spp. (Lamiaceae); adults on the host plants in May and June.

Opsilia coerulescens (Scopoli, 1763)

Leptura coerulescens Scopoli, 1763, *Ent. Carn.*: 49, Fig. 160. Type locality: «Carniola» (Slovenia).

Phytoecia coerulescens: Katbeh-Bader, 1996: 96.

North Africa, Asia Minor, Middle East (Syria, Palestine, Jordan and Palestine), Turkestan, Kazakhstan, West Siberia, China. In **Jordan:** unlabeled specimen (KATBEH-BADER, 1996); **Amman:** Amman (University), 15.III.1996 (UJ); **Balqa':** Ar Rumaymin, 22.IV.1981 (GS).

Development on Boraginaceae such as *Echium*, *Cerinth*, *Cynoglossum*, *Anchusa*, *Symphytum*, *Lithospermum*, *Lycopsis*. Adult occur from March to July.

Phytoecia geniculata Mulsant, 1863

Phytoecia geniculata Mulsant, 1863, *Hist. nat. Coléopt. France, Longic.*, 2: 420. Type locality: «Grèce, Constantinople». *Phytoecia geniculata*: Heyrovsky, 1963: 260.

Greece, Turkey, Asia Minor, Cyprus, Syria, Lebanon, Palestine and Jordan (BREUNING, 1951). In **Jordan:** «O. Jordan, Homer n. Amman», 600 m, 26.IV.1959 (HEYROVSKY, 1963); **Ajlun:** Dair Abu Said, 21.V.1999; Ajlun (castle), *ex larva* from *Notobasis syriaca* and *Silybum marianum* (GS); **Amman:** Al Jubayhah, 5.I.1995, 26.II.1990 (UJ); **Balqa':** Wadi Shu'ayb, 28.I.1995 (UJ); **Irbid:** Zubia (Kfar Yuba), 17.V.1999, *ex larva* from *Silybum marianum* (GS); **Madaba:** Madaba, 18.II.1984; 4.VII.1998 (UJ).

Reared from *Notobasis syriaca* (L.) Cass. and *Silybum marianum* (L.) Gaertn (Asteraceae); AVIDOV & HARPAZ (1969) report carrots as the host of larvae. Adults on the host plants from February to June.

***Phytoecia manicata** Reiche & Saulcy, 1858

Phytoecia manicata Reiche & Saulcy, 1858, *Ann. Soc. ent. Fr.* (3), 6: 17. Type locality: Syria.

East Mediterranean from southern Turkey to Jordan, Lebanon and Palestine. In **Jordan: Irbid:** Ishtafayna, 18.V.1999 (GS).

Development in living stems of herbaceous plants; bionomics and host plants not exactly known. Adults occur from April-May.

***Phytoecia croceipes** Reiche & Saulcy, 1858

Phytoecia croceipes Reiche & Saulcy, 1858, *Ann. Soc. ent. Fr.*(3), 6: 17. New name for *Phytoecia puncticollis* Mulsant & Wachanru, 1852, *nec* Faldermann, 1837.

Phytoecia puncticollis Mulsant & Wachanru, 1852, *Mém. Ac. Sc. Lyon*, 2, 2: 15. Type loc.: "Caramanie" (Turkey).

East Mediterranean: Transcaucasia, Caucasus, Asia Minor, Cyprus and Middle East to Iraq, Jordan and Palestine. In **Jordan:** Balqa': Wadi Shu'ayb: 15.III.1999 (UJ); Jordan Valley, 15.IV.1999 (UJ).

Develops in living stems of many herbaceous plants (Apiaceae).

Phytoecia coerulea bethseba Reiche & Saulcy, 1858

Phytoecia bethseba Reiche & Saulcy, 1858, *Ann. Soc. ent. Fr.* (3), 6: 17. Type locality: Palestine.

Phytoecia coerulea: Katbeh-Bader, 1996: 97.

The nominative form (red fore tibiae) occurs in central and southern Europe from Spain to European Kazakhstan and in East Mediterranean from Turkey to North Syria. The ssp. *bethseba* (green metallic fore tibiae) in Iraq, Syria, Lebanon, Jordan, Palestine. In **Jordan:** «O. Jordan, Amman», 800 m, 13.IV. 1958; Deh Been b. Jerash, 3.IV.1958, 700 m; Wadi Farra, Jordantal, 28.III.1959 (HEYROVSKY, 1963); Al Azraq, Al Jubayhah, Amman, As Sukhnah, Gawr Kated, Jarash (KATBEH-BADER, 1996); **Ajlun:** Ajlun, 11.IV.1999 (UJ); Dibbin, 25.IV.1985 (UJ); **Amman:** Al Jubayhah, 20.II.1984, 26.IV.1989 (UJ); Amman (University), 26.II.1993, 4.IV.1999, 22.IV.1993, 25.IV.1992, 7.V.1998 (UJ); **Balqa':** Dayr Alla, 26.XI.1994 (UJ); Ghawr Kabid (University Farm), 15.II.1990 (UJ); **Jarash:** Jarash (Old Road), 4.V.1982 (UJ); **Zarqa':** Al Azraq, 16.II.1988 (UJ);

Larvae feed in living stems and roots chiefly of Cruciferae: *Sinapis*, *Sisymbrium*, *Rapistrum*, *Linum usitatissimum*, *Linum hirsutum* and others. Adults are found from February to June on the host plants.

***Phytoecia virgula** (Charpentier, 1825)

Saperda virgula Charpentier, 1825, *Hor. Soc. entomol. Ross.* : 225. Type locality: «Dalmatia».

Central and South of Europe, Asia Minor, Caucasus and Turkestan; in Middle East it is known from Syria, Jordan, Lebanon and Palestine. In **Jordan**: **Ajlun**: Ajlun, 18.V.1999 (GS); **Zarqa**: Az Zarqa', 18.IV.1999 (UJ).

Larvae develop in the living stems of many herbaceous plants like *Chrysanthemum*, *Artemisia*, *Daucus*, *Hieracium*, *Carduaceae*, *Artemisia*. Adults are found on the host plants from March to June (VILLIERS, 1978).

DISCUSSION

A total of 60 species of Cerambycidae are recorded from Jordan. These species are placed in six subfamilies: Apatophyseinae, Prioninae, Lepturinae, Spondylidinae, Cerambycinae and Lamiinae. The largest subfamily is Lamiinae which include 26 species in 14 genera. The Cerambycinae include 24 species in 19 genera. The Prioninae contain 4 species in 4 genera. The Spondylidinae include 3 species in 2 genera.

The species list of the Cerambycidae of Jordan is far from complete. More species are expected to be found after further, extensive collecting for longer period of time. For example, 96 species of Cerambycidae were recorded in the neighboring Palestine (SAMA *et al.*, in preparation), 50 species were recorded in Iraq (SADOON, 1983) and 54 species from Saudi Arabia (HOLZSCHUH & TEOCCHI, 1991; HOLZSCHUH, 1993); many of them are not known to occur in Jordan so far.

Most of Jordanian species occur in the Mediterranean phytoecological zones of Jordan. Most of them in forest, fruit trees orchards and steppe inhabited herbaceous plants. There are few rare, true Saharian species that occur in Jordan: *Anthracoentrus arabicus*, *Monocladum aegyptiacum*, *Neoplocaederus* sp., *Derolus* sp., *Lygrus becvari* and three species of *Crossotus*. So far there are 3 species known to occur only in Jordan (endemic): *Lygrus becvari*, *Purpuricenus nabateus* and *Crossotus xanthoneurus*.

The following genera dominate in the more temperate climate of mountain in forest or fruit tree orchards: *Prinobius*, *Pedostrangalia*, *Arhopalus*, *Alocerus*, *Monochamus*, *Saperda*, *Phoracantha*, *Hesperophanes*, *Trichoferus*, *Stromatium*, *Icosium*, *Cerambyx*, *Deilus*, *Aromia*, *Arhopalus*, *Purpuricenus* and *Chlorophorus*. However, the true steppe genera are *Prionus* and *Apathophysis* which are characteristic species of the steppe and dry mountain meadows of Palaearctic Region, but with center of origin in the Irano-Turanian region (BYTINSKI-SALZ, 1956; VILLIERS, 1978).

Among the host plants of Cerambycidae in Jordan, apricot, peach, plums, apples, figs and oak trees are attacked by a large number of cerambycid species. From the recorded cerambycid species, the following are considered important economic pests: *Cerambyx dux* (on peach and apricot), *Batocera rufomaculata* (on figs), *Trichoferus griseus* (on figs), *Prionus besikanus* (on stone fruits), *Prinobius myardi* (on peach and apricot).

Based on collecting dates of the Cerambycidae of Jordan it is noticed that they are most abundant in the mid-March to May. In the Jordan Valley, adults begin to appear from the end of February to May, especially for those living on herbaceous plants: *Agapanthia*, *Phytoecia*, *Helladia* and *Musaria* are the first among the Jordanian species flying in early spring. However, in the high lands, adults appear from mid-March to September, but sometimes as late as December.

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Yoann BRAUD, Richard RAMOS et Christian COCQUEMPOT. – **Nouvelles observations de *Xylotrechus stebbingi* Gahan, 1906, en Europe et en Afrique du Nord (Col., Cerambycidae)**

Summary. – The geographical extension of *Xylotrechus stebbingi* Gahan, 1906 (Coleoptera, Cerambycidae) in the mediterranean Basin is updated by new records in France and Tunisia. A recall of previous records and some prospects of this extension are given.

Xylotrechus stebbingi Gahan, 1906, Cérambycide d'origine sino-himalayenne, a été découvert en 1982 en Italie, probablement suite à une introduction accidentelle (DIOLI & VIGANO, 1990). Il s'est rapidement disséminé en Europe méridionale et dans le bassin méditerranéen pour atteindre vers l'ouest la Côte d'Azur française (SAMA & COCQUEMPOT, 1995) et Israël en Méditerranée orientale (PAVLÍČEK *et al.*, 1998).

Pour l'Europe, il a été en outre signalé de Grèce (Crète), d'Italie (DIOLI & VIGANO, 1990 ; SAMA & COCQUEMPOT, 1995 ; BRUGNOLA, 1996 ; RATTI, 1999), de Suisse (HOLZSCHUH, 1995) et d'Allemagne (KÖHLER, 2000). *X. stebbingi* n'était connu de France que par l'unique récolte d'Antibes (fig. 1) (Alpes-Maritimes) en 1993 (SAMA & COCQUEMPOT, 1995).

De nouvelles observations sont venues récemment confirmer la poursuite de l'extension de cette espèce de part et d'autre de la Méditerranée.

Une deuxième capture française a été réalisée dans l'Hérault, à Lunel, le 5 juillet 2001 (*R. Ramos leg.*). L'insecte volait sous les lampadaires d'une résidence. Aucune autre collecte n'a été réalisée depuis à cet endroit malgré une attention particulière.

Le troisième exemplaire national a été prélevé le 13 juin 2002 par les services municipaux à Valbonne (Alpes-Maritimes). Il se trouvait en pleine journée sur un platane d'une place de la ville. Des galeries ont été observées sous l'écorce de l'arbre à proximité d'un chancre.

Le quatrième exemplaire (fig. 1.) provient de l'île Sainte-Marguerite au large de Cannes (Alpes-Maritimes). Il a été piégé vers 21 heures 30, le 28 juin 2002 (*Y. Braud leg.*) à l'aide d'une lampe à rayons ultra-violets.

Un cinquième exemplaire a été capturé dans l'après-midi du 25 juillet 2002 sous des troncs d'érables abattus, au lieu-dit "La Craux" sur la commune de Peyroules au sud des Alpes-de-Haute-Provence (*T. Michel leg.*) (A. Coache, comm. pers.).

Le dernier individu recensé à notre connaissance a été pris le matin du 5 août 2002 à Ville-la-Grand près d'Annemasse, Haute-Savoie (*J. Sudre leg.*) sur un tronc de frêne récemment tombé.

X. stebbingi est également présent en l'Afrique du Nord d'où il n'avait pas encore été signalé. Il est nuisible depuis plusieurs années en Tunisie, sur les oliviers particulièrement affaiblis par une sécheresse persistante. De nombreux exemplaires ont été collectés dans le cadre d'une étude agronomique dans la région de Sfax (*T. Jardak leg.* et comm. pers.).



Fig. 1. – *Xylotrechus stebbingi* Gahan, 1906 (Antibes, Alpes-Maritimes) (Photo Cocquempot) (Long. : 21 mm).

Ces nouvelles observations et récoltes prouvent que l'extension de cette espèce est encore effective et semble s'accélérer, bien que chaque observation française ait été réalisée sur un seul exemplaire. Il est fort probable que cette espèce soit désormais bien installée sur la Côte d'Azur et puisse se rencontrer dans un triangle délimité au nord par Evian (Haute-Savoie), au sud-ouest par Montpellier (Hérault) et au sud-est par Menton (Alpes-Maritimes).

X. stebbingi semble affectionner les zones urbaines et leur périphérie, les zones d'activités industrielles ou commerciales ... Sa période de vol est relativement longue et variable selon les régions et les années. Elle commence début juin et se prolonge jusqu'en début d'août. Cette espèce est active et vole au crépuscule mais elle peut se trouver sur les arbres favorables en pleine journée. Le frêne, le platane, l'olivier et probablement l'érable sont des plantes-hôtes qui étaient jusqu'à présent inconnues, ce qui prouve que le spectre végétal de cette espèce est très large. Il ne semble pas nuisible actuellement en France mais il convient d'être vigilant, notamment pour les arbres en difficulté végétative comme le justifient les dégâts constatés en Tunisie.

Sa présence en abondance en Tunisie depuis quelques années, et son adaptation à des arbres au bois très dur, permettent de penser que son extension en Afrique du Nord ne s'arrêtera pas à ce pays et que cette espèce est susceptible d'envahir toute la bordure littorale. Les années à venir nous permettront de voir si *X. stebbingi* parvient à faire le tour complet de la Méditerranée en gagnant le Maroc et l'Espagne.

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