



RESULTS OF THE CZECHOSLOVAK-IRANIAN ENTOMOLOGICAL  
EXPEDITIONS TO IRAN 1970, 1973 AND 1977  
COLEOPTERA : BRUCHIDAE

Klaus-Werner Anton

Grünewaldstr. 13, 79312 Emmendingen, Germany

Received February 16, 1998

Accepted April 15, 1998

**Abstract.** In the present work, the rich fauna of Bruchidae (Coleoptera) of Iran comes up to 80 species, of which 22 are new reported. It is based on about 1400 specimens deposited in the National Museum (Natural History) Praha, Czech Republic, collected during three expeditions to Iran. Data from specimens seen from other collections are added. For each species, additional information on general distribution and host plant is listed. For several species, new synonymy and taxonomical note are given. Finally, fauna elements are discussed.

■ Coleoptera, Bruchidae, fauna, distribution, host plants, new synonymies, Iran.

Up to date, the Iranian fauna of Bruchidae was rather studied in papers with single descriptions as well as in several works, which note some species collected in Iran besides records from other countries (Fahraeus in Schoenherr, 1839, Schoenherr 1839, Baudi 1886, Pic 1904 and 1913, Schilsky 1905, Hoffmann 1956 and 1968, Southgate 1976, Decelle 1983, Borowiec 1983, 1985a, 1985c, 1985d, 1985e, 1986 and 1991). Records from Iran are also considered in an extensive study of bruchid fauna of neighbouring USSR (Lukjanovich & Ter-Minassian 1957) and by Borowiec (1987b), who gives a summarizing list of 39 species of Iran. Recently Decelle & Lodos (1989) add 13 species and Borowiec & Anton (1993) note two species.

In the present paper are listed results of a study of about 1400 Bruchidae specimens collected during three Czechoslovak- Iranian expeditions to Iran in 1970, 1973 and 1977, the most deposited in the collection of the Natural History Museum, Praha, some specimens are in author's collection. Additional data are given from identified bruchid material collected in Iran, which is deposited in several collections (see below enumeration of abbreviations). Beyond it questionable data and species are discussed. General distribution and host plant data are listed; these data are compiled from papers mentioned above, from my own data and for completion from Schilsky (1906), Hoffmann (1945), Zacher (1952), Parker (1957), Hoffmann et al. (1962), Decelle (1975, 1979, 1981, 1984 and 1985), Karapetjan (1985), Borowiec (1985b and 1987a), Abdul-Rassoul et al. (1986), Delobel & Tran (1993), Anton (1994a, 1994b, 1996a and 1996b). In some cases new synonymies and taxonomical notes are given.

Apart from them following abbreviations are used throughout the text:

CKWA: author's collection

DEIC: Deutsches Entomologisches Institut (Eberswalde, Germany)

HNHM: Hungarian Natural History Museum (Budapest, Hungary)

MCVR: Museo Civico di Storia Naturale (Verona, Italy)

MHNG: Muséum d'Histoire Naturelle (Genève, Switzerland)

MLUA: Zoologisches Institut, Martin-Luther-Universität (Halle, Germany)

MNHN: Muséum National d'Histoire Naturelle (Paris, France)

MRAC: Musée Royal de l'Afrique Centrale (Tervuren, Belgium)

MRSN: Museo Regionale di Scienze Naturali (Torino, Italy)  
MZLU: Museum of Zoology, Lund University (Lund, Sweden)  
HMB: Naturhistorisches Museum (Basel, Switzerland)  
NHMW: Naturhistorisches Museum (Wien, Austria)  
NHRS: Naturhistoriska Riksmuseet (Stockholm, Sweden)  
SMNS: Staatliches Museum für Naturkunde (Stuttgart, Germany)  
ZMAS: Zoological Institute, Academy of Sciences (St.Petersburg, Russia)  
ZMHB: Museum für Naturkunde der Humboldt-Universität (Berlin, Germany)  
ZMUM: Zoological Museum, Lomonosov University (Moscow, Russia)

## RHAEBINAE

### *Rhaebus mannerheimi* MOTSCHULSKY, 1845

Distribution: From Caucasus and Transcaucasia to S.Kazakhstan; C.Turkey, N.Iran. First record from Iran given by Lukjanovitch & Ter-Minassian (1957).  
Host plant: *Niraria schoberi* var. *caspicus* (*Zygophyllaceae*).

## PACHYMERINAE

### *Caryedon acaciae* (GYLLENHAL, 1833)

Distribution: Arid regions of Africa, S.Arabia, Jordan. New for Iran.  
Material examined: S.Iran, Kuh-e Geno Mts., 600 – 1000 m, 27. – 28. IV. 1977, 3 spec. (loc.no. 318) – S.Iran, 40 km N Bandar-Abbas, 6. V. 1974, Pretzmann lgt., 6 spec. (NHMW, CKWA).  
Host plants: *Acacia kochii*, *A. nilotica nilotica*, *A. nilotica adansonii*, *A polyacantha campylacantha*, *A. tortilis*, *A. seyal*.

### *Caryedon germari* (KÜSTER, 1845)

Distribution: From Dalmatia to Israel and N.Iran, inclusively Bulgaria, Crimea, Georgia and Armenia. From Iran recorded firstly by Borowiec & Anton (1993).  
Material examined: S.Iran, Mian Jangal, 30. V. – 5. VI. 1973, 6 spec. (loc.no.223) – S.Iran, 12 km NW Kangan, 21. – 22. IV.1977, 1 spec. (loc.no.305).  
Host plant: *Lisaea heterocarpa* (*Umbelliferae*), with doubt.

### *Caryedon palaestinus* SOUTHGATE, 1976

Distribution: From Algeria to Oman, Pakistan and Turkmenistan. From Iran recorded by Southgate (1976) in a note below the description of *C. serratus* ssp. *palaestinus* types.  
Material examined: SE.Iran, 15 km NE Chah Bahar, 5. IV. 1973, 2 spec. (loc.no. 148). – S.Iran, Isin, 11. – 15. IV. 1973, 1 spec. (loc.no. 198) and 28. IV. – 6. V. 1977, 2 spec. (loc.no. 320) – S.Iran, 12 km NW Minab, 18. – 19. V. 1973, 3 spec. (loc.no. 202) – S.Iran, Bilai, 23. – 24. V. 1973, 3 spec. (loc.no. 209). – S.Iran, 7 km W Kahkom, 27. – 28. V. 1973, 1 spec. (loc.no. 215) – S.Iran, 25 km NE Khamir, 26. – 27. IV. 1977, 1 spec. (loc.no. 317) – S.Iran, 6 km W Geno, 400 m, 7. – 9. V. 1977, 1 spec. (loc.no. 323) – NE.Iran, 10 km W Sabzevar, 15. – 16. VI. 1977, 2 spec. (loc.no. 368) – S.Iran, 22 km N Bandar-Abbas, 25. IV. 1974, Pretzmann lgt., 11 spec. (NHMW, CKWA).  
Host plants: *Prosopis farcta*, *Acacia farcta*, *A tortilis tortilis*, *A. tortilis raddiana*.

### *Caryedon serratus* (OLIVIER, 1790)

Distribution: Africa; introduced into and established in several tropical regions, for example Oman and India. New for Iran.

Material examined: SE.Iran, 15 km NE Chah Bahar, 5. IV. 1973, 2 spec. (loc.no. 148) – E.Iran, Banue – Charehar, 1800 – 2000 m, 8. V. 1973, 1 spec. (loc.no. 191) – S.Iran, Isin, 11. – 15. IV. 1973, 5 spec. (loc.no. 198) and 28. IV. – 6. V. 1977, 13 spec. (loc.no. 320) – S.Iran, Hassan Lengi, 16. – 17. V. 1973, 1 spec. (loc.no. 200) – S.Iran, 20 km SE Minab, 21. V. 1973, 1 spec. (loc.no. 204) – S.Iran, 12 km NW Kangan, 21. – 22. IV. 1977, 2 spec. (loc.no. 305) – S.Iran, 15 km NE Bandar Lengeh, 25. – 26. IV. 1977, 2 spec. (loc.no. 313) – S.Iran, 6 km W Geno, 400 m, 7. – 9. V. 1977, 1 spec. (loc.no. 323).  
Host plants: *Tamarindus indica*, *Bauhinia rufescens*, *B. monandra*, *Piliostigma reticulata*, *P. thonningii*, *Cassia arereh*, *C. sieberiana* (*Caesalpiniaceae*); by allotropism *Arachys hypogea*.

***Caryedon yemenensis* DECELLE, 1979**

Distribution: Arabian Peninsula, Jordan, Israel and Pakistan. New for Iran.

Material examined: S.Iran, Isin, 28. IV. 1977, 1 spec. (loc.no. 320).

Host plant: *Cassia italica*.

**BRUCHINAE**

***Bruchus altaicus* FAHRAEUS in SCHOENHERR, 1839**

Distribution: From Caucasus southwards to Syria and eastwards to Iran and Turkmenistan. From Iran recorded firstly by Lukjanovitch & Ter-Minassian (1957) as *B.incurvatus* (Motschulsky, 1874).

Host plant: *Lathyrus tuberosus*.

Taxonomic note: The single male type of *B.altaicus*, with data “*B.altaicus* .Fald / in *Lathyrus tu / berosus*. Siberia” and “325 / 81”, is deposited in NHRS. I have not seen the type(s) of *B.incurvatus*, but detailed redescription of this species, given in Lukjanovitch & Ter-Minassian (1957), agrees completely with the studied type of *B.altaicus*.

***Bruchus atomarius* (LINNAEUS, 1761)**

Distribution: N.Africa, Europe, eastwards Iran and Kirgizia. At first recorded from Iran by Pic (1913).

Host plants: Species of *Lathyrus*, *Orobus*, *Vicia*; *Lens esculenta*, *Pisum sativum*.

***Bruchus brachialis* FAHRAEUS in SCHOENHERR, 1839**

Distribution: N.Africa, C. and S.Europe, eastwards to Iran and Siberia. First record from Iran given by Decelle & Lodos (1989).

Host plants: *Lens esculenta*, *Vicia cracca*, *V. pannonica*, *V. sativa*, *V. villosa*.

***Bruchus dentipes* BAUDI, 1886**

Distribution: Eastmediterranean, eastwards to Afghanistan and Uzbekistan. At first recorded from Iran by Baudi (1886).

Material examined: N.Iran, Golhak nr.Teheran, 1400 m, III. – V. 1961, Klapperich lgt., 2 spec. (SMNS, CKWA).

Host plants: *Vicia hyrcana*, *V. faba*.

***Bruchus emarginatus* ALLARD, 1868**

Distribution: Circummediterranean, eastwards to India inclusively Crimea and Transcaucasus. From Iran recorded firstly by Decelle & Lodos (1989).

Host plants: *Cicer arietinum*, *Lathyrus angustifolius*, *L. hirsutus*, *Pisum sativum*, *Vicia peregrina*.

***Bruchus ervi* FRÖLICH, 1799**

Distribution: Circummediterranean, eastwards to Iran. First record from Iran given by Decelle & Lodos (1989).

Host plant: *Lens esculenta*.

***Bruchus lentis* FRÖLICH, 1799**

Distribution: Circummediterranean, eastwards to Afghanistan and S.Tadzhikistan inclusively S.Ukraine, Crimea and Caucasus. At first recorded from Iran by Decelle & Lodos (1989).

Material examined: SW.Iran, Zagross Mts., Sisakht, 2400 m, 13.– 15. VI. 1973, 1 spec. (loc.no. 240) – N.Iran, Elburs Mts., Sahanak, 1700 m, 21. I. 1962, Klapperich lgt., 2 spec. (SMNS, CKWA).

Host plants: *Glycine max*, *Lens esculenta*, *Vicia ervilia*, *V. lens*.

***Bruchus lugubris* FAHRAEUS in SCHOENHERR, 1839**

Distribution: Armenia, Daghestan, Iran, Afghanistan. From Iran recorded firstly by Lukjanovitch & Ter-Minassian (1957).

Host plants: *Vicia pannonica*, *V. sativa*.

***Bruchus luteicornis* ILLIGER, 1794**

Distribution: N.Africa, C. and S.Europe, eastwards to Iran inclusively Ukraine, Crimea and Caucasus. Single record from Iran given by Schoenherr (1839). Never listed again from Iran.

Host plants: *Calycotome spinosa*, *Lathyrus* sp., *Lens esculenta*, *Vicia angustifolia*, *V. cracca*, *V. sativa*, *V. sepium*.

Note: Decelle & Lodos (1989) cite E.Turkey and Caucasus region as eastern boundary of distribution. May be, that this species was confused by Schoenherr (1839) with *B.sibiricus* Germar, 1824. From C.Asia spreading over the Caucasus region, *B.sibiricus* reaches in SE.Turkey its southernmost border of distribution. So, this species could occur in western and northern parts of Iran.

***Bruchus pisorum* (LINNAEUS, 1758)**

Distribution: Subcosmopolitan; origin in the Middle East. At first recorded from Iran by Borowiec (1987b).

Host plants: Predominately *Pisum sativum*; species of *Lathyrus* and *Vicia*.

***Bruchus rufimanus* BOHEMAN, 1833**

Distribution: Subcosmopolitan; originating from W.Asia. From Iran recorded firstly by Borowiec (1987b).

Material examined: N.Iran, Elburs Mts., Haraz nr. Abu Ask, 4. VI. 1960, Klapperich lgt., 1 spec. (SMNS).

Host plants: Mainly *Vicia faba*; additionally species of *Vicia*, *Lathyrus sativus*, *Lens esculenta*, *Pisum sativum*.

***Bruchus rugicollis* MOTSCHULSKY, 1874**

Originally described from "Conf. Perse", the identity of this species remains uncertain. Although Motschulsky (1874) compares this species with *B.laticollis* Boheman, the true identity of this species cannot be verified.

***Bruchus tristiculus* FAHRAEUS in SCHOENHERR, 1839**

Distribution: Canary Islands, Circummediterranean, eastwards to SW.Turkmenistan and Iran. Recorded from Iran by Lukjanovitch & Ter-Minassian (1957).

Host plant: *Cicer arietinum*, *Lens culinaris*, species of *Lathyrus*, *Lupinus*, *Pisum*, *Vicia*; in Turkey predominately *Vicia ervillia*.

***Bruchus tristis* BOHEMAN, 1833**

Distribution: Circummediterranean, eastwards to Iran. First record from Iran by Schilsky (1905).

Material examined: SW.Iran, Zagross Mts., Sisakht, 2400 m, 13. – 15. VI. 1973, 2 spec. (loc.no. 240).

Host plants: *Lathyrus pratensis*, *L.sativus*, *Pisum sativum*, *Vicia ervilia*, *V.faba*.

***Callosobruchus chinensis* (LINNAEUS, 1758)**

Distribution: Cosmopolitan; originating from the Far East. Recorded from Iran by Decelle & Lodos (1989).

Host plants: *Cicer arietinum*, *Dolichos lablab*, *Glycine max*, *Lathyrus* spp., *Lens esculenta*, *Phaseolus vulgaris*, *Pisum sativum*, *Vicia faba*, *V.sinensis*.

***Callosobruchus maculatus* (FABRICIUS, 1775)**

Distribution: Cosmopolitan; origin still uncertain: from Afrotropical or Oriental Region. Record from Iran given by Decelle & Lodos (1989).

Material examined: N.Iran, Teheran – Evin, 1700 m, 26. IV. – 2. VII. 1973, 2 spec. (loc.no. 260).

Host plants: *Cajanus cajan*, *Cicer arietinum*, *Dolichos lablab*, *Glycine max*, *Lens esculenta*, *Lupinus* sp., *Phaseolus vulgaris*, *Pisum sativum*, *Vicia faba*, species of *Vigna*.

***Tuberculobruchus sinaitus* (K.DANIEL, 1907)**

Distribution: N.Africa, Arabian Peninsula, Israel, Jordan. New for Iran.

Material examined: S.Iran, Isin env., Kuh-e Genu, 26. V. 1973, 1 spec. (loc.no. 213) – S.Iran, 20 km NW Borozjan, 18. IV. 1977, 1 spec. (loc.no. 297) – S.Iran, 6 km W Geno, 400 m, 7. – 9. V. 1977, 16 spec. (loc.no.323) – S.Iran, Bila'i, 40 m, 13. – 14. V. 1977, 1 spec. (loc.no. 329) – C.Iran, 30 km N Sabzevaran, 1650 m, 17. – 19. V. 1977, 1 spec. (loc.no. 337) – NE.Iran, 5 km W Sabzevar, 16. VI. 1977, 2 spec. (loc.no. 369).

Host plants: Several species of *Acacia*.

**Synonymy:** *Bruchus rabinovitchi* Pic, 1939 syn. n.

Note: The male holotype ("Sohna, 21. 6. 36", "Coll. Alfieri, Egypte") is in the Frey collection, which was recently acquired by the NHMB.

***Bruchidius apicipennis* (HEYDEN, 1892)**

Distribution: From C.Kazakhstan to Mongolia and extreme SW.China. Recorded from Iran by Borowiec (1987b).

Host plant: Still unknown.

***Bruchidius astragali* (BOHEMAN, 1829)**

Distribution: SW.Ukraine (patr.n.), N.Kazakhstan. Recorded from Iran by Borowiec (1987b).

Host plant: In high probability *Astragalus* spec.

**Synonymy:** *Bruchidius atbasaricus* Lukjanovitch & Ter-Minassian, 1954, syn. nov..

Taxonomic note: The group of *Bruchidius astragali* needs a detailed revision. Within this group there are very similar species, which caused misidentifications, for example so called *B. astragali* from S. Moravia (Pouzdřany steppe) were hitherto confounded with the true *B. varipes* (Bohemian, 1839). The single male lectotype of *B. astragali* was designed by me ("Tauria / Steven", "118 / 14", deposited in coll. NHRS). Types of *B. atbasaricus* are deposited in coll. ZMAS, from which I studied a male syntype ("Kazakhstan, Atbasar, 6. IX. 936"). See also note of *B. lindbergi* Hoffmann, below.

***Bruchidius bimaculatus* (OLIVIER, 1795)**

Distribution: Circummediterranean, eastwards to Crimea, Caucasus, Armenia, Turkey, Iraq and Israel; Borowiec (1983) cites Iran.

Host plants: Species of *Astragalus*, *Lathyrus*, *Medicago*, and *Vicia*.

**Synonymy:** *Bruchidius megiensis* Ter-Minassian, 1975, syn.nov.

Note: The male holotype of *B. megiensis* ("Megri, 27. IV. 74, B. Richter") is deposited in coll. ZMAS.

***Bruchidius bituberculatus* SCHILSKY, 1905**

Distribution: From Egypt, Sicily and Croatia eastwards to Jordan, Syria and Turkey. New for Iran.

Material examined: S.Iran, 30 km E Kazerun, 1300 m, 8. – 10. VI. 1973, 1 spec. (loc.no. 229).

Host plant: *Hymenocarpus circinatus*.

***Bruchidius bythinocerus* (REITTER, 1890)**

Distribution: Armenia, Araxes Vall., Iran. First record from Iran by Lukjanovitch & Ter-Minassian (1957).

Material examined: S.Iran, Mian Jangal, 30. V. – 5. VI. 1973, 11 spec. (loc.no. 223) – N.Iran, Teheran – Evin, 1700 m, 26. VI. – 2. VII. 1973, 1 spec. (loc.no. 260) – N.Iran, 8 km NE Ziaran, 2400 m, 10. – 16. VII. 1977, 1 spec. (loc.no. 400) – N.Iran, Golhak nr. Teheran, 1400 m, VI. – VII. 1961 and 1700 m, 9. – 23. VI. 1961, Klapperich lgt., 9 spec. (CKWA, HNHM, SMNS).

Host plant: Still unknown.

***Bruchidius canus* (GERMAR, 1824)**

This species was hitherto confounded with other species of *Bruchidius cisti* group, partially it was treated as a valid species. So all records are to be considered with reserve, inclusively the record of two specimens from Iran by Borowiec (1987b). Today, after types studies, I agree with the opinion of Aldridge & Pope (1986), who cite *B. canus* (female lectotype in coll. MLUA) as junior synonym of *B. cisti* (Fabricius, 1775) (female lectotype in coll. BMNH). Specimens of *B. canus* recorded by Decelle & Lodos (1989), Borowiec (1987b) and Borowiec & Anton (1993) belong to a species near related to *B. lutescens* (see below) of *B. cisti* group, whose identity remains uncertain until all relevant bruchid types described by Motschulsky are studied.

***Bruchidius cinerascens* (GYLLENHAL, 1833)**

Distribution: Circummediterranean, eastwards to Iran inclusively Crimea and Caucasus. Record from Iran given by Borowiec (1987b).

Material examined: W.Iran, Eskandari, 2000 m, 1. VII. 1970, 1 spec. (loc.no. 36) – N.Iran, Robat-e Quareh Bil, Wldif. Park, 1000 m, 30. VII. 1970, 3 spec. (loc.no. 78) – S.Iran, Mian Jangal, 30. V. – 5. VI. 1973, 7 spec. (loc.no. 223) – SW.Iran, 28 km N Masiri, 2230 m, 12. VI. 1973, 4 spec. (loc.no. 238) – SW.Iran, Zagross Mts., Sisakht, 2400 m, 13. – 15. VI. 1973, 31 spec. (loc.no. 240) – SW.Iran, Sisakht,

Dena, 2500 – 3000 m, 13. – 14. VI. 1973, 126 spec. (loc.no. 241) – S.Iran, 27 km E Yasuj, 2650 m, 16. VI. 1973, 100 spec. (loc.no. 244) – S.Iran, 29 km E Yasuj, 2300 m, 16. – 17. VI. 1973, 63 spec. (loc.no. 245) – S.Iran, Komehr, 2000 m, 17. VI. 1973, 6 spec. (loc.no. 246) – N.Iran, Kalat, 17. VI. 1977, 1 spec. (loc.no. 373) – NE.Iran, 30 km S Bojnurd, Assadli, 1970 m, 17. – 18. VI. 1977, 1 spec. (loc.no. 374) – N.Iran, 8 km NE Ziaran, 2400 m, 10. – 16. VII. 1977, 7 spec. (loc.no. 400).

Host plants: *Eryngium campestre*, *E. maritimum*, *E. triquetrum*.

#### ***Bruchidius dispar* (GYLLENHAL, 1833)**

Distribution: Algeria, Europe except northern part, eastwards to Crimea, Caucasus, southwards to Jordan and Israel. New for Iran.

Material examined: N.Iran, Sheykh Mahalleh, 160 m, 28. VI. – 3. VII. 1977, 1 spec. (loc.no. 390).

Host plant: *Lotus uliginosus*, in France.

#### ***Bruchidius fallaciosus* KHNZORIAN, 1959**

Distribution: Armenia, Iran (Borowiec & Anton 1993).

Material examined: N.Iran, Elburs Mts., Haraz nr. Abu Ask, 4. VI. 1960, Klapperich lgt., 9 spec. (CKWA, HNHM, SMNS).

Host plant: Still unknown.

#### ***Bruchidius foveolatus* (GYLLENHAL, 1833)**

Distribution: Circummediterranean, eastwards to Iran inclusively SW.Turkmenistan (Nebit-Dag). First record from Iran given by Hoffmann (1968).

Host plant: *Sarrothamnus scoparius*, *Genista fasselata*.

#### ***Bruchidius fulvus* (ALLARD, 1883)**

Distribution: From Lybia to Iraq and W.Pakistan. From Iran recorded by Decelle & Lodos (1989).

Material examined: SW.Iran, Shiraz, 4. VII. 1970, 1 spec. (loc.no. 42) – NW.Iran, 23 km SW Marand, 17. VIII. 1970, 1 spec. (loc.no. 97) – SE.Iran, Rask Vall. nr. Sarbaz, 3. – 4. IV. 1973, 4 spec. (loc.no. 146) – SE.Iran, 55 – 78 km NNW Tis, Pish mant, Kowr Riv., 8. IV. 1973, 2 spec. (loc.no. 151) – SE.Iran, Khash, 15. – 16. IV. 1973, 1 spec. (loc.no. 166) – C.Iran, Rafsanjan, 26. – 28. IV. 1973, 47 spec. (loc.no. 181) – S.Iran, Isin, 28. IV. – 6. V. 1977, 1 spec. (loc.no. 320) – S.Iran, Senderk, 220 m, 12. – 13. V. 1977, 1 spec. (loc.no. 327) – S.Iran, 17 km NE Rudan, road tunnel no. 7, 15. V. 1977, 50 spec. (loc.no. 331). Host plant: *Alhagi graecorum*, *Glycyrrhiza glabra*, *Medicago sativa*.

Taxonomic note: This species is a member of *Bruchidius halodendri* group, which contains very similar species.

#### ***Bruchidius glycyrrhizae* (GYLLENHAL, 1839)**

Distribution: From Hungary to Mongolia, Iran and Iraq. Record from Iran given by Borowiec (1987b) as *B. glycyrrhizae* (Fahraeus).

Material examined: C.Iran, Rafsanjan, 26. – 28. IV. 1973, 3 spec. (loc.no. 181) – E.Iran, Mohammadabad, 1600 m, 3. – 5. V. 1973, 5 spec. (loc.no. 187) – E.Iran, 33 km W Sabzvaran, 1100 m, 6. – 7. V. 1973, 1 spec. (loc.no. 189).

Host plant: *Glycyrrhiza echinata*, *G. hirsuta*, *G. uralensis*.

Taxonomic note: This species belongs to *Bruchidius halodendri* group. In the work of Lukjanovitch & Ter-Minassian (1957) there are mistakes in writing of the species name and of the author's name: *B. glycyrrhizae* Fahraeus. That was taken over by Borowiec (1987b).

***Bruchidius halodendri* (GEBLER, 1825)**

Distribution: From W.Kazakhstan to Kirgizia and SE.Uzbekistan. From N.Iran ("Aschabad") recorded by Schilsky (1905); probably this locality is actually named Ashkhabad, which is situated in Turkmenistan near the southern border to Iran.

Host plants: *Glycyrrhiza glabra*, *G. glandularis*, *Halimodendron argenteum*, *H. halodendron*; *Robinia pseudacacia* (personal communication with M.Savitsky, Moscow).

Synonymy: *Bruchidius reichardti* Lukjanovitch & Ter-Minassian, 1954, syn.nov.

Taxonomic note: The *B. halodendri* group is named after this species. Of *B. reichardti* types I studied three paratypes (two female, one male) with data "Osh, Ferg. Obl., 17. VI. 928, A. Reichardt", deposited in coll. ZMAS, of *B. halodendri* two male types with data "ad Irtin", deposited in coll. ZMHB.

***Bruchidius holosericeus* (SCHOENHERR, 1832)**

Distribution: From S.France and Italy to SW.Turkmenistan, Iran, Iraq and Israel. First record from Iran given by Schoenherr (1833).

Host plant: *Lathyrus latifolius* (in France); *Bangos phoeniculata*, with doubt.

***Bruchidius lindbergi* HOFFMANN, 1961**

Distribution: C.Asia: Kazakhstan, Uzbekistan, Tadzhikistan and Afghanistan. New for Iran.

Material examined: N.Iran, 8 km NE Ziaran, 2400 m, 10. – 16. VII. 1977, 4 spec. (loc.no. 400).

Host plant: In high probability *Astragalus* sp.

Note: Probably this species, which belongs to *Bruchidius astragali* group, was partially confounded with *B.astragali* (Bohemian) by Lukjanovitch & Ter-Minassian (1957), see also remarks of *B.astragali* (Bohemian). Types of *B. lindbergi* are deposited in coll. MZLU (holotype, paratype) and in coll. MNHN (paratypes). I studied a male paratype with data "65 km NE Herat, Col de Sabzza, 2450 m, 17. VI. 1959" from MNHN.

***Bruchidius loebli* BOROWIEC, 1985**

I studied the single female holotype, described from SW.Iran: "Fars, Dasht-e Arjan, 1650 m, 29°40'N/ 51°59'E, 1. VI. 1974, Senglet lgt." and deposited in coll. MHNG. It corresponds with the original description of *B. suratus* (Motschulsky, 1874). So, it is in high probability a junior synonym of *B.suratus*, see below.

***Bruchidius longulus* SCHILSKY, 1905**

Distribution: Circummediterranean, eastwards to Kazakhstan, Kirgizia, Tadzhikistan, Uzbekistan and Turkmenistan. New for Iran.

Material examined: SW.Iran, 28 km N Masiri, 2230 m, 12. VI. 1973, 5 spec. (loc.no. 238) – NW.Iran, 20 km SE Marand, 5. – 6. VII. 1973, 1 spec. (loc.no. 266).

Host plant: *Trigonella grandiflora*, *T.monantha*.

***Bruchidius lutescens* (BLANCHARD, 1844)**

Distribution: From Sicily and Sardinia to Israel, Iraq, Iran, Tadzhikistan, Kirgizia and Kazakhstan. From Iran recorded by Decelle & Lodos (1989)

Material examined: SW.Iran, Kazerun, 5. – 6. VII. 1970, 2 spec. (loc.no. 45) – N.Iran, C.Elburz, Kazanak, Hazar Chay, 1400 m, 20. – 21. VII. 1970, 113 spec. (loc.no. 63); same data, but S Amol, 400 m, 23. – 24. VII. 1970, 8 spec. (loc.no. 69) – N.Iran, Behshahr, 25. VII. 1970, 1 spec. (loc.no. 72) –

NW.Iran, 20 km SE Marand, 5. – 6. VII. 1973, 96 spec. (loc.no. 266) – SW.Iran, 60 km NW Andimeshk, Pol-e Tang, 10. – 11. IV. 1977, 2 spec. (loc.no. 284) – N.Iran, 8 km NE Ziaran, 2400 m, 10. – 16. VII. 1977, 3 spec. (loc.no. 400) – N.Iran, Golhak nr. Teheran, 1400 m, VI. – VII. 1961, Klapperich lgt., 4 spec. (SMNS) – N.Iran, Elburz Mts., Haraz nr. Abu Ask, 4. VI. 1960, Klapperich lgt., 1 spec. (SMNS) – N.Iran, Elburz Mts., Schalons Pass, 2600 – 2900 m, 2. IX. 1960, Klapperich lgt., 1 spec. (CKWA). Host plant: *Onobrychis caput-galli*.

***Bruchidius martinezii* (ALLARD, 1868)**

At first recorded from Iran by Borowiec (1987b), but also cited from other E.Mediterranean localities inclusively S.Ukraine, Crimea and Kazakhstan (Lukjanovitch & Ter-Minassian 1957, Karapetjan 1985, Decelle & Lodos 1989, Borowiec & Anton 1993). However, these specimens were erroneously identified as *B. martinezii*. Closely related to *B. varius* (Olivier), see below, their real identity remains uncertain until relevant Motschulsky types of Bruchidae are completely studied. The true *B.martinezii* is distributed in SW.Mediterranean Region, only.

***Bruchidius monstrosicornis* (PIC, 1904)**

Distribution: Greece, Turkey, Iran. First record from Iran given by Hoffmann (1956) in description of *B. cinerascens* ssp. *carthami* (synonymized by Decelle & Lodos 1989).

Material examined: Female type “*Bruchidius cinerascens carthami Hoffmann*”, “Iran, Rte. De Chemchak, s / Carthamus, 1800 m, 10. VI. 1956, G.Remaudiere”, (MNHN).

Host plant still unknown.

***Bruchidius myobromae* (MOTSCHULSKY, 1874)**

Distribution: From E.Ukraine and Crimea to E.Kazakhstan. From Iran recorded by Borowiec (1987b) as *B. scutulatus* (Baudi, 1890).

Host plant: *Astragalus dasyanthus*, *A. utriger*.

Taxonomic note: It is a member of *Bruchidius astragali* group. The male type of *Mylabris virgata* var. *scutulata* Baudi, 1890 from “Turkestan”, designed by me, is deposited in coll. MRSN. It corresponds with the redescription of *B. myobromae* given by Lukjanovitch & Ter-Minassian (1957). I didn't see the type(s) of *B. myobromae*.

***Bruchidius nalandus* (PIC, 1927)**

Distribution: From India and Sri Lanka to Thailand and Indonesia. New for Iran.

Material examined: SE.Iran, 15 km NE Chah Bahar, 5. IV. 1973, 8 spec. (loc.no. 148) – S.Iran, 22 km N Bandar Abbas, 25. IV. 1974, Pretzmann lgt., 7 spec. (NHMW, CKWA).

Host plant: *Tephrosia candida*, *T. purpurea*.

***Bruchidius nanus* (Germar, 1824)**

Distribution: N.Africa, S.Europe, eastwards to Afghanistan inclusively Crimea and Caucasia. First record from Iran given by Schilsky (1905): “im nördlichen Persien, (Astrabad...)” (now Gorgan).

Host plant: Species of *Genistae*, especially *Spartium junceum*.

***Bruchidius obscuripes* (GYLLENHAL, 1839)**

Distribution: Circummediterranean, Caucasia, Armenia, Iraq, Afghanistan. New for Iran.

Material examined: N.Iran, Abyek, 24. VI. 1970, 1 spec. (loc.no. 30) – S.Iran, 28 km N Masiri, 1650 m,

12. VII. 1973, 1 spec. (loc.no. 236) – S.Iran, Sisakht, Dena, 2500 – 3000 m, 13. – 14. VI. 1973, 2 spec. (loc.no. 241).

Host plant: *Veronica orientalis*, with doubt.

***Bruchidius picipes* (GERMAR, 1824)**

Distribution: Algeria, S.Europe, eastwards to Afghanistan inclusively Caucasia. First record from Iran given by Borowiec (1986) as *B. tarsalis* (Gyllenhal, 1833), synonymized by Borowiec (1987a).  
Host plant: *Trifolium incarnatum*, in France.

***Bruchidius poecilus* (GERMAR, 1824)**

Distribution: Circummediterranean, eastwards to Israel and Iran inclusively Crimea and Caucasia. From Iran recorded firstly by Decelle & Lodos (1989).  
Material examined: SW.Iran, 28 km N Masiri, 2230 m, 12. VI. 1973, 3 spec. (loc.no. 238) – SW.Iran, 60 km NW Andimeshk, Pol-e Tang., 10. – 11. IV. 1977, 1 spec. (loc.no. 284).  
Host plant still unknown.

***Bruchidius pusillus* (GERMAR, 1824)**

Distribution: S.Europe, eastwards to Iran inclusively Caucasia, southwards to Israel and Jordan. At first reliably recorded from Iran by Borowiec (1987b).  
Material examined: N.Iran, Sheykh Mahalleh, 160 m, 28. IV. – 3. VII. 1977, 1 spec. (loc.no. 390) – N.Iran, Golhak nr. Teheran, 1400 m, VI. – VII. 1961, Klapperich lgt., 2 spec. (SMNS) – N.Iran, Elburs Mts., Darband Vall., 2400 m, 26. V. 1961, Klapperich lgt., 1 spec. (SMNS).  
Host plant: *Vicia* sp., in Greece.

***Bruchidius quinqueguttatus* (OLIVIER, 1795)**

Distribution: SE.Europe, eastwards to Iran inclusively Caucasia and Armenia, southwards to Israel and Jordan. First record from Iran given by Pic (1904) in the description of *Laria quinqueguttata* var.*laterifus* (synonymized by Luca 1964).

Material examined: W.Iran, 50 km W Kuhrang, Zayandeh Rud, 2200 m, 1. VII. 1970, 1 spec. (loc.no. 38) – NW.Iran, 26 km SSE Khoy, 6. VII. 1973, 4 spec. (loc.no. 267) – N.Iran, Golhak nr. Teheran, 1400 m, VI. – VII. 1961, Klapperich lgt., 1 spec. (SMNS).

Host plant: *Cicer arietinum*, *Vicia faba*, *V. sativa*.

**Synonymy:** *Bruchus quadriguttatus* Boheman, 1829, syn.nov.

Note: The single female type of *B. quadriguttatus* with data “Nov.Holland Schneider” is deposited in coll. NHRS.

***Bruchidius reitteri* SCHILSKY, 1906**

Distribution: E.Turkey, Armenia, Araxes Vall., “Kasikoporan”; from Iran firstly recorded by Borowiec (1987b).

Host plant: Probably *Astragalus* spec.

Taxonomic note: This species belongs to *Bruchidius astragali* group. Male lectotype and two female paralectotypes with data “Caucasus, Araxesthal, Leder.Reitter” and male paralectotype with data “Russ. Kurdist., Kasikoporan, E. König”, deposited in coll.ZMHB; male and female paralectotype with data “Caucasus, Araxesthal, Leder.Reitter”, deposited in coll. HNHM, all types designed by me.

***Bruchidius richteri* LUKJANOVITCH & TER-MINASSIAN, 1954**

Distribution: Armenia, Araxes Valley; from Iran firstly cited by Borowiec (1987b).

Host plant: Probably *Astragalus* spec.

Taxonomic note: It is a member of *B.astragali* group. Types are deposited in coll. ZMAS, from which I saw a male syntype (Woghaberd, 23. V. 933, Richter).

***Bruchidius robustus* LUKJANOVITCH & TER-MINASSIAN, 1957**

Distribution: Armenia, Azerbaizhan, Jordan. New for Iran.

Material examined: N.Iran, Abyek, 24. VI. 1970, 1 spec. (loc.no. 30) – S.Iran, 30 km E Kazerun, 1300 m, 8. – 10. VI. 1973, 2 spec. (loc.no. 229).

Host plant still unknown.

***Bruchidius sahelicus* in litt. (DECCELLE 1979)**

Distribution: N.Africa, Arabian Peninsula, Israel, Jordan. New for Iran.

Material examined: S.Iran, 15 km NE Bandar Lengeh, 25. – 26. IV. 1977, 2 spec. (loc.no. 313) – S.Iran, Bila'i, 40 m, 13. – 14. V. 1977, 1 spec. (loc.no. 329).

Host plant: About ten species of *Acacia*.

Note: The description of this species stands out until Motschulsky types are completely studied. It is near related to *B.arabicus* Decelle known from S.Arabia and Israel.

***Bruchidius seminarius* (LINNAEUS, 1767)**

Distribution: C.Europe, Circummediterranean, eastwards up to Iran. First trustful record from Iran given by Borowiec (1987b).

Material examined: S.Iran, 28 km N Masiri, 1650 m, 12. VI. 1973, 1 spec. (loc.no. 236); same data, but 2230 m, 18 spec. (loc.no. 238) – S.Iran, N Masiri, Kushk, 1800 m, 12. VI. 1973, 46 spec. (loc.no. 237) – SW.Iran, Kohkiluyeh, Arow, 30°35'N/50°43'E, 24. V. 1974, Senglet lgt., 1 spec. (MHNG).

Host plant: *Coronilla varia*, *Lotus corniculatus*, *L. uliginosus*, species of *Ornithopus*, *Scorpiurus muricatus*.

***Bruchidius spathopus* KHNZORIAN, 1959**

Distribution: Armenia. New for Iran.

Material examined: N.Iran, 8 km NE Ziaran, 2400 m, 10. – 16. VII. 1977, 4 spec. (loc.no. 400).

Host plant: Probably *Astragalus* spec.

Taxonomic note: This species belongs to *Bruchidius astragali* group.

***Bruchidius steveni* (GYLLENHAL, 1839)**

Distribution: From SW.Ukraine, E.Transcaucasia, Armenia and E.Turkey to N.Iran,Turkmenistan, Tadzhikistan, Kirgizia and E.Kazakhstan. From Iran recorded firstly by Lukjanovitch & Ter-Minassian (1957) as *B.orchesioides* (Heyden, 1892).

Host plant: With doubt species of *Prangos (Umbelliferae)*.

**Synonymy:** *Mylabris (Bruchus) orchesioides* Heyden, 1892 syn. n.

Note: Of *B. steveni* the female type ("Br.Umbellatar. / Stev: e. Tauria / Steven") and the female paratype ("Br.Umbellata. / rum. Steven. / e Tauria. Stev."), deposited in NHRS. Male lectotype, female and male paralectotypes of *M. orchesioides* Heyden ("Margelian, Staudgr.") designated by the author and deposited in DEIC. Up to now, *B. steveni* was erroneously treated as a synonym of *B. holosericeus* (Schoenherr, 1832), firstly by Schilsky (1905).

### ***Bruchidius suratus* (MOTSCHULSKY, 1874)**

Distribution: Turkey, Iran and Israel. First record from Iran probably by Borowiec (1985e) as *B. loebli*, see above.

Material examined: S.Iran, NW Shul, 2100 m, 17. VI. 1973, 1 spec. (loc.no. 247).

Host plant still unknown.

Synonymy: ? *Bruchidius loebli* Borowiec, 1985e (see above).

Taxonomic note: I didn't see the type(s) of *B. suratus* (Motschulsky). But its original description includes a comparison with *B. seminarius* (Linnaeus) as closely related species sensu Motschulsky. *B. suratus* is markedly characterized by nearly complete black legs and antenna as well as scarcely spotted dark brown vestiture. These characters distinctly distinguish *B. suratus* from all other species of the *Bruchidius seminarius* group.

### ***Bruchidius tibialis* (BOHEMAN, 1829)**

Distribution: Circummediterranean, eastwards to Iran inclusively Crimea and Caucasia. From Iran recorded firstly by Hoffmann (1968).

Material examined: N.Iran, S.Coast Caspian Sea, Schalons Vall., 100 m, 20. VI. 1961, Klapperich lgt., 1 spec. (SMNS).

Host plant: ? *Calycotome spinosa*.

### ***Bruchidius tragacanthae* (OLIVIER, 1795)**

Distribution: Iran (patr.n.).

Material examined: Male lectotype "Persia Ol. / Tragacanthae Ol.", male paralectotype with same data, both in coll. ZMHB.

Host plant: In high probability *Astragalus* spec.

Taxonomic note: *B. tragacanthae* belongs to the *Bruchidius astragali* group. No additional specimens of this species are known.

### ***Bruchidius tuberculatus* (HOCHHUT, 1847)**

Distribution: Circummediterranean, eastwards to Afghanistan, Tadzhikistan and Uzbekistan. First record from Iran given by Borowiec (1987b).

Material examined: NW.Iran, Maku, 19. – 20. VI. 1970, 1 spec. (loc.no. 25) – NW.Iran, Qazvin, 24. VI. 1970, 1 spec. (loc.no. 29) – NW.Iran, 10 km NW Sardhat, 4. III. 1973, 10 spec. (loc.no. 121) – E.Iran, Deh Bakri, 1700 – 1750 m, 30. IV. – 3. V. 1973, 1 spec. (loc.no. 186) – SW.Iran, Sisakht, Dena, 2500 – 3000 m, 13. – 14. VI. 1973, 1 spec. (loc.no. 241) – NW.Iran, 20 km SE Marand, 5. – 6. VII. 1973, 10 spec. (loc.no. 266) – N.Iran, Teheran – Evin, Alborz, 1700 – 2000 m, 2. – 7. IV. 1977, 1 spec. (loc.no. 276) – N.Iran, Kalat, 17. VI. 1977, 1 spec. (loc.no. 373) – N.Iran, 20 km NW Dasht, Golestan Forest, 530 m, 19. – 21. VI. 1977, 2 spec. (loc.no. 376) – N.Iran, Elburz Mts., Wellenbachatal, 1700 m, 13. – 20. X. 1961, Klapperich lgt., 1 spec. (SMNS).

Host plant: *Centaurea iberica* (*Compositae*), with doubt.

### ***Bruchidius turkmenicus* ANTON, 1996**

Distribution: Turkmenistan. New for Iran.

Material examined: SE.Iran, Khash, 15. – 16. IV. 1973, 5 spec. (loc.no. 166) – C.Iran, Rafsanjan, 26. – 28. IV. 1973, 4 spec. (loc.no. 181) – C.Iran, Fahraj, 2. VI. 1977, 3 spec. (loc.no. 354) – NE.Iran, 5 km W Sabzevar, 16. VI. 1977, 2 spec. (loc.no. 369).

Host plant still unknown; probably halophile *Leguminosae*.

Taxonomic note: It belongs to the *Bruchidius halodendri* group.

***Bruchidius uberatus* (FAHRAEUS in SCHOENHERR, 1839)**

Distribution: Arid regions of Africa. New for Iran.

Material examined: S.Iran, Isin env., Kuh-e Genu, S slope, 26. V. 1973, 1 spec. (loc.no. 213).

Host plant: Predominately *Acacia arabica* and *A. nilotica*; *Abutilon* sp., *Dolichos lablab*.

Note: The two specimens recorded from India by Mukerji & Chatterjee (1951) are misidentifications (Decelle 1966). Nevertheless, manifestation of *B.uberatus* in S.Iran is possible. For that the single Iranian record needs confirmation.

***Bruchidius varius* (OLIVIER, 1795)**

Distribution: C.Europe, Circummediterranean, eastwards to Israel and extreme NW.Afghanistan inclusively Crimea and Caucasia. From Iran recorded firstly by Decelle & Lodos (1989).

Material examined: N.Iran, Sheikh Mahalleh, 160 m, 28. VI. – 3. VII. 1977, 3 spec. (loc.no. 390).

Host plant: *Galega officinalis*, *Genista cinerea*, *G. liniifolia*, *Lotus corniculatus*, species of *Trifolium*.

***Bruchidius virgatus* (FAHRAEUS in SCHOENHERR, 1839)**

Distribution: Caucasia, Turkey, N.Iran, Syria, Lebanon. Recorded from N.Iran by Lukjanovitch & Ter-Minassian (1957): "Elburz, Demavend".

Host plant: Probably *Astragalus talyshensis*.

**Synonymy:** *Bruchidius brignolii* ZAMPETTI, 1979, syn.nov.

Taxonomic note: It is a member of *Bruchidius astragali* group. The female holotype and the female paratype of *B. brignolii* ("Libano / leg.Osella", "Les Cedres / 24/VI/71 / 2200 m"), deposited in coll.MCVR, completely correspond with the female type of *B. virgatus* ("Causasus. / Bartels", "315 / 80") deposited in coll. NHRS. So, *B. brignolii* is a junior synonym of *B. virgatus*.

***Bruchidius* sp. prope *bagdassarjani* LUKJANOVITCH & TER-MINASSIAN, 1954**

Material examined: N.Iran, 8 km NE Ziaran, 2400 m, 10. – 16. VII. 1977, female spec. (loc.no. 400).

Taxonomic note: The identity of this species, which belongs to *Bruchidius astragali* group, remains uncertain until a male specimen is available. This fact applies to the following *B.* sp. prope...

***Bruchidius* sp. prope *prolongatus* LUKJANOVITCH & TER-MINASSIAN, 1954**

Material examined: N.Iran, 8 km NE Ziaran, 2400 m, 10. – 16. VII. 1977, female spec. (loc.no. 400).

Taxonomic note see *B.* sp. prope *bagdassarjani*.

***Bruchidius* sp. prope *reitteri* SCHILSKY, 1906**

Material examined: NE.Iran, 25 km SW Kalat-e Naderi, 600 m, 11. – 12. VI. 1977, female spec. (loc.no. 363).

Taxonomic note see *B.* sp. prope *bagdassarjani*.

***Bruchidius* sp. prope *richteri* LUKJANOVITCH & TER-MINASSIAN, 1954**

Material examined: N.Iran, 8 km NE Ziaran, 2400 m, 10. – 16. VII. 1977, female spec. (loc.no. 400).

Taxonomic note see *B.* sp. prope *bagdassarjani*.

***Bruchidius* sp. prope *sivasensis* ZAMPETTI, 1984**

Material examined: SW.Iran, Sisakht, Dena, 2500 – 3000 m, 13. – 14. VI. 1973, female spec. (loc.no. 241).

Taxonomic note see *B.* sp. prope *bagdassarjani*.

*Palaeoacanthoscelides gilvus* (GYLLENHAL, 1839)

Distribution: N.Africa, S.Europe, eastwards to Iraq, Afghanistan, Turkmenistan, Tadzhikistan and E.Kazakhstan. Record from Iran given by Decelle & Lodos (1989).

Material examined: NW.Iran, 20 km SE Marand, 5. – 6. VII. 1973, 2 spec. (loc.no. 266).

Host plant: *Hedysarum capitatum* in Algeria, *H. coronarium* in Sicily, *H. spinosissimum* in France; *Onobrychis radiata*, *O. sativa*, *O. schahuensis* in Iraq; *O. vaginalis*, *O. vicifolia* in Sicily.

*Acanthoscelides obtectus* (SAY, 1831)

Distribution: Cosmopolitan; origin in Nearctic Region. Recorded from Iran by Fahraeus (1839) as *B. irresectus* (synonymized by Riley 1892).

Host plant: Predominately *Phaseolus* spp.; *Cicer arietinum*, *Glycine max*, *Lens esculenta*, *Pisum sativum*, *Vicia faba*, species of *Vigna*.

AMBLYCERINAE

*Spermophagus borowieci* ANTON, 1996

Distribution: SW.Pakistan. New for Iran.

Material examined: SE.Iran, 21 km SW Saravan, 29. III. 1973, 2 spec.(loc.no. 140) – SE.Iran, Rask Vall. nr. Sarbaz, 3. – 4. IV. 1973, 1 spec. (loc.no. 146) – SE.Iran, 13 km SSE Nikshahr, 8. – 9. IV. 1973, 1 spec. (loc.no. 152) – SE.Iran, 25 km W Ghasre-ghand, 9. – 10. IV. 1973, 1 spec. (loc.no.153) – SE.Iran, 9 km S Espakeh, 10. IV. 1973, 2 spec. (loc.no. 155) – E.Iran, Mohammadabad, 1600 m, 3. – 5. V. 1973, 4 spec. (loc.no. 187) – S.Iran, Mian Jangal, 30. V. – 5. VI. 1973, 4 spec. (loc.no. 223) – S.Iran, NW Shul, 2100 m, 17. VI. 1973, 2 spec. (loc.no. 247).

Host plant still unknown.

*Spermophagus calystegiae* (LUKJANOVITCH & TER-MINASSIAN, 1957)

Distribution: W.Palaearctis except the extreme North, eastwards to S.Arabia, Iraq, Afghanistan, Tadzhikistan and E.Kazakhstan. First record from Iran given by Borowiec (1985a).

Material examined: N.Iran, Golhak nr. Teheran, 1400 m, III – V. 1961, Klapperich lgt., 4 spec. (SMNS, CKWA); same data, but IV. – VIII. 1961, 21 spec. (SMNS, CKWA); same data, but IX. – X. 1961, 7 spec. (SMNS, CKWA) – N.Iran, Elburz Mts., Darband Vall., 2400 m, 26. V. 1961, Klapperich lgt., 1 spec. (SMNS).

Host plant: *Convolvulus sepium*, *C. soldanella*.

*Spermophagus canus* BAUDI, 1887

Distribution: From Kazakhstan to W.China, N.Iran, Tadzhikistan and Pakistan. From Iran recorded firstly by Lukjanovitch & Ter-Minassian (1957).

Material examined: SE.Iran, 40 km NW Paskuh, 29. III. 1973, 1 spec. (loc.no. 139) – SE.Iran, 9 km S Espakeh, 10. IV. 1973, 2 spec. (loc.no. 155) – E.Iran, 13 km WSW Kerman, 29. IV. 1973, 1 spec. (loc.no. 182) – E.Iran, Deh Bakri, 1700 – 1750 m, 30. IV. – 3. V. 1973, 1 spec. (loc.no. 186) – E.Iran, Mohammadabad, 1600 m, 3. – 5. V. 1973, 4 spec. (loc.no.187) – S.Iran, Mian Jangal, 30. V. – 5. VI. 1973, 23 spec. (loc.no. 223) – S.Iran, 30 km, E Kazerun, 1300 m, 8. – 10. VI. 1973, 9 spec. (loc.no. 229) – SW.Iran, 28 km N Masiri, 2230 m, 12. VI. 1973, 1 spec. (loc.no. 238) – S.Iran, NW Shul, 2100 m, 17. VI. 1973, 1 spec. (loc.no. 247) – SW.Iran, Pol-e Tang, 60 km NW Andimeshk, 10. – 11. IV. 1977, 1 spec. (loc.no. 284) – S.Iran, 15 km NE Bandar Lengeh, 25. – 26. IV. 1977, 1 spec. (loc.no. 313) – C.Iran, Fahraj, 2. VI. 1977, 1 spec. (loc.no. 354).

Host plant still unknown.

***Spermophagus caucasicus* BAUDI, 1886**

Distribution: From Transcaucasia, Turkey and Israel (Mt.Hermon) to SW.Pakistan, from E.Uzbekistan and E.Kazakhstan to Korea, NW. Thailand (Mae Hong Son province) and SE.China (Shaanxi, N.Yunnan). First record from Iran given by Borowiec (1985a).

Material examined: N.Iran, Elburs Mts., Darband Vall., 2400 m, 26. V. 1961, Klapperich lgt., 1 spec. (SMNS) – N.Iran, Elburs Mts., Emaneh, 2500 m, 24. – 26. VI. 1960, Klapperich lgt., 2 spec. (SMNS).

Host plant: Probably *Calystegia sepium*.

***Spermophagus decellei* BOROWIEC, 1985**

Distribution: Iran (patr.n.).

Material examined: Male holotype and female allotype: SW.Iran, Fars, Dasht-e Arjan, 29°40'N/ 51°59'E, 1650 m, 1. VI. 1974, Senglet lgt. (MHNG) – E.Iran, Mohammadabad, 1600 m, 3. – 5. V. 1973, 21 spec. (loc.no. 187) – S.Iran, Mian Jangal, 30. V. – 5. VI. 1973, 1 spec. (loc.no. 223) – SW.Iran, Zagross Mts., Sisakht, 2400 m, 13. – 15. VI. 1973, 3 spec. (loc.no. 240).

Host plant still unknown.

***Spermophagus humilis* DECELLE, 1970**

Distribution: Tropical regions of Africa, Madagascar, Oman, SW.Pakistan. New for Iran.

Material examined: S.Iran, 12 km NW Minab, 18. – 19. V. 1973, 1 spec. (loc.no. 202) – S.Iran, 20 km SE Minab, 21. V. 1973, 1 spec. (loc.no. 204).

Host plant still unknown.

***Spermophagus kuesteri* SCHILSKY, 1905**

Distribution: Circummediterranean, eastwards to Jordan, NE.Afghanistan, E.Uzbekistan and Kirgizia. At first recorded from Iran by Borowiec (1983).

Material examined: NW.Iran, Maku, 19. – 20. VI. 1970, 2 spec. (loc.no. 25) – SE.Iran, 9 km S Espakeh, 10. IV. 1973, 3 spec. (loc.no. 155) – S.Iran, Mian Jangal, 30. V. – 5. VI. 1973, 1 spec. (loc.no. 223) – S.Iran, 30 km E Kazerun, 1300 m, 8. – 10. VI. 1973, 1 spec. (loc.no. 229) – NW.Iran, 10 km NW Zanjan, 4. – 5. VII. 1973, 1 spec. (loc.no. 264) – NW.Iran, 20 km SE Marand, 5. – 6. VII. 1973, 24 spec. (loc.no. 266) – E.Iran, Kuh – e Khvajeh, 3. – 5. VI. 1977, 2 spec. (loc.no. 357) – NW.Iran, 25 km SE Shahpur, 27. – 28. VII. 1977, 1 spec. (loc.no. 406) – N.Iran, Karaj nr. Teheran, 1450 m, 25. VI. 1960, Klapperich lgt., 3 spec. (SMNS) – N.Iran, Elburs Mts., Wallenbachtal, 1700 m, 13. – 20. X. 1961, Klapperich lgt., 3 spec. (SMNS, CKWA) – N.Iran, Elburs Mts., Enameh, 2000 m, 23. IX. 1960, Klapperich lgt., 1 spec. (SMNS).

Host plant: *Calystegia sepium*; species of *Convolvulus*, especially *C. arvensis*; with doubt *Centaurea iberica*.

***Spermophagus sericeus* (GEOFFROY, 1785)**

Distribution: W.Palaearctic, eastwards to Afghanistan, Tadzhikistan, N.China and C.Mongolia. First trustful record from Iran given by Decelle (1983).

Material examined: N.Iran, Elburs Mts., Wallenbachtal, 1700 m, 13. – 20. X. 1961, Klapperich lgt., 5 spec. (SMNS, CKWA) – N.Iran, Elburs Mts., Laschkarah Vall., 1800 m, VII. – X. 1961, Klapperich lgt., 1 spec. (CKWA) – N.Iran, Golhak nr. Teheran, 1700 m, 9. – 23. VI. 1961, Klapperich lgt., 1 spec. (SMNS) – N.Iran, Karaj nr. Teheran, 1450 m, 25. V. 1960, Klapperich lgt., 1 spec. (CKWA).

Host plant: Species of *Calystegia* and *Convolvulus*, predominately *Calystegia sepium* and *Convolvulus arvensis*.

### *Spermophagus turanicus* (LUKJANOVITCH & TER-MINASSIAN, 1957)

Distribution: Greece (Rhodos), Lebanon, Jordan, Turkey, Iran, NE.Uzbekistan. First record from Iran given by Borowiec (1985a) as *S. caricus* Decelle, 1982.

Material examined: SW.Iran, Shiraz, 4. VII. 1970, 1 spec. (loc.no. 42) – SE.Iran, 21 km SW Saravan, 29. III. 1973, 4 spec. (loc.no. 140) – SE.Iran, 10 km SW Zabeli, 31. III. 1973, 1 spec. (loc.no. 142) – SE.Iran, 25 km W Ghasre-ghand, 9. – 10. IV. 1973, 3 spec. (loc.no. 153) – E.Iran, 33 km W Sabzvaran, 1100 m, 6. – 7. V. 1973, 1 spec. (loc.no. 189) – S.Iran, Mian Jangal, 30. V. – 5. VI. 1973, 4 spec. (loc.no. 223) – S.Iran, 30 km E Kazerun, 1300 m, 8. – 10. VI. 1973, 1 spec. (loc.no. 229) – S.Iran, NW Shul, 2100 m, 17. VI. 1973, 8 spec. (loc.no. 247) – N.Iran, Golhak nr. Teheran, 1400 m, VI. – VII. 1961, and 9. – 23. VI. 1961, Klapperich lgt., 7 spec. (SMNS, CKWA).

Host plant still unknown.

**Synonymy:** *Spermophagus caricus* Decelle, 1982, syn.nov.

Taxonomic note: The single holotype of *Euspermophagus turanicus* Lukjanovitch & Ter-Minassian (Karzhantau range, 21. VII. (19)37; deposited in coll. ZMAS) indeed is a female but not a male as mentioned in the original description. Against that both types of *Spermophagus caricus* are males (holotype "Turkey, Mugla, 5. VI. 1973, Lodos lgt.", deposited in coll. MRAC; paratype "Turkey, Bilecik, 500 m, 14. VII. 1972, Osella lgt.", deposited in coll. MCVR). The external morphology of both species is similar. Unfortunately the vestiture of *S. turanicus* type is destroyed, whilst *S. caricus* types show a very characteristic elytral pattern. As morphological structures of ovipositors also define species within the genus *Spermophagus*, I compared the ovipositor of *S. turanicus* type with those of typical females of *S. caricus* from Rhodos (Greece). They are identic.

### *Zabrotes subfasciatus* (BOHEMAN, 1833)

Distribution: Subcosmopolitan; origin in northern S.America. First record from Iran given by Fahraeus (1839) in the description of *Bruchus nesapius* (synonymized by Decelle & Lodos 1989).

Host plant: Predominately *Phaseolus vulgaris*; *Cicer arietinum*, *Pisum sativum*, *P. arvense*, *Vicia faba*.

## CONCLUSIONS

In the present paper are listed 80 Bruchidae species, of which 22 are recorded new for Iran including species of *Bruchidius astragali* group with uncertain identity. Not included are species, which I cannot establish (*B. rugicollis* (Mots.)) or from which I think it would be otherwise reported twice (*B. loebli* Bor.).

Geographical situation of Iran makes faunistical investigations very interesting. On the one hand widely distributed species are represented. Including four eurosibirian, 20 holomediterranean and 14 easternmediterranean elements are predominating in the northern and western Iran, at most being common in lower altitudes and often reaching their easternmost area of distribution here. From the north 10 centralasiatic steppe elements advance partly up to S.Iran. At costal zone of SE.Iran occur some common afrotropical elements (*Caryedon acaciae* (Gyll.), *C. serratus* (Ol.), *Bruchidius uberatus* (Fahr.), *Spermophagus humilis* Dec.). From Pakistan, along the coast of Gulf of Oman, a single, widely distributed oriental element is spreading into and reaching its western border of distribution: *Bruchidius nalandus* (Pic.).

On the other hand there is to find the contrary extreme in strongly located elements. Hitherto known as Iranian endemits, *Bruchidius tragacanthae* (Gebl.) is reported without exact locality, whilst *Spermophagus decellei* Bor. is recorded from four precise localities in southern half of Iran. May be we have to correct this view, when the scarcely known bruchid fauna of Pakistan and especially that of Afghanistan is more intensively studied. Going across frontier, *S. borowieci* Ant. only occurs in Baluchistan (SE.Iran and SW.Pakistan). Species of *Bruchidius astragali* group are often restricted on small geographical areas in mountain regions (for example *B. spathopus* Khnzor.). Most species are to find in Caucasus, E.Turkey, W. and N.Iran, Afghanistan and C.Asia. Generally, they seem to have larval development strictly in species of *Astragalus* (Leguminosae), with which they coevolute. More inves-

tigations are necessary to unriddle enigmatic species of *B. astragali* group from Iran as well as neighbouring territories.

Worth of mentioning are the species distributed in sindo-sahelian zone. Five species occur in Iranian territory, of which *Bruchidius sahelicus* Dec. and *Tuberculobruchus sinaitus* (K.Dan.) reach distribution borders in S.Iran, whilst *B. fulvus* (All.) as well as *Caryedon yemenensis* Dec. pass to Pakistan, and *C. palaestinicus* Sg. to Turkmenistan.

As omnipresent as they are, cosmopolitan species like *Callosobruchus chinensis* (L.), *C. maculatus* (F.) and *Acanthoscelides obtectus* (Say) are to find in Iran besides subcosmopolitan *Bruchus pisorum* (L.), *B. rufimanus* Boh. and *Zabrotes subfasciatus* (Boh.).

These facts turn out a rich bruchid fauna in Iran with mainly mediterranean character.

Last but not least, some species listed in papers about bruchid fauna of neighbouring countries may certainly be found in Iran, especially those known from Armenia (Karapetjan 1985), Caucasia and Turkmenistan (Lukjanovitch & Ter-Minassian 1957, Anton 1996a), and Turkey (Decelle & Lodos 1989, Borowiec & Anton 1993).

#### ACKNOWLEDGEMENTS

I wish to express my cordial thanks to Dr. J. Jelínek (Department of Entomology, The National History Museum, Praha) for making the material of Iran expeditions available. Thanks are also due to all curators of institutions mentioned above for the loan of types as well as for making Iranian material available.

#### REFERENCES

- Abdul-Rassoul, M. S., Othman, N. Y. & Dawah, H. A. (1986): Observation on the biology, host plants and distribution of Iraqi Bruchidae (Insecta, Coleoptera). – *J. Biol. Sci. Res.* 17: 207–222.
- Aldridge, R. J. W., Pope, R. D. (1986): The British species of *Bruchidius* Schilsky (Coleoptera: Bruchidae). – *Entomol. Gazette* 37: 181–193.
- Anton, K.-W. (1994a): The Bruchidae (Coleoptera) of Saudi Arabia, with Description of Two New Species. – *Fauna of Saudi Arabia* 14: 97–104.
- Anton, K.-W. (1994b): The Bruchidae (Coleoptera) of Oman, with Descriptions of a New Genus and Two New Species. – *Fauna of Saudi Arabia* 14: 105–112.
- Anton, K.-W. (1996a): Two new species of the *Bruchidius halodendri* group from Turkmenia (Coleoptera: Bruchidae: Bruchinae). – *Genus* 7(3): 475–480.
- Anton, K.-W. (1996b): *Spermophagus borowieci* n. sp. from Pakistan (Coleoptera: Bruchidae: Amblycerinae). – *Genus* 7(3): 481–483.
- Baudi, F. (1886): *Mylabridum se Bruchidum* (Lin. Schoen All.) Europae et finitimarum regionum faunae recensitio. – *Dtsch. Entomol. Z.* 30: 385 – 416.
- Borowiec, L. (1983): Survey of seed-beetles of Bulgaria (Coleoptera, Bruchidae). – *Pol. Pismo Entomol.* 53: 107–127.
- Borowiec, L. (1985a): Notes on the Palaearctic *Spermophagus* Schoenherr (Coleoptera, Bruchidae, Amblycerinae), with description of two new species. – *Pol. Pismo Entomol.* 55: 3–24.
- Borowiec, L. (1985b): New synonym and new distributional data of Palaearctic seed-beetles (Coleoptera, Bruchidae). – *Pol. Pismo Entomol.* 55: 205–207.
- Borowiec, L. (1985c): The status of *Bruchus tragacanthae* Olivier (Coleoptera, Bruchidae). – *Pol. Pismo Entomol.* 55: 245–249.
- Borowiec, L. (1985d): Two new species of *Spermophagus* Schoenherr (Coleoptera, Bruchidae, Amblycerinae) from Israel and Iran. – *Pol. Pismo Entomol.* 55: 463–468.
- Borowiec, L. (1985e): The seminarius-group of *Bruchidius* Schilsky (Coleoptera, Bruchidae), with description of three new species. – *Pol. Pismo Entomol.* 55: 767–779.
- Borowiec, L. (1986): The seed-beetles from Yugoslavia, Albania, and Greece (Coleoptera, Bruchidae). – *Pol. Pismo Entomol.* 56: 577–592.
- Borowiec, L. (1987a): The type-material of *Bruchus pusillus* Germar and *B. picipes* Germar (Coleoptera, Bruchidae). – *Pol. Pismo Entomol.* 57: 591–592.
- Borowiec, L. (1987b): The seed-beetles (Coleoptera, Bruchidae) from the Middle East. – *Pol. Pismo Entomol.* 57: 601–616.

- Borowiec, L. (1991): Revision of the genus *Spermophagus* Schoenherr (Coleoptera: Bruchidae: Amblycerinae). – Genus, Suppl.: 198pp.
- Borowiec, L., Anton, K.-W. (1993): Materials to the knowledge of the seed-beetles of the Mediterranean Subregion (Coleoptera: Bruchidae). – Ann. Up. Sil. Mus. Entomol. 4: 99–152.
- Decelle, J. (1966): La Bruche Sud-Americaine des Acacias: *Pseudopachymerina spinipes* (Erichson). – Bull. Ann. Soc. R. Entomol. Belg. 102: 109–116.
- Decelle, J. (1975): Les Coléoptères Bruchides d'Angola. – Publ. Cult. Co. Diam. Ang., 89: 13–32.
- Decelle, J. (1979): Insects of Saudi Arabia. Coleoptera: Fam. Bruchidae. – Fauna of Saudi Arabia 1: 318–330.
- Decelle, J. (1981): Bruchidae related to grain legumes in the afro-tropical area. – Ser. Entomol. 19: 193–197.
- Decelle, J. (1983): Le genre *Spermophagus* Schönherr en Europe occidentale (Col. Bruchidae Amblycerinae). – Bull. Soc. Entomol. Fr. 88: 235–241.
- Decelle, J. (1984): Les Coléoptères Bruchidae de l'Archipel du Cap Vert (Insecta: Coleoptera). – Cour. Forsch.-Ins. Senckenberg 68: 49–55.
- Decelle, J. (1985): Synonymies et distribution géographique de Bruchidae (Coleoptera) asiatiques. – Bull. Ann. Soc. R. Entomol. Belg. 121: 75–79.
- Decelle, J. (1987): Les Coléoptères Bruchidae nuisibles aux légumineuses alimentaires cultivées dans la région afrotropicale. – In: Les légumineuses alimentaires en Afrique, pp. 188–200, Ed. AUPELF.Bibl. Nat. Canada.
- Decelle, J., Lodos, N. (1989): Contribution to the study of Legume Weevils of Turkey (Coleoptera: Bruchidae). – Bull. Ann. Soc. R. Entomol. Belg. 125: 163–212.
- Delobel, A., Tran, M. (1993): Les Coléoptères des denrées alimentaires entreposées dans les régions chaudes. – Orstom Éd., pp. 426. Boudy (France).
- Hoffmann, A. (1945): Coléoptères Bruchides et Anthribides. – Faune de France 44: 1–184.
- Hoffmann, A. (1956): Curculionides nouveaux rapportés par la Mission G. Remaudière en Iran. – Rev. Pathol. Veg. Entomol. Agric. Fr. 35: 241–249.
- Hoffmann, A. (1968): Contribution à la faune de l'Iran. 6. Coléoptères Curculionidae et Bruchidae. – Ann. Soc. Entomol. Fr., N.S. 4: 145–154.
- Hoffmann, A., Labeyrie V., & Balachowsky A. S. (1962): Famille des Bruchidae. – In: Balachowski, A. S.(ed.), Entomologie appliquée à l'agriculture. Tome 1. Coléoptères. 1, pp. 434–494, Masson et Co., Paris.
- Karapetjan, A. P. (1985): Zernovki (Bruchidae). Fauna Armyanskoy SSR. Nasekomye Žestkokrylye. (Bruchidae. Fauna of Armenian SSR, Insects, Coleoptera). – Izd. A.N. Armen. SSR, pp. 171, Jerevan (in Russian).
- Luca, Y. de (1964): Contribution aux Bruchides (Coléoptères) du Sahara et des régions subdesertiques limitrophes. – Bull. Inst. Fr. Afr. Noire 4: 1199–1204.
- Lukjanovitch, F. K., Ter-Minassian, M. E. (1957): Žuki-zernovki (Bruchidae). Fauna SSSR, Žestkokrylye, 24 (1). (Coleoptera – Bruchidae. Fauna of the USSR 24(1)) – Zool. Inst. Akad. Nauk. SSSR, N.S.67, pp. 209, Moskva. (in Russian).
- Mukerji, S. & Chatterjee, S. N. (1951): Morphology of the genital structures of some of the Bruchidae (Lariidae) of India and Ceylon and their taxonomic importance. – Ind. J. Entomol. 12(1): 1–28.
- Parker, H. L. (1957): Notes sur quelques Bruches et leurs parasites élevés des graines de légumineuses (Col.). – Bull. Soc. Entomol. Fr. 62: 168 – 179.
- Pic, M. (1904): Sur divers Lariidae ou Bruchidae et Urodon anciens et nouveaux. – Echange 20: 39–40.
- Pic, M. (1913): Coleopterorum Catalogus. Part 55. Bruchidae. – W. Junk, pp. 74. Berlin.
- Riley, C. V. (1892): An additional note on the bean weevil. – Can. Entomol. 24: 291–292.
- Schilsky, J. (1905): Bruchidae. – In: Küster, H. C., Kraatz, G. (eds.), Die Käfer Europa's. 41: 100nos.
- Schilsky, J. (1906): Bruchidae. – In: Küster, H. C., Kraatz, G. (eds.): Die Käfer Europa's. 42, no. 95–97.
- Schoenherr, C. J. (1833): Genera et species Curculionidum cum synonymia hujus familiae I – Roret, pp. 15+381. Paris.
- Schoenherr, C. J. (1839): Genera et species Curculionidum cum synonymia hujus familiae 5, I – Roret, pp. 2+474. Paris.
- Southgate, B. J. (1976): A new subspecies of *Caryedon* (Coleoptera: Bruchidae) from the Middle East. – Isr. J. Zool. 25: 194–198.
- Zacher, F. (1952): Die Nährpflanzen der Samenkäfer. – Z. angew. Entomol. 33: 460–480.