

The distribution of leaf beetles of the tribe **Cryptocephalini in Iran** (Chrysomelidae: Cryptocephalinae)

Matthias SCHÖLLER & Hiva NASSERZADEH

Abstract: The published information about the Iranian leaf beetles in the tribe Cryptocephalini of Cryptocephalinae was compiled, and various insect collections were screened for new records. The Cryptocephalini fauna of Iran was found to comprise 75 species, with 16, 10, 1, 1 and 47 species in the genera *Acolastus*, *Pachybrachis*, *Stylosomus*, *Melixanthus* and *Cryptocephalus*, respectively. 26 species are endemic to Iran, i. e. 35%. The following 15 species are published for the first time to be part of the Iranian fauna: *Acolastus fausti* (Weise, 1882), *Acolastus mandli* (Lopatin, 1967), *Pachybrachis albicans* Weise, 1882, *Pachybrachis caprea* Weise, 1887, *Pachybrachis laticollis* Suffrian, 1860, *Pachybrachis mendax* Suffrian, 1860, *Pachybrachis nigropunctatus* Suffrian, 1854, *Cryptocephalus anticus* Suffrian, 1848, *Cryptocephalus biledjekensis* Pic, 1909, *Cryptocephalus imperialis* Laicharting, 1781, *Cryptocephalus moraei* L., 1758, *Cryptocephalus octomaculatus* Rossi, 1790, *Cryptocephalus semiargenteus* Reitter, 1894, *Cryptocephalus sericeus* (L., 1758), and *Cryptocephalus turcicus* Suffrian, 1848. *Pachybrachis fimbriolatus* Suffrian, previously published for Iran, was confused with *P. mendax*. The records are listed and distribution maps are given and discussed.

Key words: Iran, biogeography, diversity, endemic taxa, distribution pattern, Coleoptera, Chrysomelidae, Cryptocephalini

Introduction

The leaf beetle subfamily Cryptocephalinae is almost worldwide in distribution, and many species occur in savannas and semi-desert habitats (LOPATIN, 1999). Various expeditions have shown the fauna of its tribe Cryptocephalini to be comparatively species-rich in Iran (BERTI & RAPILLY 1973, 1979; LOPATIN 1967, 1981, 1982, 1984, 1985; MEDVEDEV 1975). However, these results have never been compiled, and no maps showing the distribution are available. New specimens recently collected during expeditions by the Insect Taxonomy Research Department of the Plant Pests & Diseases Research Institute Teheran, and others, inspired us to map these records together with all those published previously.

Materials and methods

The specimens originated from the following collections:

DUBC = Institute of Systematic Biology, Daugavpils University, Daugavpils, Latvia.

FFPC = Frank FRITZLAR personal collection, Jena, Germany.

FKPC = Frantisek KANTNER personal Collection, Lipí u Ceskych Budejovic, Czech Republic

HMIM = Hayek Mirzayans Insect Museum, Insect Taxonomy Research Department, Iranian Research Institute of Plant Protection, Tehran, Iran.

JBPC = Jan BEZDEK personal collection, Budweis, Czech Republic.

MESC = Matthias SCHÖLLER personal collection, Berlin, Germany.

MNHN = Muséum National d'Histoire Naturelle, Paris, Nicole BERTI.

NMPC = National Museum Prague collection (J. HAJEK).

UHPG = Uwe HEINIG personal collection, Berlin, Germany.

ZMHUB = Museum für Naturkunde der Humboldt-Universität, Berlin (J. FRISCH, M. UHLIG).

NMW = Naturhistorisches Museum Wien, Austria (H. SCHÖNMANN, H. SCHILLHAMMER).

HHPC = Hans HEBAUER personal collection, Rain / Niederbayern, Germany.

MLUH = Martin-Luther-Universität Halle/Saale, Germany, Wissenschaftsbereich Zoologie (K. SCHNEIDER).

PRPC = Pavel ROMANTSOV personal Collection, St. Petersburg, Russia.

ZIN = Zoological Institute, St. Petersburg, Russia.

The collection records were traced with the help of the road atlas of Iran (Anonymous, 2006), map of Encarta reference library software (2004) and the description of collection sites described in HOBERLANDT (1974, 1981, 1983). In the last mentioned publication, information on the ecology of the habitats can be found, too. The few records that were not traced were indicated by an asterix (*). No key to species is available for Iranian species yet, part of the species can be determined with LOPATIN & DOVGAILO (2002), WARCHAŁOWSKI (2003) and SCHÖLLER & WARCHAŁOWSKI (2009).

For type specimens, the original label data are given, non-type labels are harmonised.

The following abbreviations have been used: C = central, F = female, HT = holotype; M = male, PT = Paratype, spm = specimen, spms = specimens.

Results and discussion

The data are organised in the following manner: first published data are listed chronologically, then previously unpublished records from the above mentioned insect collections are given. All records are illustrated for the genus *Acolastus* in Figs 1–2, for *Stylosomus* and *Melixanthus* in Fig. 2, for *Pachybrachis* in Fig. 3, and for *Cryptocephalus* in Figs 4–8.

***Acolastus (Acolastus) fausti* (Weise, 1882)**

1F (NMPC): N Iran, 3 km N Dasht, Golestan forest, 18.-19.VI.1977, 960 m, loc. no. 375 Exped. Nat. Mus. Praha; 1M (MESC): Teheran, Darakesh, 31.V.1997, M. KAFKA lgt.
New for Iran.

***Acolastus (Anopsilius) glabratus* (Lopatin, 1985)**

LOPATIN (1985): Iran, Zargos, Sisakt, 2400 m, 13.-15.V.1973 (HT).
2M, 6F (NMW): 25.IV.1974, 22 km N Bandar-Abbas (7), Lichtfang, Exped. Mus. Vindob., leg. PRETZMANN; 1M (NMW): 22 km N Bandar-Abbas (7), VII.1974, an Licht, leg. PRETZMANN & KASY; 1M, 1F (MESC): Hormozgan, Mts. Kuh-e-Biaban, 26°27' N, 57°38' E, 6.-11.IV. 2000, leg. V. SINIAEV and A. PLUTENKO.

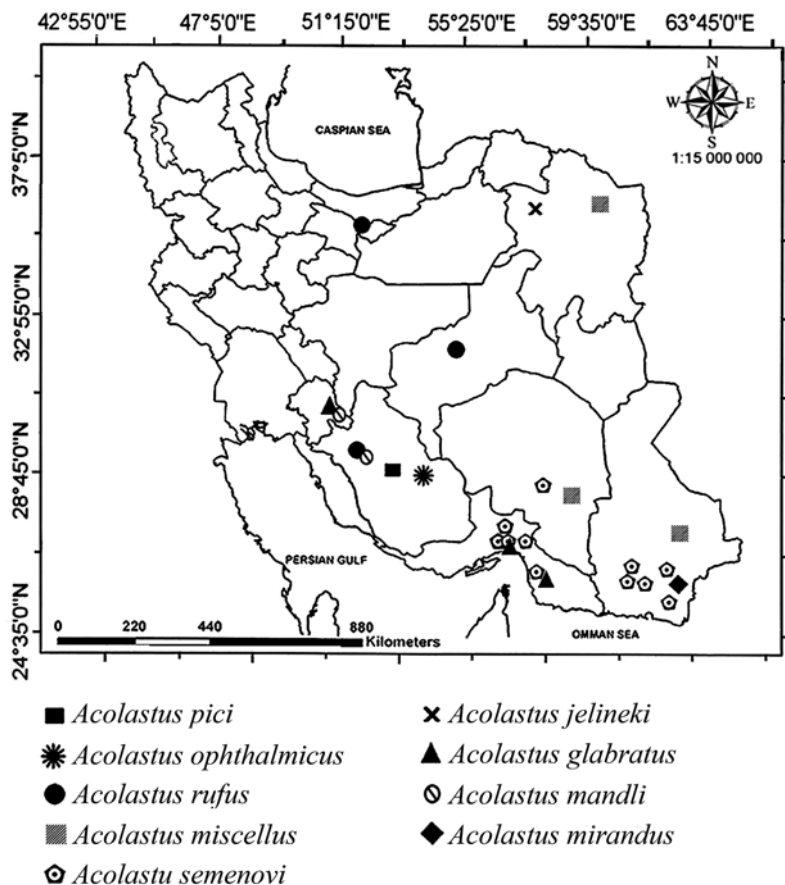


Fig. 1: Distribution map of *Acolastus*-species.

***Acolastus (Acolastus) hoberlandti* (Lopatin, 1980)**

LOPATIN (1980): vicinity of Zabol, Beludzhistan.

LOPATIN (1982): SE Iran, Baluchistan, 44 km northeast of Zaboli, loc. no. 141, 30.-31.III.1973 (HT).

1M (JBPC): 9.-10.IV.2000, Sistan va Baluchestan prov., 2 km S Espakeh, 690 m, 26°48' N, 60°10' E, at light, Iran 2000 Czech Biological Expedition, J. HÁJEK & M. MIKÁT leg.

1F (MESG): Belutschistan, Iranshar, 800 m, 11.-21.IV.1954, leg. RICHTER and SCHÄUFFELE.

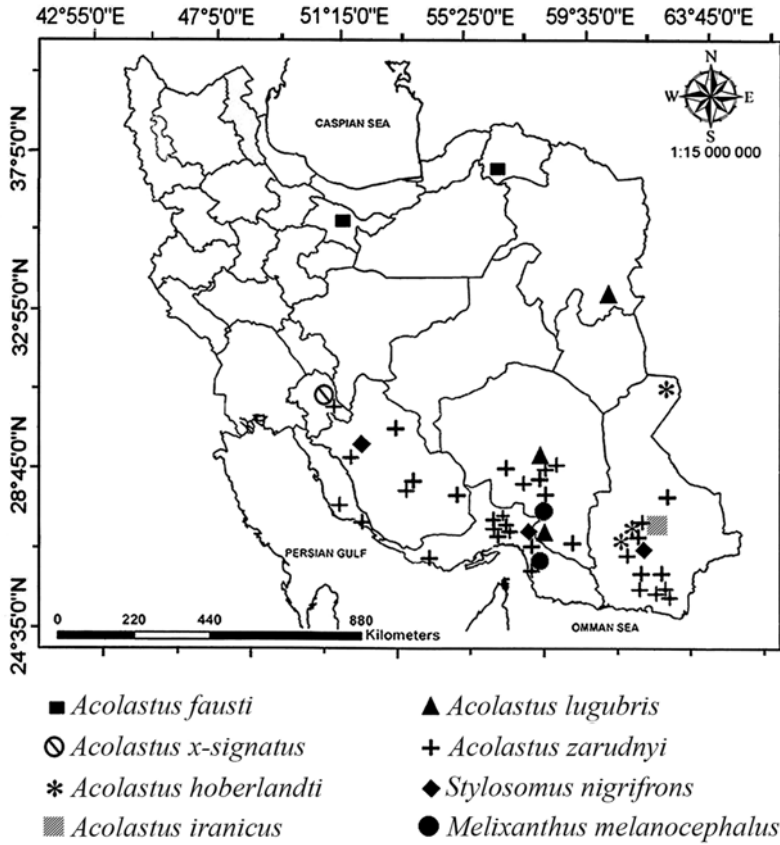


Fig. 2: Distribution map of *Acolastus*-, *Stylosomus*-, and *Melixanthus*-species.

***Acolastus (Anopsilius) iranicus* (Lopatin, 1980)**

LOPATIN (1982): 1M (HT in NMPC), 1F (PT in NMPC), SE Iran, Baluchistan, Sarhad (Serhed) tableland, 40 km northwest of Paskuh, loc. no. 139, 29.III.1973.

Acolastus (Anopsilius) jelineki (Lopatin, 1985)

LOPATIN (1985): 1M (HT) (NMPC), NE Iran, 5 km W Sabzeyar, loc. no. 369, 16.VI.1977.

Acolastus (Anopsilius) klimentoi Romantsov & Bukejs, 2009

ROMANTSOV & BUKEJS (2009): 1M (PRPC): Khorasan prov., 65 km SW Khusf, Obi-Garm, 32°33' N, 58°28' E, 1100 m, 29.IV.2004, A. KLIMENKO leg. (HT); 3M (PRPC): Khorasan prov., 65 km, SW Khusf, Obi-Garm, 32°33' N, 58°28' E, 1100 m, 29.IV.2004, A. KLIMENKO leg.; 1M (PRPC): S Iran, Fars prov., Shiraz area, Karameh env. 2.VI.2008 A. KLIMENKO leg.; 1M (DUBC): Fars prov. 10 km SW Kharameh, 31.V.2008, leg. A. ANICHTCHENKO; 1M, 1F (ZIN): Kerman, Bampur, 27.IV.01., N. ZARUDNYJ (these are syntypes of *Thelyterotarsus zarudnyi* Jakobson, 1916); 3F (ZIN): Kerman, Bampur 25.IV.01, N. ZARUDNYJ (these are syntypes of *Thelyterotarsus zarudnyi* Jakobson, 1916); (all PT).

Acolastus (Anopsilius) lugubris (Berti & Rapilly, 1973)

BERTI & RAPILLY (1973): Saqdar, 22.4.1971 (HT + 2PT). 1M, 1F (JBPC), 4F (FKPC): 16.-17.IV.2000, Hormozgan Prov., 10 km E Dehbarez, 350 m, 27°27' N, 57°19' E, at light, Iran 2000 Czech Biological Expedition, J. HÁJEK & M. MIKÁT leg; 1M (UHPC): Kerman, 65 km NNW Sabzvaran (Jiroft), 2707 m, 29°05' N, 57°32' E (lux), 21.-22.VII.2004, leg. M. REJZEK.

Acolastus (Anopsilius) mandli (Lopatin, 1967)

3M, 2F (MESC): Iran, SW, BuyerAhmad, o-Kuhgiluye prov., S Sakht env., 5-9 km E, 11.-16.VII.2003, 1700-4000 m, leg. IVO JENIŠ; 1F (MESC), S Iran, Imam Sade Straße, Shiraz-Kazerun, 1200 m, leg. VARTIAN; det. M. SCHÖLLER 2008.
New for Iran.

Acolastus (Anodontelytrus) mirandus (Lopatin, 1980)

LOPATIN (1982): 1M, SE Iran, Baluchistan, 3 km N of Rask, Sarbaz river valley, 3.-4.IV.1973.
1M (HT) (NMPC): SE Iran, Rask vall r. Sarbáz, loc. no. 146, 3.-4.4.1973.

Acolastus (Acolastus) miscellus (Berti & Rapilly, 1973)

BERTI & RAPILLY (1973): Shah-Taqi, 23.4.1971 (HT).
LOPATIN (1985): SE Iran, 40 km NW Paskuh.

Acolastus (Anopsilius) ophthalmicus (Lopatin, 1997)

LOPATIN (1997): Mian Dzhangal, prov. Fars.

Acolastus (Anopsilius) pici (Lopatin, 1985)

LOPATIN (1985): Iran, Sultanabad

1M (HT) in DEIC, figured in SCHÖLLER & WARCHAŁOWSKI (2009).

Acolastus (Acolastus) rufus (Lopatin, 1980)

LOPATIN (1982): S Iran, Fars Province, 30 km east of Kazerun, loc. no. 229, 1300 m, 8.-10.6.1973 (HT+19 spms), 13 spms in NMPC.

1M (FKPC): Elbruz, Prov. Teheran, Polur (Damavand), 12.VII.2004, 3000 m, leg. C. HOLZSCHUH; 2M, 1F (FKPC): Yasd, 40 km SW of Harat, Bare-Shadi, 2100 m, 2.-3.vii.2004, leg. C. HOLZSCHUH, det. SCHÖLLER.

Acolastus (Acolastus) semenovi (Jakobson, 1917)

JAKOBSON (1917): Ge, prov. Kerman.

1F, 4M (NMPC): Hormozgan, Issin-Geno 750 m, 25.IV.1986, Mirz. Borum, det. SCHÖLLER; 1M, SE Iran, 9 km S Espakeh, loc. no. 155, 10.IV.1973, det. LOPATIN 1982; 1M, S Iran, Bilai, loc. no. 209, 23.-24.V.1973, det. LOPATIN 1982; 1F, S Iran, 17 km NE Rudan road tunnel no.7, loc. no. 331, 15.V.1977, det. LOPATIN 1982; 1F, SE Iran, Bahu Kalat, loc. no. 147, 3.-4.IV.1973, det. LOPATIN 1982; 1F, SE Iran, 25 km W Ghasreghand, loc. no. 153, 9.-10.IV.1973, det. LOPATIN 1982; 1F, SE Iran, 27 km ENE Sarbáz, loc. no. 144, 31.III.-1.IV.1973, det. LOPATIN 1982; 1F, S Iran, Isin, loc. no. 320, 28.IV.-6.V.1977, det. LOPATIN 1982; 1F, SE Iran, 16 km SE Tangé-Sarhé, loc. no. 154, 900 m, 10.IV.1973, det. LOPATIN 1982; 1M, 1F, S Iran, Sabzevaran, loc. no. 336, Exped. Nat. Mus. Praha, 17.V.1977, det. SCHÖLLER (all NMPC).

1M, 1F (NMW): 41 km N Bandarabbas, VII.1974 (10), an Licht, leg. PRETZMANN & KASY; 1F (NMW): 25.IV.1974, 22 km N Bandar-Abbas (7), Exped. Mus. Vindob., leg. PRETZMANN.

Acolastus (Acolastus) x-signatus (Lopatin, 1985)

LOPATIN (1985): Iran, Kohgiluyeh, Boyerahmad, Sisakht, 2400 m, 13.-15.VI.1973

HT and 14 PT (NMPC): SW Iran, Zagross Mts., Sisakht, 2400 m, loc. no. 240, 13.-15.VI.1973.

1M (MESC): Iran, SW, BuyerAhmad, o-Kuhgiluye prov., S Sakht env., 5-9 km E, 11.-16.VII.2003, 1700-4000 m, leg. IVO JENIŠ; det. SCHÖLLER 2008.

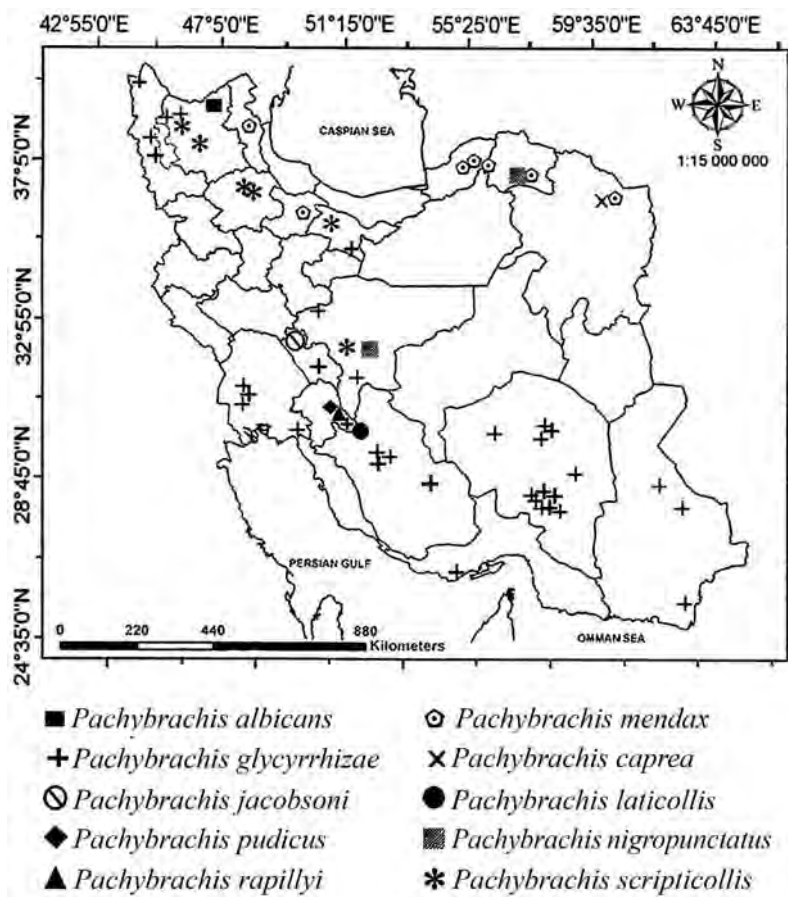


Fig. 3: Distribution map of *Pachybrachis*-species.

***Acolastus (Anopsilius) zarudnyi* (Jakobson, 1916)**

JAKOBSON (1916): 1M (Lectotype, ZIN): Bagu 27.II.1901; 1M (Paralectotype, ZIN): Ge, 28.-30.III.1901, N. ZARUDNYJ; 1F (Paralectotype, ZIN): Kerman: Sargar, 28.IV.01. N. Zarudnyj.

LOPATIN (1967): SE Iran, 100 km W. Sahidan (*), 1150 m, 11.V.1965.

BORUMAND (2000): Bushehr, Bandar-e Tāheri (25 km E), 120 m, 22.IV.1977, leg. PĀZUKI & HĀSHEMI, det. LOPATIN; Fārs, Dehbid, 11.V.1972, leg. ABĀI; Hormozgān, Bandar Abbās, Isin, 25.IV.1971, leg. ZAIRI; Isin, Kuh-e Geno, Bāgh-e Tang, 410 m, 7.-8.V.1977, leg. PĀZUKI; Bandar-e Chārak (5km N), 70 m, 24.IV.1977, leg. PĀZUKI & HĀSHEMI; Mināb, Rudān, 400 m, 4.IV.1973, leg. ABĀI; Kermān, Bāft, Darreh Pahn, 1750 m, 21.V.1977, leg. SAFAVI, PĀZUKI & HĀSHEMI; Jiroft, Bargah, 650 m, 15.V.1977, leg. SAFAVI & PĀZUKI; 3M + 30spms Jiroft, Mohammadābād, 1600 m, loc. no. 187, 3.-5.V.1973, leg. BORUMAND; Sistān, Baluchestān, Chāhbahār, Nikshahr, loc. no. 152, 8.-10.IV.1973, leg. SAFAVI & BORUMAND; 25 km W Ghasr-e Ghand, loc. no. 153, 9.-10.IV.1973; Irānshahr, Bampur, -Bazmān, loc. no. 159 12.-14.IV.1973, leg. SAFAVI & BORUMAND; Khāsh, 11 km NE Kārvāndar, 1300 m, 13.V.1972, leg. ABĀI & EBERT, det. I. LOPATIN.

19F, 24M: Hormozgan, Issin-Geno 750 m, 25.IV.1986, MIRZ. BORUM; 1F, Hormozgān, Sarzeh, Goldasht, 400 m, 13.IV.1994, EBRĀ./ PARCH.; 1F, Hormozgān, Kuh-e Genu, 1500 m, 6.VI.1997, V. NAZ.; 1F, Hormozgān, Siāhu, Sikhorān, 830 m, 25.V.2001, MOF./EBRĀ./OSTEN; 1F, Fārs, Dārāb, Rostagh, 1250 m, 21.-23.IV.1992, MIRZ./BADII; 1F, Fārs, Miān-Jangal, 40 km N Fasā, 1700 m, 20.-21.VI.1993, MIRZ./BADII; 3M, 2F, Hormozgān, Kuh-e Genu, 174 m, 14.IV.2004, MOGH./SER., det. SCHÖLLER (all HMIM).

1F, 2M (JBPC): Kerman Prov., 390 m, Chah-e-dad Khoda env. (27°17' N 58°14' E) (light), 15.-16.IV.2000, det. SCHÖLLER; 1F (JBPC): Fars, Yasug NW, Siraz, (vill. Kakan), 30°40' N, 51°43' E, 13.VI.1999, leg. E. & P. HAJDAJ, det. SCHÖLLER; 1F, 2M (FKPC): Hormozgan Prov., 350 m, 10 km E of Tujak, 26°04' N, 51°18' E (light), leg. J. HAJEK & M. MIKÁT, det. SCHÖLLER.

4M, 1F, SE Iran, 9 km S Espakeh, 10.VI.1973, loc. no. 155, det LOPATIN; 4M, 4F, S Iran, 30 km E Kazerun, 1300 m, 8.-10.VI.1973, loc. no. 229, det. LOPATIN; 1F, S Iran, Kushk, N Masírí, 1800 m, 12.VI.1973, loc. no. 237, det. SCHÖLLER; 1F, SE Iran, Bahu Kalat, loc. no. 147, 3.-4.IV.1973, det. LOPATIN 1984; 2F, SE Iran, 400 m, 6 km W Gene, 7.-9.V.1977, det. LOPATIN 1984; 1F, SE Iran, 18 km N Bazman, loc. no. 162, 13.-14.IV.1973, det. LOPATIN 1984; 1F, SE Iran, Bahu Kalat, loc. no. 147, 3.-4.IV.1973, det. LOPATIN; 1M, 2F, C Iran, Posht-e Kuh, loc. no. 343, 21.-22.V.1977, det. SCHÖLLER; 1M, 2F, C Iran, 30 km N Sabzevaran, loc. no.

337, 17.-19.V.1977, det. SCHÖLLER; 1M, S Iran, Kuh-e Geno Mts., 600-1000 m, loc. no. 318, 27.-28.IV.1977, det. LOPATIN 1984; 2F, SE Iran, 400 m, 6 km W Gene, 7.-9.V.1977, det. LOPATIN 1984; 1F, SE Iran, Bahu Kalat, loc. no. 147, 3.-4.IV.1973, det. LOPATIN 1984; 1M, SE Iran, 55-78 km NNW Tis, Pish mant kowr riv., loc. no. 151, 8.IV.1973, det. LOPATIN 1984; 1F, S Iran, Jashak, 60 km SE Khormuj, loc. no. 304, 20.-21.IV.1977, det. LOPATIN 1984; 2F, SE Iran, 400 m, 6 km W Gene, 7.-9.V.1977, det. LOPATIN 1984; 1F, E Iran, Darzin, 20 km W Bam, loc. no. 185, 29.-30.IV.1973, det. LOPATIN 1984; 2F, SE Iran, 400 m, 6 km W Gene, 7.-9.V.1977, det. LOPATIN 1984; 2M, S Iran, Mian Jangal, loc. no. 223, 30.V.-5.VI.1973, det. LOPATIN 1978; 1M, S Iran, Zagross Mts., Sisakht, 2400 m, loc. no. 240, 13.-15.VI.1973, det. LOPATIN 1978 (all NMPC). 1M (NMW): S Iran, 6.V.1974, Abad-Geno, 40 km N Bandar-Abbas (15), Exped. Mus. Vindob., leg. PRETZMANN; 1M (JBPC), 1M (FKPC): 15.-16.IV.2000, Kerman prov., Chah-e-dad Khoda env., 390 m, 27°17' N, 58°14' E, at light, Iran 2000 Czech Biological Expedition, J. HÁJEK & M. MIKÁT leg.

***Pachybrachis (Pachybrachis) albicans* Weise, 1882**

2F (HMIM): E Azarbāijān, Kaleibar, Vayeghan, 1440 m, 5.-6.VIII.1992, PARCH./BADII, det. Matthias SCHÖLLER.

***Pachybrachis (Pachybrachis) caprea* Weise, 1887**

1M, 1F (NMPC): NE Iran, Kuh-e Binalud, 20 km N.E. Nishabur, 13.-15.VI.1977, 2500 m, loc. no.366, det. LOPATIN 1984.

New for Iran, nominate subspecies known from Kazakhstan and Turkmenistan.

***Pachybrachis (Pachybrachis) glycyrrhizae* (Olivier, 1808)**

BERTI & RAPILLY (1973): Sahl-Abad, Lake Bakhtegan, 24.IV.1971.

LOPATIN (1981): NW Iran, Azarbaijan-e Gharbi, Maku, 19.-20.VI.70, 5spms; loc. no. 25, 3M in NMPC.

BORUMAND (2000): Orumieh, Jabalkandi, 6.VII.1973, det. LOPATIN; Châharmahâl, Bakhtiâri, 29.VI.1971, leg. RAJABI, det. LOPATIN; Fârs, Shirâz, 4.VII.1970, det. LOPATIN; Kerman, Jiroft, Mohammadâbâd, 1600 m, 3.-5.V.1973, loc. no. 187, det. LOPATIN; W Jiroft, 1100 m, 6.-7.V.1973; Jiroft, 26.IV.1974, leg. SAFAVI, det. LOPATIN; Kermân, Shahdâd, 670 m, 13.V.1977, leg. SAFAVI, det. LOPATIN; Khuzestân, Ahvâz, 14.-16.IV.1977, det. LOPATIN.

1spm (HMIM): Shirāz, 4.VII.1970, det. LOPATIN; Kerman, Jiroft, Mohammadābād, 1600 m, 3.-5.V.1973, loc. no. 187, det. LOPATIN; W Jiroft, 1100 m, 6.-7.V.1973; Jiroft, 26.04.1974, leg. SAFAVI, det. LOPATIN; Kermān, Shahdād, 670 m, 13.V.1977, leg. SAFAVI, det. LOPATIN; Khuzestān, Ahvāz, 14.-16.IV.1977, det. LOPATIN; 1F, Kohkiluyeh & Boyerahmad, Kākān, Hoseynkhāni, 2100 m, 26.-27.V.1995, BADII/SAFZ./HĀSH, det. SCHÖLLER; 1F, Tehrān, Varāmin, 20.VI.1990, Parvin, det. SCHÖLLER; 4M, 1F, Hormozgan, Bandarabbas, Lengeh, 183 m, 16.IV.2004, MOGH./SER., det. SCHÖLLER (all HMIM); 1F (NMPC): N Iran, Robat-e Tork, 29.VI.1970, loc. no. 34, det. LOPATIN 1984; 1M, W Iran, Eskanderi, 2000 m, 1.VII.1970, loc. no. 36, det. LOPATIN 1984; 4M, 1F and 9spms, NW Iran, Jabal Kandi, 6.VII.1973, loc. no. 270, det. LOPATIN 1984; 1M, SE Iran, Khash, 15.-16.IV.1973, loc. no. 166, det. LOPATIN 1978; 1M, NW Iran, 20 km SE Marand, 5.-6.VII.1973, loc. no. 266, det. LOPATIN; 1M, 1F, E Iran, 13 km WSW Kerman, 29.IV.1973, loc. no. 182, det. LOPATIN; 1M, E Iran, Bam, 24.-25.IV.1973, loc. no. 177, det. LOPATIN; 1M, 1F and 37spms, SW Iran, 40 km N Ahwaz, 15.-16.IV.1977, loc. no. 291, det. LOPATIN 1982; 1F, SW Iran, Ahwaz, 14.IV.1977, loc. no. 289, det. LOPATIN 1984; 1M, 1F, SW Iran, Shushtar, 13.IV.1977, loc. no. 287, det. LOPATIN 1984; 1F and 1spm, S Iran, 33 km S Sabzevaran, 17.V.1977, loc. no. 335, det. LOPATIN 1984; 1M, 2F, C Iran, 2000 m, 12 km NW Dowlatabad, 21.V.1977, loc. no. 341, det. LOPATIN 1984; 1M and 32spms, C Iran, Rafsanjan, 26.-28.IV.1973, loc. no. 181; 1M 1F C Iran, Chashmeh-ye-Sargaz, 20.-21.V.1977, loc. no. 339; 1M SW Iran, Darbahare, 10 km NW Zeidun, 17.IV.1977, loc. no. 294; 2F and 2 spms, S Iran, 10 km W Shiraz, 8.VI.1973, loc. no. 228; 3M, 1F, SW Iran, Shiraz (N), 4.VII.1970, loc. no. 42, det. LOPATIN 1982; 1F, C Iran, Ferdows-e Esfandagheh, 21.V.1977, loc. no. 340, det. LOPATIN 1984; 1M, E Iran, 2100 m, Taftan, Tamandan, 20.IV.1973, loc. no. 167, det. LOPATIN; 2M, 1F, NW Iran, Maku, 19.-20.VI.1970, loc. no. 25; 1M, 1F, C Iran, 570 m, Shahdad, 31.V.-1.6.1977, loc. no. 353, det. SCHÖLLER 2008; 2F, SE Iran, Bahu Kalat, loc. no. 147, 3.-4.IV.1973, det. LOPATIN (all NMPC); 1spm (JBPC): 14.-15.IV.2000, Hormozgan Prov., 10 km E Tujak, 10 m, 26° 04' N, 57° 18' E, light.

***Pachybrachis (Pachybrachis) jacobsoni* Lopatin, 1968**

LOPATIN (1981): W Iran, Zajanden, W Kuhrang, 1.7.70, 1spm.

***Pachybrachis laticollis* Suffrian, 1860**

(= *Pachybrachis callosus* Sahlberg, 1913)

1M (NMPC): S Iran, 27 km E Yasuj, 2650 m, 16.VI.1973, loc. no. 244, det. LOPATIN 1983.

New for Iran

***Pachybrachis (Pachybrachis) mendax* Suffrian, 1860**

BORUMAND (2000): Ardabil, Vildarreh, 4.VIII.1972, leg. BORUMAND/ZAIRI, det. LOPATIN.

1M (NMPC): N Iran, 20 km NW Dasht, Golestan forest, 19.-21.VI.1977, 530 m, loc. no. 376, *P. fimbriolatus* det. LOPATIN 1983; 1F, NE Iran, Kalat, 17.VI.1977, loc. no. 373, *P. fimbriolatus* det. LOPATIN 1983; 1M, Khorasan Razni Prov., 5 km W Amir Abad, river valley, garden, at light, 36°35' N, 60°00' E, 1030 m, 21.-22.V.2006, JIRI HÁJEK & PAVEL CHVOJKA leg., det. SCHÖLLER 2008; 1M, Khorasan Razni Prov., 5 km W Amir Abad, river valley, garden, at light, 36°35' N, 60°00' E, 1030 m, 21.-22.V.2006, JIRI HÁJEK & PAVEL CHVOJKA leg., det. SCHÖLLER 2008 (all NMPC).

1F (HMIM): Golestān, Park-e Melli-e Golestān, Sulgerd, 1150 m, 20.-21.VII.1996, EBRA./NAZ.V; 1F (HMIM): Golestān, Park-e Melli-e Golestān, Yakhnikalan, 1650 m, 20.VII.1996, EBRA./NAZ.V, det. SCHÖLLER.

New for Iran.

***Pachybrachis (Pachybrachis) nigropunctatus* Suffrian, 1854**

1M, NE Iran, Kalat, 17.VI.1977, loc. no. 373, det. LOPATIN; 1F, S Iran, Pasargad, 21.VI.1973, loc. no. 252, det. LOPATIN 1983 (all NMPC).

New for Iran.

***Pachybrachis (Pachybrachis) pudicus* Lopatin, 1984**

LOPATIN (1984): S Iran, Sisakht Dena, 2500-3000 m, loc. no. 241, 13.-14.VI.1973 (HT and 2 PT located in NMPC).

***Pachybrachis (Pachybrachis) rapillyi* Lopatin, 1984**

LOPATIN (1984): S Iran, Kohgiluyeh, Boyerahmad, 29 km E Yasuya, 2300 m, 16.-17.VI.1973, (HT + 47spms); HT in NMPC, label S Iran, 29 km E Yasuj, 2300 m, 16.-17.VI.1973, loc. no. 245.

1F (NMPC): S Iran, 29 km E Yasuj, 2300 m, 16.-17.VI.1973, loc. no. 245, det. SCHÖLLER.

***Pachybrachis (Pachybrachis) scripticollis* Faldermann, 1837**

= *Pachybrachis persa* Suffrian, 1860

1F (Lectotype *P. persa*) (MLUH): / 22175; 1F / 22176 (Persien), det. SCHÖLLER 2008.

1F (HMIM): Tehrân, Karaj, Arangeh, Sarziârat, 1750 m, 10.-11.VII.1996, Bar./Badii, det. SCHÖLLER; 1F (HMIM): W Azarbayejan Province, on wheat & Barley, 8.XII.1996, det. SCHÖLLER.

1F (NMPC): W Iran, Zayandeh Rud, 2200 m, 50 km W Kuhrang, loc. no. 38, 1.VII.1970, det. SCHÖLLER; 1F, NW Iran, 10km NW Zanzan, 4.-5.VII.1973, loc. no. 264, det. SCHÖLLER; 2F, 3M, NW Iran, 20 km SE Marand, 5.-6.VII.1973, loc. no. 266, det. LOPATIN 1984; 2F, 8 km NE Ziaran, 10.-16.VII.1977, loc. no. 400, 2400 m, det. SCHÖLLER (all NMPC).

***Stylosomus (Stylosomus) nigrifrons* Fleischer, 1909**

BORUMAND (2000): Fârs, Sepidân, Komehr, 2000 m, 17.IV.1973, det. I. LOPATIN.

1M (NMPC): SE Iran, Ghasemabad, 10 km Bampur (vall), 11.-12.IV.1973, loc. no. 157; 6F (NMPC): S Iran, Komehr, 2000 m, 17.VI.1973, loc. no. 246, det. LOPATIN 1983.

***Melixanthus melanocephalus* (Suffrian, 1857)**

= *Melixanthus jordanicus* Lopatin, 1979

LOPATIN (1985): Hormozgân, Bashâgerd, Senderk, 220 m, loc. no. 327, 12.-13.V.1977; 17 km ser.-west, Rudascha, 15.V.1977.

1spm (NMPC): S Iran, 17 km NE Rudan road tunnel no. 7, loc. no. 331, 15.V.1977, det. LOPATIN 1982.

***Cryptocephalus (Cryptocephalus) alborzensis* Rapilly, 1980**

BERTI & RAPILLY (1973): Iran, Galvardeh, 31.VI.1969

RAPILLY (1980): Firuzabad, Monts Alborz, 23.V.1965 (HT + 9PT), Galvardeh Forest south of Astara, 25.VI.1969 (PT); 120 km west of Bojnurd, 1500 m, 30.IV.1965 (PT); Asterabad, IV.-VI.1908 (PT).

1F (MESC): Mazandaran prov., Hasan Kif valley SW, 11.-16.VII.2003, 1800-3000 m, leg. Ivo JENIŠ; det. SCHÖLLER; 1F (FKPC): Chalus-Karaj, Marzan Abad, 18.VI.1997, 2000 m, leg. M. KAIKA; det. SCHÖLLER.

***Cryptocephalus (Cryptocephalus) androgyne* Marseul, 1875**

= *Cryptocephalus (Cryptocephalus) coerulescens coerulescens* Sahlberg, 1839

BERTI & RAPILLY (1973): Iran, Galvardeh, 31.V.1969; Beshahr, 3.VI.1969.

MEDVEDEV (1975): Gachsar, Marzanabad, 550 m, 28.IV.1970; Chalus, 29.IV.1970; Gorgan, 220-800 m, 1.V.1970; Shasavar, 6.V.1970.

BORUMAND (2000): Salmānshahr, 15.V.1953, leg. SHARIF and 22.V.1965, leg. SAFAVI, det. I. LOPATIN.

1F (HMIM): Azarbāijān-E, Sharghi, Kaleybar, Youzband, 1500 m, 4.VII.1997, BAR./MOF., det. SCHÖLLER; 1M, 1F (FFPC): N Iran, Prov. Mazandaran, N Elburz, Dohesar-road, 36.35.11 N, 50.47.67 E, 550 m, 01.VI.2008, leg. Dirk FRENZEL.

Cryptocephalus (Cryptocephalus) anticus Suffrian, 1848

1M (HMIM): Azarbāijān, Moghan, Parsabad, 3.6.1978, HASHEMI/ZAIRI, det. Matthias SCHÖLLER.

New for Iran

Cryptocephalus (Asionus) augustalisi augustalisi Pic, 1913

BERTI & RAPILLY (1979): Ramine, 27.5.1977, right bank of Rud-e-Karun.

1M, 2F (HMIM): Sistān-Baluchestān, Chābahār, Negor, 3.XII.1998, MOF./BAR., det. Matthias SCHÖLLER.

Cryptocephalus (Asionus) augustalisi dissipatus Schöller, 2009

= *augustalisi iranicus* Berti & Rapilly, 1979

BERTI & RAPILLY (1979): Ramine, 50 km N Ahwaz, river banks of Rud-e-Karun, 30.VI.1975 (HT).

Note: according to BERTI & RAPILLY (1979) the river Rud-e-Karun constitutes the natural barrier between the two subspecies.

Cryptocephalus (Cryptocephalus) aureolus Suffrian, 1847

BORUMAND (2000): Azarbāijān-e Sharghi, Marand, 27.VII.1971, leg. TERMEH, det. I. LOPATIN.

Cryptocephalus (Cryptocephalus) biledjekensis Pic, 1909

1F (FFPC): N Iran, Prov. Qazvin, SW Elburz, Paßhöhe W Kordak, 2480 m, 36°13'07" N, 50°59'38" E, 28.V.08, leg. D. FRENZEL.

New for Iran

Cryptocephalus (Cryptocephalus) concolor Suffrian, 1847

= *C. duplicatus persicus* Rapilly, 1980

RAPILLY (1980): 100 km W of Bojnurd, 30.IV.1965 (1M, MNHN); S Chalus, 13.VI.1969 (2spms), 30.IV.1965 (1spm); Firuzabad (Chalus), 23.V.1965 (35spms); Kalardacht, 12.V.1965 (1spm), 28.VI.1965 (1spm); Kopet-Dagh, Descht (3spms).

BORUMAND (2000): Golestān, Gonbad-e Kāvus, 24.III.1956, leg. SAFAVI; Māzandarān, Chālus, 23.V.1965, leg. SAFAVI, det. I. LOPATIN.

MEDVEDEV (1975): Gachsar, Marzanbad, 550 m, 28.IV.1970.

4M (HMIM): Golestān, P.M. Golestān, Tang-e Gol, 5.V.1999, MOGH./BAR./MAN.; 1M, Golestān, P.M. Golestān, Tang-e Rāh, 930 m, 7.V.2000, BADII/EBRA./MOGH./MOF.; 1M, Golestān, P.M. Golestān, Almelh Karkoli, 1700 m, 13.VI.2000, BADII/EBRA./MOGH./MOF.; 3M, 1F, Golestān, P.M. Golestān, Koylar, 1250 m, 16.VI.2000, BADII/EBRA./MOGH./MOF.; 1M, Golestān, P.M. Golestān, Khājenārenj, 1395 m, 11.VI.2000, BADII/EBRA./MOGH./MOF.; 1M, Māzandarān, Golestān Forest, Tang-e-Gol, 700 m, 15.V.1993, PĀZUKI/BADII; 2M, Māzandarān, N Kandawan, Khabak, 2560 m, 9.VII.1977, Pazuki/Moriazawiha; 1M, Ardabil Province, Almas, Khal-khal-Asalem, 2100 m, 29.VI.1985, MIRZ./PAZ.; 3M, 1F, Mazandaran, Tonekabon, Esel-Mahalleh, Har Dang, 2600 m, 24.VI.2002, MOF./SER./DEUVE/MONT./HAJ.; 3M, 3F., Mazandaran, Haraz to Baladeh, 10 km Baladeh, between Eel & Kala village, 2290-2450 m, 05.VI.05, 36°10' N, 51°55' E, leg. MOGH./HAJ./SER.; 1M, E Azarbaijan, Kaleybar, Daresi, 1300 m, 23.VI.2002, SER./HAJ./DEUVE/MONT.; det. SCHÖLLER (all HMIM); 1M (NMPC): Golestan Prov., 2 km E Tunel-e-Golestan, stream valley, oak forest, at light, 37°22' N, 55°59' E, 835m, Jiri HÁJEK & Pavel, CHVOJKA leg., 26.-27.V.2006, det. SCHÖLLER; 2M (HHP): Elburs, Mazandaran pr., Tang Rah, 600 m, 25.05.2005, leg. Vladimir MAJOR, det. SCHÖLLER; 6M, 2F (MESC): Iran, Mazandaran prov., Hasan Kif valley SW, 11.-16.VII.2003, 1800-3000 m, leg. Ivo JENIŠ; 1M, Māzandarān, Delir env., 2000 m, 05.VI.2009, SKOUPÝ leg.; 1F, Māzandarān, Kandelouz, 18.VI.2009, SKOUPÝ leg.; all det. Matthias SCHÖLLER (all MESC); 1spm (FFPC): N Iran, Prov. Mazandaran, NW Elburz, Javaherdeh road, 36°51' N, 50°30' E, 1750 m, 02.VI.2008, leg. A. SKALE (22a).

***Cryptocephalus (Burlinius) connexus* Olivier, 1807**

LOPATIN (1981): N Iran, Tehrān, Damāvand, C. Elburz, Gazanak, Hazar Chay, 1400 m, 20.-21.VII.70, 139 spms.

2M, 4W (HMIM): Golestān, Pār-k-e Melli-e Golestān Tangegol, 700 m, 24.-27.VII.1996, EBRĀ./NBZ.V.; 1M, Golestān, Pār-k-e Melli-e Golestān, Koylar, 1250 m, 23.VII.1996, EBRĀ./NBZ.V.; 1M, Golestān, Pār-k-

e Melli-e Golestān, Koylar, 1250 m, 23.VII.1996, Ebrā./NBaz.V. (all HMIM, det. SCHÖLLER 2008); 1F (NMPC): N Iran, Gorgan garden, 140 m, 21.-23.VI.1977, loc. no. 378, det. LOPATIN 1982; 6W (NMPC): S Iran, Komehr, 2000 m, 17.VI.1973, loc. no. 246, det. LOPATIN 1983.

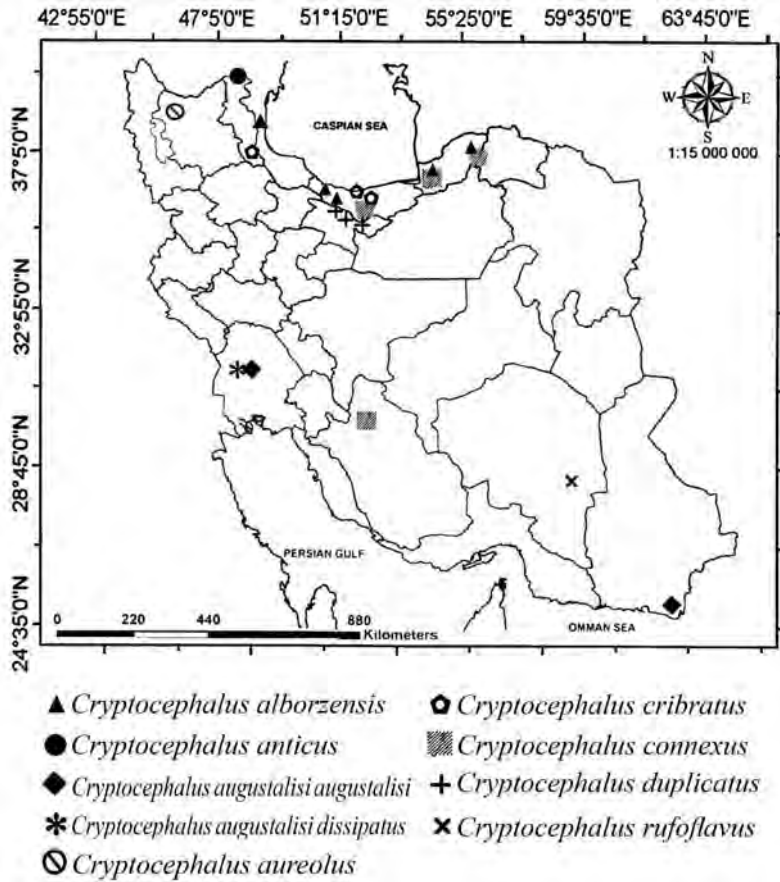


Fig. 4: Distribution map of *Cryptocephalus*-species.

***Cryptocephalus (Cryptocephalus) cribratus* Suffrian, 1847**

RAPILLY (1980): Firuzabad, near Chalus, 23.V.1965.

1F, 1M (NMPC): Ardabil prov., 4.-5.VI.2006, 5 km NW Kolur, “Shah-rud” river valley, 37°26' N, 48°41' E, 1670 m, Ji★i HÁJEK & Pavel CHVOJKA leg., det. SCHÖLLER 2008; 1F, Mazandaran prov., 30.-31.V.2006, 2 km S Naj, Alborz Mts. stream valley, 36°11' N, 52°01' E, 1870 m, Jiri HÁJEK & Pavel CHVOJKA leg., det. SCHÖLLER 2008.

***Cryptocephalus (Cryptocephalus) curtissimus* Pic, 1907**

BORUMAND (2000): Fārs, Firuzābād, 14.X.1951, leg. MIRZĀYĀNS; Hormozgān, Mināb (12 km NW), 18.-19.V.1973, det. I. LOPATIN.

14spms (NMPC): S Iran, 12 km NW Minab, 18.-19.V.1973, loc. no. 202, det LOPATIN; 1M (NMPC): SE Iran, 30 km N Bampur, 12.-13.IV.1973, loc. no.159, det LOPATIN 1978.

***Cryptocephalus (Asionus) davatchii* Berti & Rapilly, 1973**

BERTI & RAPILLY (1973): Shah-Taqi, 22.IV.1971 (HT+PT).

BERTI & RAPILLY (1979): Iran, Delfar, 9.VI.1973, 1500 m, Saqdar, 11.VI.1973, 2200 m, 31spms.

1M, 1F (NMPC): E Iran, Deh Bakri, 1700-1750 m, loc. no. 186, 30.IV.-3.V.1973; 1M, SE Iran, 30 km N Bampur, 12.-13.IV.1973, loc. no.159; 1F, E Iran, 30 km SW Nosratābāt, 26.III.1973, loc. no.136; 1F, SE Iran, 25 km W Ghasre-ghand, loc. no. 153, 9.-10.IV.1973; all det. LOPATIN 1978; 1F, E Iran, 33 km W. Sabzevaran, 6.-7.V.1973, loc. no. 189, det. LOPATIN 1982; 1F, SE Iran, Bahu Kalat, loc. no. 147, 3.-4.IV.1973, det. LOPATIN 1978; 1F, E Iran, Mohammabad, loc. no. 187, 3.-5.V.1973, det. LOPATIN 1978 (all NMPC).

***Cryptocephalus (Cryptocephalus) distinguendus* Schneider, 1792**

BORUMAND (2000): Tehrān, December 1947, det. I. LOPATIN.

***Cryptocephalus (Cryptocephalus) duplicatus* Suffrian, 1847**

BERTI & RAPILLY (1973): Damavand, VI 1969.

LOPATIN (1981): 1F, N Iran, C. Elburz, Kandavan Val., loc. no. 86, 2545 m, 10.-11.VIII.70.

2M (HMIM): Ahar-F. Hasanabad Chen, D.abi', 8.VIII.1968, SCHÖLLER det.

***Cryptocephalus (Protophysus) euchirus* Kraatz, 1879**

BERTI & RAPILLY, 1973: S. of Chalus, 13.VI.1969; Marzunabad, 9.VI.1969.

BORUMAND (2000): Māzandarān, Chālus, 23.V.1965, leg. SAFAVI, det. I. LOPATIN.

1spm (FFPC): N Iran, C Elburz, Damavand Mt. Gosfand Sara Larjan, 35°52' N, 52°07' E, 2600 m, 29.V.2008, Dirk FRENZEL leg.; 1M (MESC): Māzandarān, Delir env., 2000 m, 05.VI.2009, SKOUPÝ leg., det. M. SCHÖLLER.

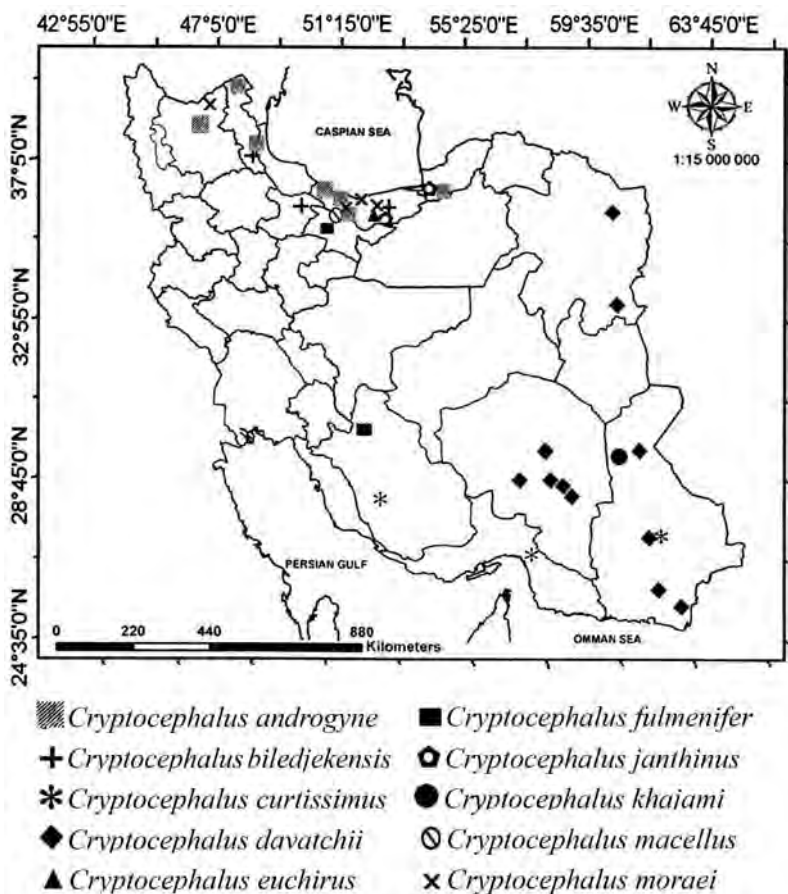


Fig. 5: Distribution map of *Cryptocephalus*-species.

***Cryptocephalus (Burlinius) exiguus variceps* Weise, 1884**

BERTI & RAPILLY (1973): Iran, Gorgan, 11.VI.1969.

1spm (FFPC): N Iran, Prov. Mazandaran, N Elburz, SW Now Shahr, Primärwald, 36°35' N, 52°34' E, 500 m, 3.VI.2008, Dirk FRENZEL leg.

***Cryptocephalus (Cryptocephalus) fasciatointerruptus* Berti & Rapilly, 1979**

BERTI & RAPILLY (1979): Iran, Jalali, 3.VI.1973 (HT+20 PT); Dehnow, 8.VI.1973, 1spm, 20 km N of Bandar-Abbas, 31.V.1973, 4spms; Minab, 18.IV.1971, 1spm, Dehak, 16.IV.1971, 2spms.

BORUMAND (2000): Bushehr, Bandar-e Genāveh, 10 km NW Cham-e Zeydun, Darbahāre, loc. no. 294, 17.IV.1977; Hormozgān, 22 km NE Bandar Abbās, Bāghu, 16.V.1973; 41 km NE Bandar Abbās, Jelāni, 16.V. 1973; Sistān & Baluchestān, Irānsgahr, Sarbāz-Rāsk, 1.-2.IV.1973, leg. SAFAVI & BORUMAND; Zābol, May 1950, leg. MIRZĀYĀNS, det. I. LOPATIN.

4spms (NMPC): S Iran, Hassan Lengi, 16.-17.V.1973, loc. no. 200; 1spm, S Iran, Baghu, 25.V.1973, loc. no. 212; 2spms, E Iran, Kahúrak, 25.-26. III.1973, loc. no. 135; 1spm, SE Iran, 55-78 km NNW Tis, Pish mant, kowr riv., 8.IV.1973, loc. no. 151; 33spms, SE Iran, Rask, vall. r. Sarbāz, 3.-4.IV.1973, loc. no. 146; 4spms, S Iran, Minab, 19.-20.V.73, loc. no. 203; S Iran, Jalabi, 16.V.1973, loc. no. 199b; 2spms, S Iran, Bilai, 23.-24.V.1973, loc. no. 209; 5 spms, SE Iran, Bahu-Kalat, 3.-4.IV.1973, loc. no. 147.; 4spms (HMIM): Hormozgān, Jask to Bashagerd Rd., 30 km N Jask, 10-20 m, 2.XII.1998, Bar./Mof. (all NMPC, all det. I. LOPATIN, 1980); 2F (NMPC): SW Iran, Shushtar, 13.IV.1977, loc. no. 287; 1M, SW Iran, 34 km SE Omidiyeh, 16.-17.IV.1977, loc. no. 292; 3M, S Iran, Jelani, 41 km NE Bandar Abbas, 16.V.1973, loc. no. 199b; 1M, SW Iran, Darbahare, 10 km NW Zeidun, 17.IV.1977, loc. no. 294; 2M, 1F, S Iran, Bāghú, 22 km NE Bandar Abbas, 16.V.1973, loc. no. 199a; 2M, S Iran, Hassan Lengi, 16.-17.V.1973, loc. no. 200; 2M, 1F, S Iran, Banghu, 25.V. 1973, loc. no. 212; 2F, S Iran, Darab, loc. no. 219, 29.V.1973; 1M, S Iran, Borazian, loc. no. 299, 19.IV.1977; 1M, C Iran, Fahraj, loc. no. 354, 02. VI.1977; 4 spms, S Iran, Hassan Langi, 24.-25.V.1973, loc. no. 211 (all NMPC, all det. LOPATIN, 1983); 1F, S Iran, 12 km NW Kangan, 21.-22.IV.1977, loc. no. 305; 2M, 1F, C Iran, Rafsanjan, 26.-28.IV.1973, loc. no. 181; 1F, SE Iran, Bahu Kalat, loc. no. 147, 3.-4.IV.1973 (all NMPC, all det. SCHÖLLER).

Note: In BORUMAND (2000), the name *Cryptocephalus undulatus* ssp. *meridiopersicus* Lopatin was published, this is a nomen nudum.

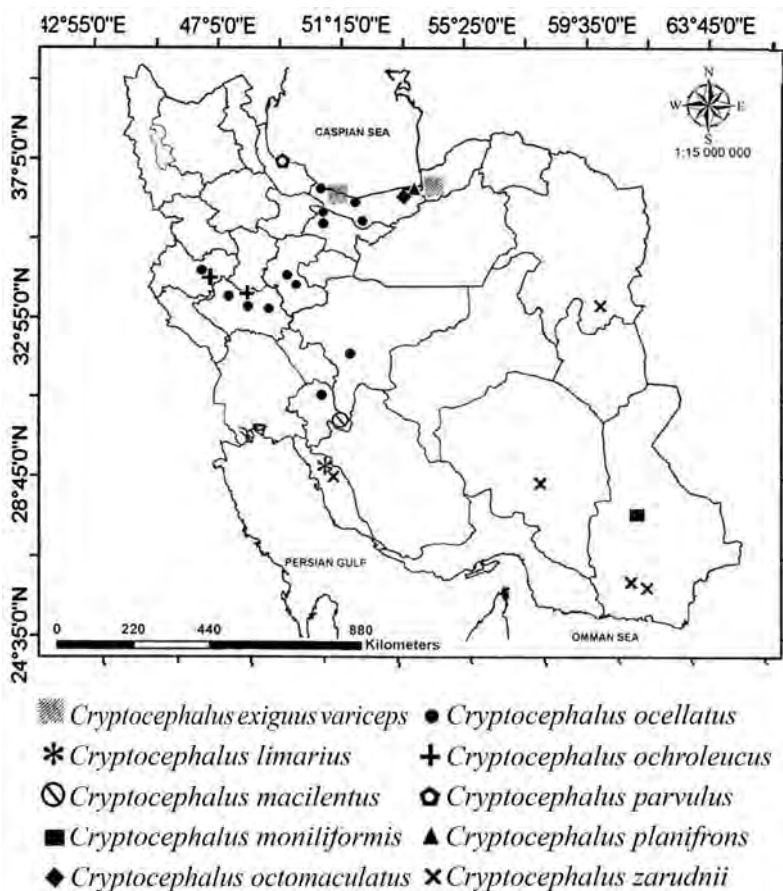


Fig. 6: Distribution map of *Cryptocephalus*-species.

***Cryptocephalus (Asionus) fulmenifer* Reitter, 1889**

= *C. phaleratus* Suffrian, 1853; = *C. phaleratus* Tappes, 1871; = *C. tigrinus* Berti & Rapilly, 1979; = *C. undatus* Suffrian, 1847

BERTI & RAPILLY (1979): Iran, Karaj valley, 5 km N Karaj, 26.VII.1972, 3spms, according to publication in Coll. Tel Aviv University.

1M (NMPC): S Iran, Komehr, 2000 m, loc. no. 246, 17.VI.1973, det. LO-PATIN 1983.

***Cryptocephalus (Cryptocephalus) imperialis* Laicharting, 1781**

1F (MESC): Māzandarān, Kandelouz, 18.VI.2009, SKOUPÝ leg., det. SCHÖLLER.

New for Iran.

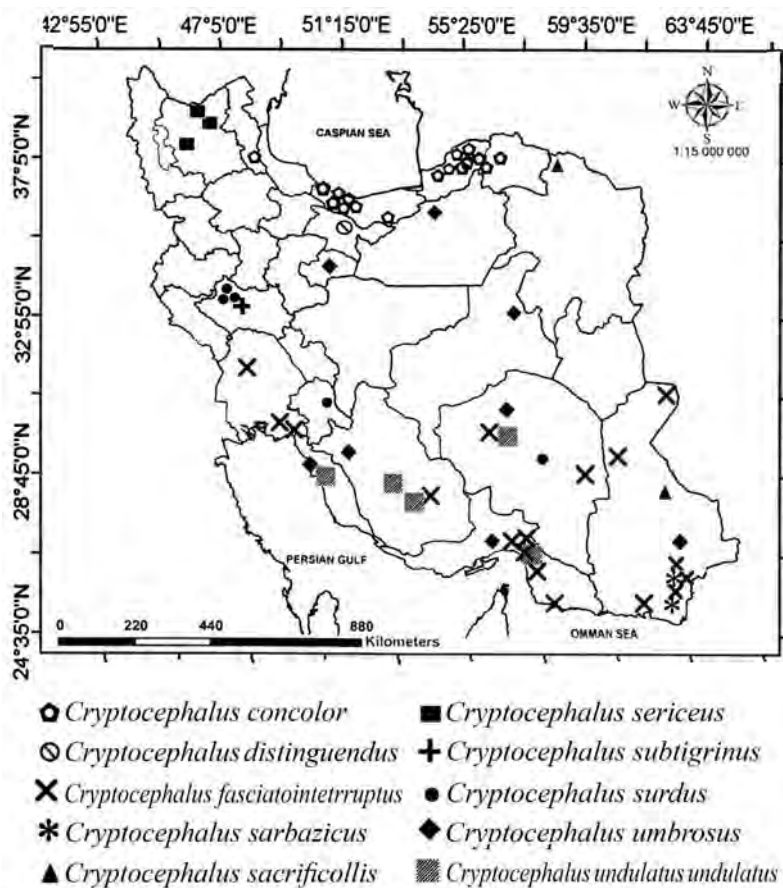


Fig. 7: Distribution map of *Cryptocephalus*-species.

***Cryptocephalus (Cryptocephalus) janthinus* Germar, 1824**

BERTI & RAPILLY (1973): Iran, Kordkuy, 5.VI.1969.

LOPATIN (1981): N Iran, E. Elburz, Veresk, 800 m, loc. no.81, 2.VIII.70.

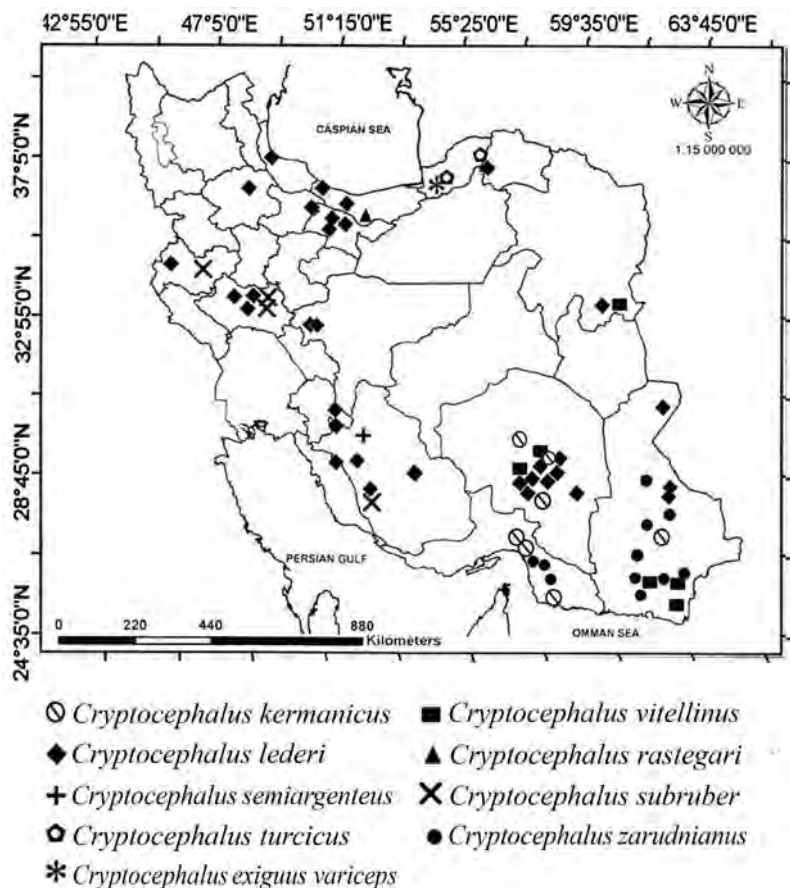


Fig. 8: Distribution map of *Cryptocephalus*-species.

***Cryptocephalus (Cryptocephalus) kermanicus* Lopatin, 1979**

LOPATIN (1979): Kerman.

BORUMAND (2000): Kermân, Jiroft, 22 km N Kahnuj, 520 m, 16.V.1977, leg. SAFAVI & PÂZUKI, det. I. LOPATIN.

2M (NMPC): S Iran, 16 km N Jask, loc. no. 208, 22.-23.V.1973; 1F, 1M, S Iran, 12 km NW Minab, 18.-19.V.1973, loc. no. 202; 1M, SE Iran, 30 km N Bampur, 12.-13.IV.1973, loc. no. 159; 1M, S Iran, Jelani, 41 km NE Bandar Abbas, 16.V.1973, loc. no. 199b; 1F, E Iran, 16 km NW Neybid, 2000 m, 29.IV.1973, loc. no. 184, all NMPC, all det. LOPATIN 1982 (all NMPC).

Cryptocephalus (Asionus) khajami Lopatin, 1980

LOPATIN (1982): E Iran, Sistan, 30 km southwest of Nosratabad, loc. no. 175, 23.IV.1973, in NMPC HT and six PT.

Cryptocephalus (Cryptocephalus) moraei L., 1758

RAPILLY (1980): Nowshar, V. and VI. 1965.

LOPATIN (1981): 1F, N Iran, Babol-Shahi, loc. no. 70, 24.VII.70.

1M (HMIM): E Azarbâijân, Sharghi, Kaleybar, Youzband, 1500 m, 4.VII.1997, BAR./MOF., det. SCHÖLLER; Mazandan, Haraz to Baladeh, 10 km Baladaeh, between Eel & Kala village, 2290-2450 m, 05.VI.05, 36°10' N, 51°55' E, leg. MOGH./HAJ./SER.

Cryptocephalus (Burlinius) lederi Weise, 1889

BERTI & RAPILLY (1973): Iran, Shah-Taqi*, 18.VI.1971.

RAPILLY (1980): Central Chain, Rayen, 2200 m, 5.VI.1973; Firuzabad, 1300 m, 25.VI.1975; Borudjerd, 1400 m, 28.VI.1975; Zageh mountain pass, 2000 m, 21.V.1977; Kurang, 2300 m, 5.VI.1977; Saqdar, 2200 m, 11.VI.1973.

LOPATIN (1981): W Iran, Eskandari, 2000 m, 1.VII.70, 50spms; N Iran, C Elburz, Kuhha-ye Tu-Chal, 2000-2500 m, 18.-19.VII.70, 2spms; N Iran, C Elburz, Val. Darband Sar, 2500-3000 m, 16.VII.70, 3spms; N Iran, C Elburz, Kandavan Val., 2545 m, 10.-11.VIII.70, 1spm.

BORUMAND (2000): Kermân, 33 km W Jiroft, 6.-7.V.1973; Kermân, Jiroft, Mohammadâbâd, 3.-5.V.1973; Fârs (Fasa) 15 km NW, Miânjangal, 5.VI.1973; Kermânshâh, Rijâb, Sarâb-e Eskandar, 2000 m, 1.VII.1970, det. I. LOPATIN.

1F (NMPC): N Iran, Sheykh Mahalleh, 160 m, loc. no. 390, 28.VI.-3.VII.1977; det. LOPATIN 1982; 1M, 1F, E Iran, 33 km W Sabzevaran, 1100 m, 6.-7.V.1973, loc. no. 189, det. LOPATIN 1982; 2M, 2F, N Iran, 8 km NE Ziaran, 2400 m, 10.-16.VII.1977, loc. no. 400, det. LOPATIN 1982; 1M, N Iran, 10 km NW Zanjan, 4.-5.VII.1973, loc. no. 264, det. LOPATIN 1982; 1M, 1F, S Iran, Mian Jangal, loc. no. 223, 30.V.-5.VI.1973, det.

SCHÖLLER; 1M, N Iran, 20 km NW Dasht, Golestān forest, 530 m, loc. no. 376, 19.-21.VI.1977, det. SCHÖLLER; 1F, C Iran, Chashmeh-ye-Sargaz, 20.-21.V.1977, loc. no. 339, det. Lopatin 1982; 2spms, E Iran, 33 km W Sabzevaran, 6.-7.V.1973, loc. no. 189, det. Lopatin 1982; 1spm, S Iran, 2000 m, 26 km N Birjand, 6.-7.VI.1977, loc. no. 360, det. LOPATIN 1982; 1spm, S Iran, Mian Jangal, loc. no. 223, 30.V.-5.VI.1973, det. LOPATIN 1978; 1spm, SW Iran, Zagross Mts., Sisakht, 2400 m, loc. no. 240, 13.-15.VI.1973; 1spm, E Iran, Kuh e Khvajeh, loc. no. 357, 3.-5.VI.1977; 1M, Rishapur, Iangé Chogan, 1050-1200 m, loc. no. 234, 10.-11.VI.1973; 1F, S Iran, Kushk, N Masīrī, 1800 m, 12.VI.1973, loc. no. 237; 1M, 2F, E Iran, Mohammadabad, 1600 m, loc. no. 187, 3.-5.V.1973; 1F, E Iran, Deh Bakri, 1700-1750 m, loc. no. 186, 30.IV.-3.V.1973; 2F, E Iran, Taftan, Gusheh, loc. no. 171, 21.IV.1973; 5F, 1M, W Iran, Eskanderi, 2000 m, 1.VI.1970, loc. No. 36; 1M, N Iran, Central Elburz, Kuhha-ye Tu-Chal, 2000-2500 m, 18.-19.VII.1970, loc. No. 59; 3F, 1M, E Iran, Taftan, Tamandan, loc. no. 167, 2100 m, 17.-18.IV.1973 (all NMPC); 2M, 3F (HMIM): Dacht-Arjan, 17.VI.1970, leg. RADJABI; 1M (HMIM): Tehran, Karaj, Arageh, Sarziarat, 1750 m, 10.-11.VII.1996, BAR./BADII, det. M. SCHÖLLER; 1F (MESC): Firoozabad, 20.X.2004, det. SCHÖLLER; 3M, 2F (ZMHUB): Boyer Ahmadi va Kohkiluyeh Province, Si Sakht: Dena protected area Kuh-e Dihar, 2700 m, 30°52' N, 51°30' E, 08.VII.2004, leg. J. FRISCH; 2M, 1F, same date, Dena, 30°52' N, 51°30' E, leg. ZIEGLER, FRISCH, GIL., SER.; 2F, Fars Province, Shiraz-Firuzabad road, pass Kavar-Bowvakan: 1790 m, 29°04' N, 52°39' E, 12.IV.2006, leg. FRISCH & SERRI (all ZMHUB); 2F (FFPC): N Iran, Prov. Mazandaran, N Elburz, Dohesar-road, 36°35'11" N, 50°47'67" E, 550 m, 01.VI.2008, leg. Dirk FRENZEL; 2M (FFPC): N Iran, Prov. Tehran, S Elburz, Kondor near Karaj, Bachtal, 1640 m, 35°50' N, 51°05' E, leg. Dirk FRENZEL.

***Cryptocephalus (Cryptocephalus) limarius* Lopatin, 1984**

LOPATIN (1984): S Iran, 20 km NE Borazdzhan, loc. no. 297, 18.IV.1977, types in NMPC, i. e. HT and two PT.

***Cryptocephalus (Burlinius) macilentus* Lopatin, 2001**

LOPATIN (2001): S Iran, Sisakt Dena, 13.-14.VI.1973 (HT); Provinz Lorestan and Fare in Zagros mountains (PT).

***Cryptocephalus (Burlinius) macellus* Suffrian, 1860**

= *macellus iranicus* Medvedev, 1975; synonymisation by LOPATIN (2001).

MEDVEDEV (1975): 2M, 1F, Gachsar, Marzanabad, 1700-2800 m, 28.IV.1970, leg. W. WITTMER and V. BOTHMER.

***Cryptocephalus (s. str.) moniliformis* Lopatin, 1980**

LOPATIN (1982): SE Iran, Baluchistan, 30-45 km NE of Bazman, along Bazman-Deh, Pabid road, 14.IV.73.

1M (NMPC): Label of Holotype: SE Iran, 30-45 km NNE Bazman, loc. no. 163, 14.IV.73, male PT same label.

***Cryptocephalus (Burlinius) ochroleucus flabellatus* Schöller, 2009**

= *C. ochroleucus orientalis* Rapilly, 1980

RAPILLY (1980): Kermanshah, 1600 m, 20.VI.1975 (HT); North of Borujerd, Vannae, 1900 m, 28.VI.1975 (PT).

***Cryptocephalus (Burlinius) ocellatus* Drapiez, 1819**

BERTI & RAPILLY (1973): Iran, Nowshahr, 8.VI.1969.

MEDVEDEV (1975): Ramsar, 7.V.1970.

RAPILLY (1980): Polur, 2200 m, 19.VI.1973; Talqan, 2100 m, 11.VI.1975; Avonak, 1950 m, 10.VI.1975*; Hamadan, 1850 m, 13.VI.1975; Kouh-I-Alwand, 2000 m, 13.VI.1975; Vannae, 1900 m, 28.VI.1975; 30 km SW of Borudjerd, 31.V.1977; Nurabad, 1750 m, 22.VI.1975; Hatam-Bak, 1650 m, 23.VI.1975; Firuzabad, 1300 m, 25.VI.1975; Kermanshah, 1600 m, 19.VI.1975; Patao, 1150 m, 18.VI.1975; Isfahan, bords du Zayendeh Roud, 9.VI.1977.

LOPATIN (1981): N Iran, C Elburz, Val. Darband Sar, 2500-3000 m, loc. no. 58, 16.VII.70, 1M (in NMPC).

***Cryptocephalus (Cryptocephalus) octomaculatus* Rossi, 1790**

2F (NMPC): N Iran, Behshahr, loc. no. 72, 25.VII.1970.

New for Iran.

***Cryptocephalus (Cryptocephalus) parvulus* Mueller, 1776**

RAPILLY (1980): Bandar-e-Pahlavi, 1.VI.1969.

***Cryptocephalus (Burlinius) planifrons* Weise, 1882**

BERTI & RAPILLY (1973): Iran, Behshahr, 10.VI.1969.

***Cryptocephalus (Burlinius) rastegari* Rapilly, 1980**

RAPILLY (1980): Alborz-mountains, Haraz valley, Polur, 2450 m, 19.VI.1973.

Note: This cannot be *C. xanthus* Jablokoff-Khnzorian, 1968, because according to the figures given in the original description *C. xanthus* does not belong to *Burlinius*. The synonymisation by LOPATIN (2001) is therefore rejected, the type specimen needs a re-examination.

***Cryptocephalus (Cryptocephalus) rufoflavus* Lopatin, 1984**

LOPATIN (1984): E Iran, Deh Bakri, 1700-1750 m, loc. no. 186, 30.IV.-3.V.1973; HT and female PT in NMPC.

***Cryptocephalus (Asionus) sarbazicus* Lopatin, 1980**

LOPATIN (1982): SE Iran, Sistân, Baluchestân, 3 km north of Rask, Sarbaz river valley, loc. no. 146, 3.-4.IV.1973 (HT+PT); 68 km south of Rask, Bahu Kalat, 3.-4.IV.1973 (PT); labelling of male HT + 6 PT in NMPC: SE Iran, Bahu Kalat, loc. no. 147, 3.-4.IV.1973, det. LOPATIN 1982.

***Cryptocephalus (Burlinius) scarificollis* Lopatin, 1984**

LOPATIN (1984): E Iran, Taftan, Tamandan, 2100 m, loc. no. 167, 20.IV.1973, (HT + 1PT); 17.-18.IV.1973 (1PT); HT + 1PT in NMPC.

1M (NMPC): Khorasan Razni Prov., 2 km S Dor Badam, steppe, stream valley, at light, 37°28' N, 58°28' E, 1575 m, 23.-24.V.2006, Jiri HÁJEK & Pavel CHVOJKA leg., det. SCHÖLLER 2008.

***Cryptocephalus (Cryptocephalus) semiargenteus semiargenteus* Reitter, 1894**

1F (NMPC): S Iran, 7 km NW Shul, 2100 m, loc. no. 247, 17.VI.1973, det. LOPATIN 1985.

New for Iran.

***Cryptocephalus (Cryptocephalus) sericeus* L., 1758**

1M (HMIM): Azarbäijân-e, Sharghi, Ahar: Garmâdoz, Damanâbi; 1F (HMIM): Azarbäijân-e, Sharghi, Osku, near Sahand, Kuh-e Soltân, 2600-3130 m, 22.VI.1985, TERM./MOUSAVI; 1F, Azarbäijân-E, Sharghi, Kaleybar, Youzband, 1500 m, 4.VII.1997, BAR./MOF., det. SCHÖLLER; 1F (NMPC): Ardabil prov., 4.-5.VI.2006, 5 km NW Kolur, "Shahrud" river valley, 37°26' N, 48°41' E, 1670 m, Jiri HÁJEK & Pavel CHVOJKA leg.,

det. SCHÖLLER 2008; 2M, 1F (HMIM): Mazandaran, Tonekabon, Esel-Mahalleh, Har Dang, 2600 m, 24.VI.2002, MOF./SER./DEUVE/ MONT./HAJ.; 1F (HMIM): Ardabil prov., 4.-5.VI.2006, 5 km NW Kolur, “Shahrud” river valley, 37°26' N, 48°41' E, 1670 m, Jiri HÁJEK & Pavel CHVOJKA leg., det. BEZDEK 2008.

New for Iran.

Note: The male was attributed to *C. sericeus* because of the presence of a bilobate tubercle above the depression of the anal sternite, and the female because the pronotal punctation and shape of lateral pronotal margin is as in Central European *C. sericeus*.

***Cryptocephalus (Asionus) subtigrinus* Berti & Rapilly, 1979**

BERTI & RAPILLY (1979): Iran, 15 km NW Khorramabad, in direction of Firuzabad, 1300 m, 27.VI.1975 (HT + 39 PT) in MNHN and Faculté de Karaj.

***Cryptocephalus (Cryptocephalus) surdus* Rapilly, 1980**

RAPILLY (1980): NE of Khorramabad, Hatam-Bak*, 1650 m, 23.VI.1975 (HT); Firuzabad, Zagros mountain chain, NW of Khorramabad, 1750 m, 22.VI.1975 (PT); Nurabad, NW of Khorramabad, 22.VI.1975 (PT); Hatam-Bak-Delfar (Delfard), 1500 m, 9.VI.1973 (PT); West of Kermanshah, Patao, 1150 m, 18.VI.1975 (PT).

***Cryptocephalus (Cryptocephalus) subruber* Rapilly, 1980**

RAPILLY (1980): Firuzabad, Zagros mountain chain, 50 km NE of Khorramabad, 1750 m, 21.VI.1975 (HT); West of Kermanshah, Patao, 1150 m, 18.VI.1975 (PT); NE of Khorramabad, Hatam-Bak, 1650 m, 23.VI.1975 (11 PT).

***Cryptocephalus (Cryptocephalus) turcicus* Suffrian, 1848**

1M (HMIM): Golestān, P.M. Golestān, Khājenārenj, 1350 m, 4.V.1999, MOGH./BAR./MAN., det. SCHÖLLER; 1spm (HMIM): Persien, Asterabad, IV.-VI.1908, Coll. O. LEONHARD, det. Matthias SCHÖLLER.

New for Iran.

***Cryptocephalus (Cryptocephalus) umbrosus* Lopatin, 1956**

OGLOBLIN (1956): Eastern Iran, Khorasan: Bukhsana near Rui; Dast Hirta Tebbes: Shahrud near Astrabad.

BERTI & RAPILLY (1979): Khorassan, 7.-8.VII.1901 (PT); Delfard, 1500 m, 9.VI.1973.

BORUMAND (2000): Ghom, SW Ghom Neyzār, 1400 m, 2.VII.1983, leg. MIRZĀYĀNS & BORUMAND; Hormozgān, Bandar Abbās, Isnin: Kuh-e Geno, 410 m, 7.-8.V.1977, leg. SAFAVI & PĀZUKI; Kermān, Jiroft, 22 km N Kahnuj, 580 m, 16.V.1977, leg. SAFAVI & PĀZUKI; Sistān & Baluchestān, Sarāvān, 10.IV.1951, leg. SAL., det. I. LOPATIN.

14M, 1F (HMIM): Fārs.-Kazerun, Gavkoshak, 1200 m, 6.VI.1990, Ebra, Badii, det. SCHÖLLER; 2F (NMPC): S Iran, 6 km W Geno, 400 m, loc. no. 323, 7.-9.V.1977, det. LOPATIN 1982.

Cryptocephalus (Cryptocephalus) undulatus Suffrian, 1854

BERTI & RAPILLY (1973): Bushehr, 23.V.1969; Dehak*, 16.IV.1971; Minab, 22.IV.1971.

BERTI & RAPILLY (1979): Nord Persien.

LOPATIN (1981): S Iran, Aliabad, 75 km NW Jahrom, loc. no. 53, 10.VII.70, 5spms; S Iran, 5 km W Jahrom, Rudkhanch-ye Shur, loc. no. 52, 9.-10.VII.70, 1M, 1F.

1M (NMPC): Khorasan Razni Prov., 5 km E Baghbaghu, “Kashaf Rud” river valley, at light, 36°02' N, 60°38' E, 650 m, 19.-20.V.2006, Jiri HÁJEK & Pavel CHVOJKA leg.; 1F, S Iran, 30 km NNE Borazian, loc. no. 298, 18.-19.IV.1977; 1F (HMIM): Rafsandjan, 15.IV.1974 (all det. SCHÖLLER 2008).

Cryptocephalus (Asionus) vitellinus Lopatin, 1980

LOPATIN (1980): SE Iran, Sistān & Baluchestān, Chāhbahār, 25 km W of Qasr-e-Qand and 34 km east of Nikshahr, 9.-10.IV.1973 (HT+PT); SE Iran, Baluchistan, Bahu Kalat 68 km south of Rask, 3.-4.IV.73 (PT).

RAPILLY (1980): Region Sabzevaran, Delfar, 1500m, 9.VI.1973; Central mountain chain, Saqdar, 2200m, 17.IV.1973.

BORUMAND (2000): Kermān, 16 km S.W. Jiroft, 820m, 19.V.1977, leg. SAFAVI & PĀZUKI, det. I. LOPATIN.

NMPC, exact label data of HT and 18 PT: SE Iran, 25 km W. Ghasreghand, loc. no. 153, 9.-10.IV.1973; exact label data of 2PT SE Iran, Bahu-Kalat, loc. no. 147, 3.-4.IV.1973; 3spms SE Iran, 25 km W. Ghasreghand, loc. no.153, 9.-10.IV.1973, det. LOPATIN 1983; 3spms SE Iran, Rask vall r. Sarbáz, loc. no. 146, 3.-4.IV.1973, det. LOPATIN 1983 (NMPC).

***Cryptocephalus (Asionus) zarudnianus* Medvedev, 1971**

MEDVEDEV (1971): Iran, Sistān & Baluchestān, Land Bampur, 10.-11. VIII.1998 (HT).

LOPATIN (1982): 8spms, SE Iran, Baluchistan, Nikshahr, Nikshahr river valley, loc. no. 152, 8.-9.IV.1973; 1F, Rask, Sarbaz river valley, loc. no. 146, 3.-4.IV.1973.

BERTI & RAPILLY (1979): Senderak, 2.VI.1973; East of Darpahn, 2.VI. 1973.

BORUMAND (2000): Hormozgān, Bashāgerd, 20 km E Senderk, 300 m, 11.V.1977, leg. SAFAVI & PĀZUKI; Zāhedan-Khāsh, 26.IV.1971, leg. RA-JABI; Sistān & Baluchestān, Chāhbahār, Nikshahr, 8.-10.IV.1973; Nikshahr, Gasr-e Gahnd, 10.IV.1973; 90 km Zāhedān, 27.III.1973, leg. SAFIVI & BORUMAND; all det. I. LOPATIN.

1M (NMPC): S Iran, Derpehan, 12 km E Senderk, 11.-12.V.1977, loc. no. 326, 9.-10.IV.1973, det. LOPATIN 1982; 1M, SE Iran, 12 km SSE Bazman, 13.IV.1973, loc. no. 160, det. LOPATIN 1982; 1F, Baloutchestan, Nikschahr, 8.-10.IV.1973, BROUM./SAF., det. SCHÖLLER; 1F (HMIM): Baloutchestan, Nikschahr, 8.-10.IV.1973, BROUM./SAF., det. SCHÖLLER 2008.

***Cryptocephalus (Asionus) zarudnii* Lopatin, 1953**

= *Cryptocephalus (Asionus) kharazii* Berti & Rapilly, 1979

BERTI & RAPILLY (1979): Iran, Delfard, 9.VI.1973, 1500 m (HT+PT), Saqdar, 11.VI.1973, 2200 m (PT) 101 PT total.

LOPATIN (1985): 1M, SE Iran, 25 km W Ghasre-ghand, loc. no. 153, 9.-10.IV.1973.

BORUMAND (2000): Sistān & Baluchestān, Chāhbahār, Gasr-e Gahnd, 9.-10.IV.1973; Nikshahr, 8.-10.IV.1973, leg. SAFIVI & BORUMAND, det. I. LOPATIN.

1F (NMPC): 20 km NE Borazdzhan, loc. no. 297, 18.IV.1977, det. LOPATIN 1985.

Discussion

Most species of *Cryptocephalini* are still known from few collection localities or even the type specimens only. However, for some species distribution patterns emerge. For one group of species predominantly distributed in Europe a few records are known from the north-west of Iran

only, these species do obviously not reach the border of the Caspian Sea, i.e. *Pachybrachis albicans*, *Cryptocephalus anticus*, *C. aureolus*, and *C. sericeus*, and the Asian *P. scripticollis*.

Some species occur exclusively close to the shores of the Caspian sea, but were not recorded further south or west within the country. These are partly species widely distributed in Europe that reach their limits of distribution at the southern coast of the Caspian sea, i.e. *Cryptocephalus octomaculatus*, *C. parvulus*, *C. planifrons*, *C. distinguendus*, *C. turcicus*, and *C. exiguus variceps*. On the other hand, this circumcasian distribution applies also to two species that are restricted to Asia minor and Kaukasus, i. e. *Cryptocephalus cribratus* and *C. alborzensis*. DE LATTIN (1951) proposed the term caspian distribution for species currently present between the black sea and the caspian sea, but also including species moreover widely distributed versus Central Europe and / or Western Siberia. This broad concept hypothesized an glacial refugial area between the black sea and the caspian sea, from which the respective species expanded in postglacial times.

Another two groups of species that occur both in Europe and Asia were found to be more widely distributed in the north of Iran, either more in the north-west, i.e. *Cryptocephalus duplicatus*, *C. janthinus*, *C. moraei* and *C. ocellatus*, or more in the north-east, i.e. *Pachybrachys mendax*, *Cryptocephalus androgyne androgyne* and *C. concolor*. Few species are distributed across Iran from the north-west to the very south-east, i.e. *P. glycyrrhizae* and *C. lederi*.

26 species are endemic to Iran. The highest level of endemism can be found in the genus *Acolastus*. Out of the 15 species of *Acolastus* 11 are endemic (73%), the four remaining species are *A. glabratus* occurring also in Turkey, *A. zarudnyi* and *A. mandli* also occurring in Afghanistan, and *A. fausti* that is more widely distributed in Caucasian countries. In the genus *Pachybrachis*, only two species are endemic (20%). The remaining species are more widely distributed, partly also in Europe or North Africa. About half of the species of *Cryptocephalus* are endemic, at least at the subspecies-level. Most of the non-endemic species are widely distributed in Europe and Asia.

The majority of endemic species (17) were found in the South. The South-Eastern part of Iran is most rich in endemic species, the nine species that were found only there are *Acolastus iranicus*, *A. mirandus*, *A. semenovi*, *Cryptocephalus davatchii*, *C. zarudnii*, *C. moniliformis*, *C. sarbazicus*, *C. zarudnianus*, and *C. kermanicus*. DE LATTIN (1951) proposed an Irano-eremian refugial area that covers the present distribution of these endemic species.

Six endemic species are known from the South-West only, *Acolastus jelineki*, *A. pici*, *A. rufus*, *A. x-signatus*, *Cryptocephalus limarius* and *C. macilentus*. Five endemic species were collected only in the West, *Pachybrachis pudicus*, *P. rapillyi*, *Cryptocephalus ochroleucus flabellatus*, *C. augustalisi dissipatus*, and *C. subtigrinus*. Three endemic species were collected only in the East, *Acolastus hoberlandti*, *A. lugubris* and *Cryptocephalus khajami*. Only three endemic species were found to be restricted to the very North, *Cryptocephalus euchirus*, *C. scarificollis*, and *C. rastegari*. The remaining species are *Acolastus ophthalmicus* (North and Central), *C. umbrosus* (Central and South), and *C. vitellinus* (East / South-East).

During this study, a number of taxonomic problems were identified that could not be solved in a faunistic work. Species-groups that need further studies are the *zarudnyi*- and *glabratus*-complex of *Acolastus*, and the *fulmenifer*-group (*tigrinus*-group sensu Berti) of *Cryptocephalus*. The subspecies of *Cryptocephalus undulatus* need to be revised.

Generally difficult to determine are the *Cryptocephalus* species in the *C. sericeus*-species group. In the species-group *C. violaceus*, *C. duplicatus* and *C. concolor*, the aedeagi are similar and the ridges on the male last abdominal segment show a variability that was not studied yet. In this work, all males with a V- or roof-shaped ridge are contributed to *C. duplicatus*, and all males with a bulging lamella to *C. concolor*.

The fact that 16% of the *Cryptocephalini* species recorded in this study were new to Iran showed the need to compile the huge amount of data that accumulated to date. The maps can also serve to identify collection sites in the future in areas that received little or no attention yet.

Acknowledgements

The authors would like to thank cordially Sayeh SERRI (HMIM), Jiri HAJEK (NMPC), Jan BEZDEK and all other collectors and museum collection managers mentioned in materials and methods for loaning the material under study. Johannes FRISCH (ZMHUB) provided valuable information on the biogeography of the area.

References

ANONYMOUS (2006): Road atlas of Iran. First Edition. – Gitashenasi Cartographic & Geographical Institute, Tehran, Iran.

- BERTI, N. & RAPILLY, M. (1973): Contribution à la faune de l'Iran. Voyages de MM. R. Naviaux et M. Rapilly (Col., Chrysomelidae). – Annales de la Société Entomologique de France (n.s.) **9**:861–894.
- BERTI, N. & RAPILLY, M. (1979): Contribution à la faune d'Iran. 4 – Cryptocephalinae (Coléoptères, Chrysomelidae). – Nouvelle Revue d'Entomologie **9**: 239–269.
- BORUMAND, H. (2000): Insects of Iran. The list of Coleoptera in the Insect Collection of Plant Pest & Diseases Research Institute. Coleoptera (XXIV): Chrysomeloidea: Fam. (160) Chrysomelidae. Plant Pests & Diseases Research Institute, Insect Taxonomy Research Department Publ. **4**, 61 pp.
- ENCARTA Weltatlas (2004) – CD; Microsoft.
- HOBERLANDT, L. (1974): Results of the Czechoslovak-Iranian entomological expedition to Iran 1970. No. 1: Introduction. – Acta Entomologica Musei Nationalis Pragae Suppl. **6**:9–23.
- HOBERLANDT, L. (1981): Results of the Czechoslovak-Iranian entomological expeditions to Iran. Introduction to the Second expedition 1973. – Acta Entomologica Musei Nationalis Pragae **40**:5–32 + XIV.
- HOBERLANDT, L. (1983): Results of the Czechoslovak-Iranian entomological expeditions to Iran. Introduction to the Third expedition 1977. – Acta Entomologica Musei Nationalis Pragae **41**:5–24 + XVI.
- JAKOBSON, G. G. (1917): De genero *Thelyterotarso* Weise (Coleoptera, Chrysomelidae). – Revue Russe d'Entomologie, Petrograd **16**(1916):266–274.
- LATTIN, G. de (1951): Über die zoogeographischen Verhältnisse Vorderasiens. – In: Herre, W. (Hrsg.) Verhandlungen der Deutschen Zoologen vom 1. bis 5. August 1950 in Marburg. – Zoologischer Anzeiger, Suppl. **15**:206–214.
- LOPATIN, I. K. (1967): Österreichische entomologische Expeditionen nach Persien und Afghanistan. Beiträge zur Coleopterologie. Teil V: Chrysomelidae. – Annalen des Naturhistorischen Museums Wien **70**:437–441.
- LOPATIN, I. K. (1979): Novy rod i novye vidy zhukov-listoedov (Coleoptera, Chrysomelidae) iz Irana. – Entomologicheskoe Obozrenie **58**(3):586–589.
- LOPATIN, I. K. (1980): Zhuki-listoedy (Coleoptera, Chrysomelidae) Irana. Rezultaty chekhoslovatsko-iranskoy ekspedicii 1973. I. – Entomologicheskoe Obozrenie **59**(3):613–623.
- LOPATIN, I. K. (1981): Ergebnisse der Tschechoslowakisch-Iranischen entomologischen Expeditionen nach dem Iran (1970) Coleoptera: Chrysomelidae. – Acta Entomologica Musei Nationalis Pragae **40**:371–380.
- LOPATIN, I. K. (1984): Leaf-beetles (Coleoptera, Chrysomelidae) of Iran. Results of the Czechoslovak-Iranian expeditions, 1973-1977. III. – Entomological Review **59**(3):62–76.
- LOPATIN, I. K. 1985: Zhuki-listoedy (Coleoptera, Chrysomelidae) Irana. Rezultaty chekhoslovatsko-iranskoy ekspedicii 1973-1977 g. IV. Entomologicheskoe Obozrenie **64**: 760-772.
- LOPATIN, I. K. (1997): Novye vidy zhukov-listoedov (Coleoptera, Chrysomelidae) aziatskoy fauny. – Entomologicheskoe Obozrenie **76**(2):363–377.

- LOPATIN, I. K. (1999): Biology and biogeography of desert leaf beetles of Central Asia. In: COX, L. M. (ed.) *Advances in Chrysomelidae biology* 1:159–168.
- LOPATIN, I. K. (2001): Einige neue und wenig bekannte Cryptocephalinen-Arten (Coleoptera, Chrysomelidae). – *Vestnik-Zoologii* 35(1):91–93, 103.
- LOPATIN, I. K. & DOVGAILO, K. E. (2002): The genus *Cryptocephalus* (Chrysomelidae) of Palearctic region. CD Rom, K. Dovgailo, Minsk (not running on current computer systems).
- MEDVEDEV, L. N. (1971): Neue und wenig bekannte palaearktische Arten der Gattung *Cryptocephalus* Geoffr. (Coleoptera: Chrysomelidae). – *Deutsche Entomologische Zeitschrift* (N.F.) 18:129–132.
- MEDVEDEV, L. N. (1975): Chrysomelidae collected by Dr. W. WITTMER in Turkey and Iran. – *Mitteilungen der Entomologischen Gesellschaft Basel*, N.F. 1: 12–19.
- OGLOBLIN, D. A. (1956): Novye vidy roda *Cryptocephalus* Latr. (Coleoptera, Chrysomelidae) palearkticheskoy fauny. – *Entomologicheskoe Obozrenie* 34:890–894.
- RAPILLY, M. (1980): Contribution à la faune d'Iran. Coléoptères, Chrysomelidae, Cryptocephalinae. – *Revue Française Entomologie* (n. s.) 2(2):75–85.
- ROMANTSOV, P. & BUKEJS, A. (2009): New leaf-beetle species of *Acolastus* Gerstaecker, 1855 (Coleoptera: Chrysomelidae: Cryptocephalinae) from Iran and notes on close species. – *Acta Biol. Universitatis Daugavp.* 9(1):89–96.
- SCHÖLLER, M. & WARCHAŁOWSKI, A. (2009): A review of the Eurasian and North-African *Acolastus* Gerstaecker, 1855 (Coleoptera: Chrysomelidae: Cryptocephalinae). – *Genus* 20(2):277–325.
- WARCHAŁOWSKI, A. (2003): The leaf-beetles (Chrysomelidae) of Europe and the Mediterranean region. – Warszawa, Natura optima dux Foundation:1–600.

Adresses of the authors:

Dr. Matthias SCHÖLLER, Bundesforschungsinstitut für Kulturpflanzen, Institut für ökologische Chemie, Pflanzenanalytik und Vorratsschutz, Abt. Vorratsschutz, Königin-Luise-Str. 19, D-14195 Berlin, Germany.
E-Mail: schoeller@tricho.b.shuttle.de

Hiva NASSERZADEH, Insect Taxonomy Research Department, Iranian Research Institute of Plant Protection, Evin/Tabnak St., P.O. Box 1454, IR – 19395, Tehran, Iran. E-Mail: h_naserzadeh@yahoo.com

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Mitteilungen des Internationalen Entomologischen Vereins](#)

Jahr/Year: 2010

Band/Volume: [35 2010](#)

Autor(en)/Author(s): Schöller Matthias, Nasserzadeh Hiva

Artikel/Article: [The distribution of leaf beetles of the tribe Cryptocephalini in Iran \(Chrysomelidae: Cryptocephalinae\) 55-87](#)