Distributional notes on Chrysomelidae from Pakistan and Afghanistan

(Coleoptera)

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Summary
The distributional data concerning 19 species from Pakistan and 9 species from Afghanistan are presented. Eight species are recorded as new for Pakistan: Coptocephala crassipes (Leefevre, 1876), Chloropterus ornatus Lopatin, 1984, Pachnephorus tessellatus Duftscheidt, 1825, Macrocoma sacra (Lopatin, 1983), Macrocoma marquardti (Breit, 1913), Palpoxena pallida (Jacoby, 1896), Aulacophora impresa (Fabricius, 1801), and Chaetocnema belli Jacoby, 1904. One species is recorded as new for Afghanistan: Tituboa heptneri (Medvedev, 1957).

Zusammenfassung

Key words
Chrysomelidae, leaf beetles, Pakistan, Afghanistan, distribution, new records

Introduction
The faunistic data on the leaf beetles of Pakistan are still sufficiently incomplete; the majority of species are recorded once for this territory and their distributional pattern is unknown. The only existing summary by Hashmi & Tashfeen (1992), and also Chaudry et al. (1966), as well as identification keys of Abdullah & Qureshi (1968, 1969a, 1969b) lack exact geographical data. The leaf beetles of Afghanistan are studied somewhat better (see e.g. Gruev 1988; Lopatin 1962, 1983; Medvedev 1978, 1985), although real distributional data is also fragmentary. The general faunistic records on the Chrysomelidae of Pakistan and Afghanistan are summarized in Löbl & Smetana (2010).

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The new findings of leaf beetles presented below supplement data on the ranges of the species and especially their distributional pattern in Pakistan and Afghanistan. It has the special interest in view that both regions are situated at the border between Palaearctic and Oriental zoogeographical regions.

Material and Methods


The material from Pakistan treated in this paper was collected by second author and housed in the Natural History Museum, University of Karachi; the material from Afghanistan was collected by O. V. Pak (Donetsk, Ukraine) and stored in the personal collection of the third author.

Results

Subfamily Clytrinae

Coptocephala crassipes iranica (Medvedev, 1971)

New record:
N. Pakistan, Khyber-Pakhtunhwa Province, Mansehra District, Balakot, 20.IV.2009, 1 male.
New to Pakistan. Described from Iran and distributed also in Afghanistan, India, Oman, Saudi Arabia and Yemen. The nominotypical subspecies is distributed in Italy (Sardinia) and North Africa (Löbl & Smetana 2010).

Smaragdina viridis viridis (Kraatz, 1882)

New record:
Afghanistan, Kabul Province, Kabul environs, Parman gorge, 18.05.2010, 3 exx.
Previously recorded in Afghanistan from Herat Province (Medvedev 1978). Distributed also in Middle Asia (Löbl & Smetana 2010).

Tituboea heptneri (Medvedev, 1957)

New record:
Afghanistan, Kabul Province, 5 km NW Kabul, Kargha locality, 2000 m, 15-16.05.2010, 3 exx.; the same place, 1-2.06.2010, 2 exx.
New to Afghanistan. Described from Iran. This species is insufficiently studied and poorly known. The finding of this species in Afghanistan suggests of its larger range. The material examined supplements with data on the variability of colouration of this species; pronotum with or without two blurred piceous spots at basal margin, 4 dark spots on elytron vary in size from medium-sized to small, dot-shaped, legs and last segment of abdomen black or legs entirely yellow.
**Tituboea silensis** (Weise, 1894)

New record:
Afghanistan, Kabul Province, 5 km NW Kabul, Kargha locality, 2000 m, 15-16.05.2010, 1 ex.
Previously reported from Afghanistan from Kabul environs, Laghman and Ghazni Provinces (Medvedev 1978).

**Labidostomis nuristanica** Reineck, 1937

New record:
Afghanistan, Kabul Province, 5 km NW Kabul, Kargha locality, 15-16.05.2010, 8 exx.
This polytypic species comprises three subspecies including the nominotypical. The differences between them are indistinct including aedeagal. Hence, it is difficult to identify the subspecies of examined material, though the colouration the most resembles *Labidostomis nuristanica afghanica* L. Medvedev, 1978. All subspecies are distributed mostly in Afghanistan (Löbl & Smetana 2010) which gives objections against their validity; this subspecies also known from Pakistan.

Subfamily Eumolpinae

**Platycorynus peregrinus** (Herbst, 1783)

New record:
NE Pakistan, Punjab Province, Rawalpindi District, Murree environs, 15.VIII.2009, 1 ex.
Previously reported from Pakistan by Hashmi & Tashfeen (1992) without exact geographical data. The species is widely distributed in the Oriental Region (Löbl & Smetana 2010).

**Chloropterus ornatus** Lopatin, 1984

Material:
E Pakistan, Sindh Province, Umerkot District, Umerkot environs, 15.VI.2009, 1 female.
New to Pakistan. The species is described from south-east Iran. The specimen differs from the type series by the absence of an inner spot on the elytra and the somewhat smaller size – 4.5 mm.

**Pachnephorus tesselatus** Duftschmidt, 1825

Material:
E Pakistan, Sindh Province, Mirpur Khas District, Tamdajam environs, 22.VI.2009, 1 ex.
New to Pakistan. The species is widely distributed in the Palearctic Region (Löbl & Smetana, 2010) and known from the territories bordering Pakistan – Afghanistan and China (Medvedev 1985; Gruev 1988).
Colaspisoma ornatum Jacoby, 1881

Material:
NE Pakistan, Punjab Province, Rawalpindi District, Murree environs, 15.VIII.2009, 3 ex.
Previously recorded for Pakistan after Hashmi & Tashfeen (1992) without exact geographical data. Known also from Afghanistan and India (Medvedev 1985).

Macrocoma sacra (Lopatin, 1983)

Material:
N. Pakistan, Khyber-Pakhtunhwa Province, Swat District, Charbagh environs, 07.VII.2010, 1 male.
New to Pakistan. The species was described from Saudi Arabia.

Macrocoma marquardi (Breit, 1913)

Material:
N. Pakistan, Khyber-Pakhtunhwa Province, Malkandi, Naran environs, 18.VI.2010, 1 male, 2 females.
New to Pakistan. The species is distributed in China (Tibet) and Afghanistan (Medvedev 1985; Gruev 1988; Löbl & Smetana 2010).

Chrysochares asiaticus (Pallas, 1771)

New record:
E. Afghanistan, Nangarhar Province, 10 km SE Jalalabad, Samarkhel Village, Kabul River valley, 13.05.2010, 2 exx.
Previously reported as Chrysochares asiaticus orientalis Lopatin, 1963 in Afghanistan from Maimana Province. This information was missing in the Catalogue of Palaeartic Coleoptera (Löbl & Smetana 2010). Mostly asiatic species are known also from the south of the European part of Russia, Ukraine, Azerbaijan, Kazakhstan, Mongolia, Middle Asia, and from Xinjiang Province of China (Löbl & Smetana 2010).

Subfamily Chrysomelinae

Chrysolina punjabiensis Abdullah & Qureshi, 1968

New record:
N. Pakistan, Khyber-Pakhtunhwa Province, Chitral District, Boony environs, 15.VII.2010, 1 male.
Previously known from the type locality in W. Pakistan, Punjab Province, Lahore.

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**Chrysolina inconstans** *Wiedemann, 1823*

New record:
N. Pakistan, Khyber-Pakhtunhwa Province, Malkandi, Naran environs, 18.VI.2010, 3 females. This species was recorded from Pakistan by **Abdullah & Qureshi** (1968) and **Hashmi & Tashfeen** (1992) without exact geographical data. Known also from India and Sri Lanka (**Bieńkowski** 2001; **Löbl & Smetana** 2010).

**Chrysolina grata grata** *(Faldermann, 1837)*

New record:
Afghanistan, Kabul Province, Kabul environs, Parman gorge, 18.05.2010, 3 ex.; Afghanistan, Kabul Province, 5 km NW Kabul, Kargha locality, 2000 m, 15-16.05.2010, 1 ex.

A common and abundant species recorded in Afghanistan from many provinces (**Medvedev** 1985). Also known from Georgia, Iran, Iraq, Turkey, and Turkmenia (**Löbl & Smetana** 2010).

**Chrysolina marginata circumducta** *(Méntrés, 1835)*

New record:
Afghanistan, Kabul Province, 5 km NW Kabul, Kargha locality, 2000 m, 15-16.05.2010, 1 ex.; Afghanistan, Bamyan Province, Kokhi-Baba Mountain range, 10 km S Bamyan, 30.05.2010, 1 ex.

This holarctic species is polytypic with a complicated situation within the species complex and unclear status of the most of subspecies described so far. Only the subspecies *Chrysolina marginata bodemeyeri* (**Weise**, 1910) has been recorded from Afghanistan from Herat, Oruzgan, Baghlan, and Kabul (**Medvedev** 1985). Thus, this subspecies is recorded from Afghanistan for the first time.

Subfamily Galerucinae

**Tribe Galerucini**

**Palpoxena pallida** *(Jacoby, 1896)*

New record:
E. Pakistan, Sindh Province, Mirpur Khas District, Khan, 24.VII.2010, 1 male.

New to Pakistan. Previously known from India (Bombay: Belgaum). According to **Abdullah & Qureshi** (1968) and **Chaudry et al.** (1966) three species are known from Pakistan – *Palpoxena albicans* (**Jacoby**, 1900), *P. rufofulva* (**Jacoby**, 1896), and *P. konbirensis* (**Weise**, 1924).
New record:
N. Pakistan, Khyber-Pakhtunhwa Province, Mansehra District, Paras environs, Naran Village, 27.VII.2009, 3 exx.
Previously known in Pakistan from Punjab Province (Murree) and Khyber-Pakhtunhwa Province: Hazara District (Abbottabad); also known from India and Nepal (MAULIK 1936).

*Mimastra cyanura* (HOPE, 1831)

New record:
N. Pakistan, Khyber-Pakhtunhwa Province, Mansehra District, Paras environs, Naran Village, 27.VII.2009, 2 exx.
Previously known in Pakistan from Punjab Province (Kulu) (MAULIK, 1936) and Khyber-Pakhtunhwa Province: Hazara District (Abbottabad, Balakot) (CHAUDRY et al. 1966).

*Aulacophora foveicollis* (LUCAS, 1849)

New record:
N. Pakistan, Khyber-Pakhtunhwa Province, Mansehra District, Paras environs, Naran Village, 27.VII.2009, 1 ex.; E Pakistan, Sindh Province, Tharparkar environs, 05.VII.2008, 1 ex.
Previously known in Pakistan from Punjab Province, Khyber-Pakhtunhwa Province, and Sindh Province (CHAUDRY et al. 1966; MEDVEDEV 1985). The species is widely distributed in southern Europe, North Africa, Western Asia, and India (LÖBL & SMETANA 2010).

*Aulacophora impressa* (FABRICIUS, 1801)

Material:
E. Pakistan, Sindh Province, Tharparkar District, Nagarparkar environs, 15.VII.2010, 1 ex.
New to Pakistan. Previously known from India and Nepal (MAULIK 1936; LÖBL & SMETANA 2010).

*Aulacophora intermedia* JACOBY, 1892

New record:
E. Pakistan, Sindh Province, Mirpur Khas District, Khan environs, 24.VII.2010, 1 ex.
Previously known from Pakistan from Khyber-Pakhtunhwa Province (Hazara District) and Punjab Province (Murree) (CHAUDRY et al. 1966). Distributed also in India, Sri Lanka, and Myanmar (MAULIK 1936).
Radymna persica (Faldermann, 1837)

New record:  
E. Afghanistan, Nangarhar Province, 10 km SE Jalalabad, Samarkhel Village, Kabul River valley, 13.05.2010, 2 exx.  
A common and abundant species recorded in Afghanistan from many provinces (Medvedev 1985). Widely distributed in West Asia (Löbl & Smetana 2010).

Tribe Alticina

Altica balassogloi (Jacobson, 1892)

New record:  
N. Pakistan, Khyber-Pakhtunhw Province, Chitral environs, 14.VII.2010, 1 male, 3 females.  
Previously reported from North Pakistan in Gupis District of Gilgit-Baltistan territory (Lopatin 1967).

Altica himalayensis Chen, 1936

New record:  
N. Pakistan, Khyber-Pakhtunhw Province, Swat District, Charbagh environs, 07.VII.2010, 4 exx.  
This species was recorded for Pakistan from Punjab Province (Murree) (Döberl 2003). Widely distributed in West Asia: Bhutan, India, Nepal, China (Löbl & Smetana 2010).

Chaetocnema belli Jacoby, 1904

New record:  
E. Pakistan, Sindh Province, Tharparkar District, Mithi environs, 17.IX.2010, 2 exx.  
New to Pakistan. Previously known from India (Bombay, Nilgiri Hills) and Nepal (Maulik 1926; Löbl & Smetana 2010).

Subfamily Cassidinae

Cassida subtilis Weise, 1897

New record:  
E. Pakistan, Sindh Province, Tharparkar environs, 5.VII.2008, 26 exx.  
Previously known from Pakistan after Hashmi & Tashfeen (1992) without exact geographical data. Distributed also in India, Sri Lanka, and Myanmar (Borowiec 1999).
Cassida brevis (Weise, 1884)

New record:
Central Afghanistan, Bamiyan Province, Banda-Amir, 2900 m, 5 exx.
Previously reported from Afghanistan from Ghazni, Oruzgan, Ghor, and Bamiyan Provinces (Medvedev 1985; Gruev 1988). Widely distributed in south-east Europe, Transcaucasus, and West Asia (Löbl & Smetana 2010).

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References
Abdullah, M. & Qureshi, S. S. 1969a: A key to the Pakistani genera and species of the Hispinae and Cassidinae (Coleoptera: Chrysomelidae), with description of new species from West Pakistan including the economic importance. – Pakistan Journal of Science and Industrial Research 12: 95-104.
Abdullah, M. & Qureshi, S. S. 1969b: A key to the Pakistani genera and species of the Chrysomelinae and Halticinae (Coleoptera: Chrysomelidae), with description of new genera and species including the economic importance. – Pakistan Journal of Science and Industrial Research 12: 105-120.
Lopatin I. K. 1977: Leaf beetles (Chrysomelidae) of Middle Asia and Kazakhstan. – Nauka, Leningrad.

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