

**CHOROTYPE IDENTIFICATION
FOR TURKISH CHRYSOMELOIDEA (COLEOPTERA)
PART III – CHRYSOMELIDAE: CRYPTOCEPHALINAE**

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ABSTRACT: The paper gives chorotype identifications for Turkish Cryptocephalinae (Coleoptera: Chrysomelidae). In association with this, some zoogeographical remarks are also given in the text.

KEY WORDS: Cryptocephalinae, Chrysomelidae, Fauna, Zoogeography, Turkey.

Works on Turkish leaf beetles began in late 19th century. Especially since the last century, they were increased as chiefly faunistic and taxonomic works. Recently, they continue with an increased speed.

Clearly, there is no any work on zoogeographical regionalisation of Turkish Chrysomeloidea related the whole territories of Turkey or regions of Turkey (see Part I for regions in Turkey) at the present.

As known, a series work was planned that is aim to expose zoogeographical regionalisations of Turkish Chrysomeloidea fauna. Özdikmen & Kaya (2014) is the first and Özdikmen & Mercan (2014) is the second attempt of this aim. The present study is attempted as the third step of this aim.

ARRANGEMENT OF INFORMATION

Information in the present text is given in the following order:

The subfamily, genus, species and subspecies names are given simply.

For each genus, species and subspecies are presented with the author name and date of description.

The data, **Range, Records in Turkey, Remarks** and **Chorotype** under the title for each taxon is given.

Range. In these parts, the whole distribution areas in world are provided for each taxon as in Löbl & Smetana (2010) (see the cited reference for the abbreviations).

Records in Turkey. In these parts, the whole distribution areas in Turkey are provided for each taxon as in Ekiz et al. (2013) (see the cited reference for the abbreviations).

Remarks. In these parts, regional and general distribution in Turkey are given chiefly.

Chorotype. The present zoogeographical characterization.

The present zoogeographical characterization is based on the chorotype classification of Anatolian fauna, recently proposed by Vigna Taglianti et al. (1999). In the text, as far as possible one chorotype description can be identified for each taxon. But this kind of description can not be possible for some taxa, so two or more chorotypes are used for them.

With this purpose, Löbl & Smetana (2010) for the range in the world, Ekiz et al. (2013) for the provincial distribution in Turkey and Özdikmen et al. (2014) for the fauna of Turkey are used chiefly.

According to Özdikmen et al. (2014), Turkish Cryptocephalinae comprises of 107 species group taxa (92 species and 15 subspecies) of 4 genera.

Subfamily CRYPTOCEPHALINAE

Genus *Acolastus* Gerstaecker, 1855

Subgenus *Anopsilus* Jakobson, 1917

A. glabratus (Lopatin, 1985)

Range: E: TR **A:** IN **Records in Turkey:** TR-A: AGR **Remarks:** The species has been recorded only from Eastern Anatolian Region in Turkey until now. **Chorotype:** SW-Asiatic (Irano-Anatolian)

A. iranicus (Lopatin, 1980)

Range: A: IN **TR Records in Turkey:** TR-A: URF **Remarks:** The species has been recorded only from South-Eastern Anatolian Region until now. **Chorotype:** SW-Asiatic (Irano-Anatolian)

Genus *Cryptocephalus* Geoffroy, 1762

Subgenus *Asionus* Lopatin, 1988

C. amasiensis Weise, 1894

Range: A: TR **Records in Turkey:** TR-A: AMA, KAH **Remarks:** The endemic species has been recorded only from 2 Turkish regions as Black Sea Region and Mediterranean Region until now. **Chorotype:** Anatolian

C. apicalis Gebler, 1830

Range: E: AB AU BH BU CR CT HU IT MD RO SK ST TR UK YU **A:** KZ WS **Records in Turkey:** TR-A: ANK – TR-E **Remarks:** The species has been recorded only from 2 Turkish regions as Central Anatolian Region and Marmara Region until now. **Chorotype:** C and E-European

C. curda Jakobson, 1897

Range: E: AB AR GG **A:** TR **Records in Turkey:** TR-A: AFY, AGR, CNK, COR, ELA, EZU, KON, KRS, ORD, SIV, TUN **Remarks:** The species has been recorded only from 4 Turkish regions. But it has not been recorded from Aegean Region, Mediterranean Region and South-Eastern Anatolian Region until now. **Chorotype:** SW-Asiatic (Anatolo-Caucasian)

C. flexuosus Krynicki, 1834

Range: E: AB BU GG RO ST UK **A:** KI KZ WS **Records in Turkey:** TR-A **Remarks:** Provincial distribution of the species is unknown. But it must be distributed very likely at least in N and NE Turkey. **Chorotype:** Turano-Mediterranean (Turano-Balkan)

C. gloriosus Mulsant & Wahanru, 1853

Range: A: TR **Records in Turkey:** TR-A: KAR **Remarks:** The endemic species has been known only from Central Anatolian Region in Turkey until now. **Chorotype:** Anatolian

C. phaleratus (Tappes, 1871)

Range: E: AB AR GG **A:** IN **TR Records in Turkey:** TR-A: ADI, DIY **Remarks:** The species has been recorded only from South-Eastern Anatolian Region in Turkey until now. **Chorotype:** SW-Asiatic (Anatolo-Caucasian + Irano-Caucasian + Irano-Anatolian)

C. pseudoreitteri Tomov, 1976

Range: A: TR **Records in Turkey:** TR-A: AKS, ANK, KAY **Remarks:** The endemic species has been known only from Central Anatolian Region in Turkey until now. **Chorotype:** Anatolian

***C. quatuordecimmaculatus* Schneider, 1792**

Range: E: AL AU BU CZ HU MC RO SK UK YU **A: TR Records in Turkey:** TR-A: ANK, EZU **Remarks:** The species has been recorded only from 2 Turkish regions as Central Anatolian Region and Eastern Anatolian Region until now. **Chorotype:** C and E-European

***C. tappesi* Marseul, 1868**

Range: A: LE SY **TR Records in Turkey:** TR-A: ADA, GAZ, HAT, MER **Remarks:** The species has been recorded only from 2 Turkish regions as Mediterranean Region and South-Eastern Anatolian Region until now. **Chorotype:** E-Mediterranean (Palaestino-Taurian)

***C. volkovitshi* Lopatin, 1976**

Range: E: AB AR **TR Records in Turkey:** TR-A: IGD, KRS **Remarks:** The species has been recorded only from Eastern Anatolian Region in Turkey until now. **Chorotype:** SW-Asiatic (Anatolo-Caucasian)

Subgenus *Burlinius* Lopatin, 1965***C. ayvazi* Gök & Sassi, 2002**

Range: A: TR **Records in Turkey:** TR-A: ISP **Remarks:** The endemic species has been known only from Mediterranean Region in Turkey until now. **Chorotype:** Anatolian

***C. bilineatus* (Linnaeus, 1767)**

Range: E: AR AU BE BU BY CR CT CZ DE EN FI FR GB GE GG HU IT KZ LA LT LU MD NL NT PL PT RO SK SL SP ST SV SZ UK YU **A:** ES FE JA KZ MG NC TR WS XIN **Records in Turkey:** TR-A **Remarks:** Provincial distribution of the species is unknown. **Chorotype:** Sibero-European

***C. chrysopus* Gmelin, 1790**

Range: E: AB AU BE BH BU BY CR CT CZ FR GE GR HU IT MD PL RO SK SL SP ST TR UK YU **A:** WS **Records in Turkey:** TR-A: SAM **Remarks:** The species has been known only from Black Sea Region in Turkey until now. **Chorotype:** Sibero-European

***C. connexus* Olivier, 1807**

Range: E: AB AL AR AU BH BU CR CZ FR GE GG GR HU IT MC MD PL RO SK SL ST TR UK YU **A:** IN IS JO KZ SY TM **TR Records in Turkey:** TR-A: ADI, AFY, AGR, AKS, ANK, ART, BAL, BAR, BIL, BOL, BRS, ESK, EZU, GAZ, GIR, GUM, HAT, ISP, IZM, KAH, KAR, KAS, KRB, KSH, MAN, MER, NIG, ORD, OSM, SAK, SAM, SII, TOK, TRA, ZON – **TR-E:** TEK (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The species is widely distributed in Turkey. It has been recorded from all Turkish regions. But it has not been recorded only from Istranca and Çatalca Parts of European Turkey in Marmara Region, Upper Firat and Hakkari Parts in Eastern Anatolian Region and Dicle Part in South-Eastern Anatolian Region until now. **Chorotype:** Turano-European

***C. elegantulus* Gravenhorst, 1807**

Range: E: AB AL AR AU BE BH BU BY CR CT CZ DE FR GB GE GG GR HU IT KZ LA MC MD NL NT PL RO SK SL SP ST TR UK YU **A:** ES FE FUJ HUB JIX KZ MG NC TR WS **Records in Turkey:** TR-A: GIR, KON, NIG **Remarks:** The species has been recorded only from 2 Turkish regions as Black Sea Region and Central Anatolian Region until now. **Chorotype:** Sibero-European

C. exiguus* Schneider, 1792**C. e. amicus* Baly, 1873**

Range: A: ES FE HEB HEI JA JIL MG NC SHX TR WS **Records in Turkey:** TR-A: BRS **Remarks:** The subspecies has been known only from Marmara Region in Turkey until now. **Chorotype:** E-Palaearctic

***C. e. variceps* Weise, 1884**

Range: E: AB AR BU GR **A:** IN TR **Records in Turkey:** TR-A: ADA, EZU, IST, IZM,

SAK, TOK – TR-E **Remarks:** The subspecies has been recorded from 5 Turkish regions. But it has not been recorded only from Central Anatolian Region and South-Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Turano-Balkan)

***C. fausti* Weise, 1882**

Range: E: AB A: TR **Records in Turkey:** TR-A: EZU, ISP, KON **Remarks:** The species has been recorded only from 3 Turkish regions as Central Anatolian Region, Eastern Anatolian Region and Marmara Region until now. **Chorotype:** SW-Asiatic (Anatolo-Caucasian)

***C. fulvus* Goeze, 1777**

***C. f. fulvus* Goeze, 1777**

Range: E: AB AL AN AR AU BE BH BU BY CR CT CZ DE EN FI FR GB GE GG GR HU IT KZ LA LT LU MC MD NL NR NT PL PT RO SK SL SP ST SV SZ TR UK YU **A:** KZ TD WS **Possible Records in Turkey:** TR-A: ANK, CAN, ERZ, EZU, GUM, TOK, TUN – TR-E: EDI, KRK **Remarks:** The species is represented by two subspecies in Turkey as the nominate form and *C. fulvus schatzmayri*. It was not possible to give infraspecific distributions separately according to available references. However, *C. fulvus schatzmayri* should be distributed very likely only in S and W Turkey. So the nominate subspecies should be distributed in 4 Turkish regions as Black Sea Region, Central Anatolian Region, Eastern Anatolian Region and Marmara Region in Turkey. **Chorotype:** Sibero-European

***C. f. schatzmayri* Burlini, 1969**

Range: E: GR A: IS JO SA TR **Possible Records in Turkey:** TR-A: ANT, DEN, ISP, IZM, MAN, MER, MUG **Remarks:** With respect to the above explanation, the subspecies should be distributed in 3 Turkish regions as Aegean Region, Mediterranean Region and South-Eastern Anatolian Region in Turkey. But probably it has been recorded only from Aegean Region and Mediterranean Region until now. **Chorotype:** SW-Asiatic or E-Mediterranean (Palaestino-Taurian) + Arabian

***C. labiatus* (Linnaeus, 1760)**

Range: E: AB AL AU BE BH BU BY CR CT CZ DE EN FI FR GB GE HU IR IT KZ LA LT MC MD NL NR NT PL RO SK SL SP ST SV SZ TR UK YU **A:** MG TR **Records in Turkey:** TR-A: EZU, MAL, ORD **Remarks:** The species has been recorded only from 2 Turkish regions as Black Sea Region and Eastern Anatolian Region until now. **Chorotype:** European or Centralasiatic-European

***C. lederi* Weise, 1889**

Range: E: AB AR A: AF IN IQ TM TR **Records in Turkey:** TR-A: ANK, MAL **Remarks:** The species has been recorded only from 2 Turkish regions as Central Anatolian Region and Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Turano-Anatolian)

***C. macellus* Suffrian, 1860**

Range: E: AB AL AN BE BH BU CR FR GE GR HU IT MC NL PL SK SL SP TR UK YU **N:** EG TU **A:** IN IS JO SY TR **Records in Turkey:** TR-A: AMA, BAL, BIL, BOL, CAN, EZU, HAT, ISP, IST, KON, MAL, MER, SAM, SAK – TR-E: IST **Remarks:** The species is rather widely distributed in Turkey. It has been recorded from 5 Turkish regions. But it has not been recorded only from Aegean Region and South-Eastern Anatolian Region until now. **Chorotype:** Mediterranean

***C. ocellatus* Drapiez, 1819**

***C. o. ocellatus* Drapiez, 1819**

Range: E: AB AL AN AR AU BE BH BU BY CR CT CZ FR GE GG GR HU IT KZ LA LT LU MC MD NL PL RO SK SL SP ST SZ TR UK YU **A:** IN IQ WS **Records in Turkey:** TR-A: ADI, AKS, AMA, ANK, ART, BAL, BIL, BOL, BRS, CAN, COR, DIY, ERZ, ESK, EZU, GUM, HAK, ISP, IST, IZM, KAS, KAY, KRS, KUT, MAR, MER, NIG, ORD, RIZ, SAM, SIN, SIV – TR-E **Remarks:** The subspecies is widely distributed in Turkey. It has been recorded from

all Turkish regions. But it has not been recorded only from Kocaeli Part of Asian Turkey and all Parts of European Turkey in Marmara Region, and Upper Murat-Van Part in Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. oranensis* Weise, 1882**

Range: N: AG **Records in Turkey:** TR-A: ANT, ISP **Remarks:** The species has been recorded only from Mediterranean Region in Turkey until now. **Chorotype:** Mediterranean

***C. populi* Suffrian, 1848**

Range: E: AB AL AR AU BE BH BU BY CR CT CZ FR GE HU IT LA MC PL RO SK ST SZ UK YU **A:** FE KZ **TR Records in Turkey:** TR-A: ANK, GAZ, ISP, NIG **Remarks:** The species has been recorded only from 3 Turkish regions as Central Anatolian Region, Mediterranean Region and South-Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. pusillus* Fabricius, 1777**

Range: E: AL AU BE BH BU BY CR CT CZ DE EN FI FR GB GE GG GR HU IR IT LA LT LU MC MD NL NR NT PL PT RO SK SL SP ST SV SZ TR UK YU **A:** KZ WS **Records in Turkey:** TR-A: ANK, ISP **Remarks:** The species has been recorded only from 2 Turkish regions as Central Anatolian Region and Mediterranean Region until now. **Chorotype:** Sibero-European

***C. pygmaeus* Fabricius, 1792**

***C. p. vittula* Suffrian, 1848**

Range: E: AB AL AR AU BH BU CR CZ FR GE GG GR HU IT KZ LA MC MD PL RO SK SL ST SZ TR YU **A:** SY **Records in Turkey:** TR-A: ADA, AFY, AKS, ANT, AYD, BRS, DEN, ERZ, EZU, ISP, IZM, KOC, MAN, MER, MUG, NIG – TR-E (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The subspecies is rather widely distributed in Turkey. It has been recorded from 5 Turkish regions. But it has not been recorded only from Black Sea Region and South-Eastern Anatolian Region until now. **Chorotype:** C and E-European

***C. rufipes* (Goeze, 1777)**

Range: E: AU BE BH CR CZ DE FR GE HU IT LA NL NT PL PT RO SK SL SP SZ TR UK **N:** AG MO **Records in Turkey:** TR-E: IST **Remarks:** The species has been recorded only from Marmara Region in Turkey until now. **Chorotype:** Mediterranean

***C. strigosus* Germar, 1824**

Range: E: AU BH BU CR CZ FR GR HU IT MC PL RO SK SL YU **A:** TR **Records in Turkey:** TR-A: EZU **Remarks:** The species has been recorded only from Eastern Anatolian Region until now. **Chorotype:** C and E-European

***C. sultani* Pic, 1920**

Range: A: TR **Records in Turkey:** TR-A: ADI, ESK, KON **Remarks:** The endemic species has been known only from 2 Turkish regions as Central Anatolian Region and South-Eastern Anatolian Region until now. **Chorotype:** Anatolian

***C. tschimganensis* Weise, 1894**

***C. t. tschimganensis* Weise, 1894**

Range: A: KI KZ TD **UZ Records in Turkey:** TR-A: DEN, IZM **Remarks:** The species has been recorded only from Aegean Region in Turkey until now. **Chorotype:** Centralasiatic + Anatolian

***C. tshorumae* Tomov, 1984**

Range: A: TR **Records in Turkey:** TR-A: COR **Remarks:** The endemic species has been known only from Black Sea Region in Turkey until now. **Chorotype:** Anatolian

Subgenus *Cryptocephalus* Geoffroy, 1762***C. androgynae* Marseul, 1875*****C. a. androgynae* Marseul, 1875**

Range: E: AB BE BY CT CZ FI FR GE LA LT NL NT PL RO SP SV UK A: FE IN IS KZ MG TM TR **Records in Turkey:** TR-A **Remarks:** Provincial distribution of the subspecies is unknown. **Chorotype:** Sibero-European

***C. anticus* Suffrian, 1848**

Range: E: AB AL AU BE BH BU BY CR CT CZ FR GE GR HU IT LT KZ MC MD PL RO SK SL SP ST TR UK YU A: JO KI KZ SY TR UZ WP WS **Records in Turkey:** TR-A: ADA, AKS, ANK, ANT, BAY, BIL, BOL, BRS, CAN, CNK, DEN, DIY, ESK, EZU, HAK, ISP, IZM, KAY, KOC, KON, KRB, TOK, GUM, KOC, MAN, MAR, MER, MUS, NEV, NIG, SAK, SAM, SIN, SIV, TOK, TUN, ZON – TR-E: KRK, TEK **Remarks:** The species is widely distributed in Turkey. It has been recorded from all Turkish regions. But it has not been recorded only from Çatalca Part of European Turkey in Marmara Region, Central-West Anatolia Part in Aegean Region and Central Fırat Part in South-Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. bameuli* Duhaldeborde, 1999**

Range: E: AB AL AR AU BU CR CT CZ DE FI FR GE GR HU IT MC MD RO SB SK SL SP ST SV TR UK A: ES KZ TR **Records in Turkey:** TR-A: EZU **Remarks:** The species has been recorded only from Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. bicolor* Eschscholz, 1818**

Range: E: AB BH BU FR GG HU MC RO ST UK YU A: IN TR **Records in Turkey:** TR-A: EZU, TOK **Remarks:** The species has been recorded only from 2 Turkish regions as Black Sea Region and Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Turano-Appenninian)

***C. biguttatus* (Scopoli, 1763)**

Range: E: AB AU BE BH BU BY CR CT CZ DE EN FI FR GB GE HU IT KZ LA LS LT LU MD NL NT PL RO SK SL SP SZ UK YU A: KZ TR WS **Records in Turkey:** TR-A: ANK, BAY, BOL, KAH (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The species has been recorded only from 3 Turkish regions as Black Sea Region, Central Anatolian Region and Mediterranean Region until now. **Chorotype:** Sibero-European

***C. biledjekensis* Pic, 1909**

Range: E: BU A: IN SY TR **Records in Turkey:** TR-A: BIL, GUM, ISP, IZM, KON **Remarks:** The species is probably rather widely distributed in Turkey. It has been recorded from 5 Turkish regions. But it has not been recorded only Eastern Anatolian Region and South-Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Turano-Balkan)

C. bipunctatus* (Linnaeus, 1758)**C. b. bipunctatus* (Linnaeus, 1758)**

Range: E: AB AL AR AU BE BH BU BY CR CT CZ DE EN FI FR GB GE GG GR HU IR IT KZ LA LS LT LU MC MD NL NR NT PL PT RO SK SL SP ST SV SZ TR UK YU A: TR **Records in Turkey:** TR-A: AMA, ANK, ANT, ART, BAL, BOL, BRS, CAN, CNK, COR, ERZ, EZU, ISP, IZM, KAH, KAS, KAY, KON, KRB, KRS, KUT, MAN, MER, NIG, SIN, SIV, TOK, YOZ, ZON – TR-E: EDI, KRK (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The subspecies is rather widely distributed in Turkey. It has been recorded from 6 Turkish regions. But it has not been recorded only from South-Eastern Anatolian Region until now. **Chorotype:** European

***C. cordiger* (Linnaeus, 1758)**

Range: E: AU BE BH BU BY CR CT CZ DE EN FI FR GE HU IT KZ LA LT LU MC MD NT

PL RO SK SL ST SV SZ UK YU **A:** ES KZ MG TR WS **Records in Turkey:** TR-A: EZU
Remarks: The species has been recorded only from Eastern Anatolian Region until now.
Chorotype: Sibero-European

***C. crassus* Olivier, 1791**

Range: E: FR IT PT SP **N:** AG MO TU **A:** IS SY TR **Records in Turkey:** TR **Remarks:** Provincial distribution of the species is unknown. **Chorotype:** Mediterranean

***C. cribratus* Suffrian, 1847**

Range: E: AB GG ST **A:** IN SY TM TR **Records in Turkey:** TR-A: ANK, ART, BIL, BOL, EZU, GUM, IST, IZM, KAH, KAS, KON, KRS, NEV, NIG, SIV, TRA **Remarks:** The species is rather widely distributed in Turkey. It has been recorded from 6 Turkish regions. But it has not been recorded only from South-Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Turano-Anatolian)

***C. duplicatus* Suffrian, 1847**

Range: E: AB AR BU GG GR ST **A:** IS JO SY TR **Records in Turkey:** TR-A: ADA, AMA, ANK, ANT, ART, BIL, BIT, BOL, BRS, CNK, COR, DEN, ERZ, ESK, EZU, GIR, GUM, HAK, ISP, IST, IZM, KAH, KAS, KRB, KRS, KOC, KON, KUT, MAN, MER, NEV, ORD, SAK, SAM, SIN, SII, SIV, TOK, TUN, TRA, VAN, YOZ, ZON – TR-E: KRK, TEK **Remarks:** The species is widely distributed in Turkey. It has been recorded from all Turkish regions. But it has not been recorded only from Çatalca Part of European Turkey in Marmara Region, Upper Murat-Van Part in Eastern Anatolian Region and Central Firat Part in South-Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Turano-Balkan)

***C. flavipes* Fabricius, 1781**

Range: E: AL AR AU BE BH BU BY CR CT CZ EN FR GE GR HU IT KZ LA LS LT LU MC MD NL NT PL RO SK SL SP ST SZ UK YU **A:** ES FE IN IS KZ TR WS **Records in Turkey:** TR-A: AMA, ANK, ART, AYD, BOL, BRS, CAN, DUZ, ESK, EZU, GAZ, ISP, IST, KAS, KAY, KRS, KUT, MAL, MER, ORD, SAM, SIN, TOK, TRA, TUN – TR-E: EDI, IST, TEK (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The species is widely distributed in Turkey. It has been recorded from all Turkish regions. But it has not been recorded from some Parts of Central Anatolian Region, Eastern Anatolian Region, Marmara Region and South-Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. ilicis* Olivier, 1808**

Range: E: AL GR IT TR YU **A:** JO SY **Records in Turkey:** TR-A: AYD, BAL, BRS, IST, IZM, KON, MAN – TR-E: KRK **Remarks:** The species has been recorded only from 3 Turkish regions as Aegean Region, Central Anatolian Region and Marmara Region until now. **Chorotype:** Turano-Mediterranean (Balkano-Anatolian)

***C. imperialis* Laicharting, 1781**

Range: E: AL AU BH BU CR CZ FR GE GG GR HU IT MC MD RO SK SL SP ST SZ UK YU **A:** IN TR **Records in Turkey:** TR-A: AMA, EZU, ISP, KON, USA **Remarks:** The species has been recorded only from 4 Turkish regions. But it has not been recorded from Aegean Region, Marmara Region and South-Eastern Anatolian Region until now. **Chorotype:** S and E-European or Turano-European

***C. infraniger* Pic, 1915**

Range: A: TR **Records in Turkey:** TR-A: TOK (Löbl & Smetana, 2010) **Remarks:** The endemic species has been known only from Black Sea Region in Turkey until now. **Chorotype:** Anatolian

***C. janthinus* Germar, 1824**

Range: E: AB AL AU BH BU BY CR CT CZ FR GE HU IT LT MC MD PL RO SK SL ST UK YU **A:** ES FE IN IS JA JIL MG TR WS **Records in Turkey:** TR-A: ARD, CAN, ESK, ISP, KRS, MER – TR-E: KRK **Remarks:** The species has been recorded only from 4 Turkish regions. But it has not been recorded from Aegean Region, Black Sea Region and South-

Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. messutati* Kippenberg, 2011**

Range: A: TR **Records in Turkey:** TR-A: MER **Remarks:** The endemic species has been recorded only from Mediterranean Region until now. **Chorotype:** Anatolian

***C. moraei* (Linnaeus, 1758)**

Range: E: AB AL AU BE BH BU BY CR CT CZ DE EN FI FR GB GE GG GR HU IR IT LA LT MC MD NL NR NT PL PT RO SK SL SP ST SV SZ TR UK YU **A:** IN IQ JO TR WS **Records in Turkey:** TR-A: ADA, AFY, AKS, ANK, ANT, ARD, ART, BIL, BIT, BOL, BRS, CAN, COR, DIY, ERZ, EZU, GIR, GUM, HAK, ISP, IZM, HAK, KAH, KAS, KAY, KON, KRB, KRS, MAN, MER, MUG, NIG, ORD, OSM, RIZ, SAK, SAM, SIN, TOK TRA, TUN, ZON – TR-E: KRK, TEK (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The species is widely distributed in Turkey. It has been recorded from 6 Turkish regions. But it has not been recorded only from South-Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. octomaculatus* Rossi, 1790**

Range: E: AB AU BU CR FR GE GG GR HU IT MD PL RO SK SL ST TR UK YU **Records in Turkey:** TR-A: ANK, ISP, KON, MER **Remarks:** The species has been recorded only from 2 Turkish regions as Central Anatolian Region and Mediterranean Region until now. **Chorotype:** C and E-European

***C. octopunctatus* (Scopoli, 1763)**

***C. o. octopunctatus* (Scopoli, 1763)**

Range: E: AU BE BH BU BY CR CT CZ EN FI FR GE HU IT LA LT MC MD NL NT PL RO SB SK SL SP ST SZ TR UK **A:** KZ SCH WS **Records in Turkey:** TR-A: ANK, DIY, DUZ, KRS, SAK, TOK **Remarks:** The subspecies is probably rather widely distributed in Turkey. It has been recorded from 5 Turkish regions. But it has not been recorded only from Aegean Region and South-Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. paphlagonius* Sassi & Kismali, 2000**

Range: A: TR **Records in Turkey:** TR-A: AMA, ANK, ART, BIL, ERZ, ESK, EZU, KAH, KAS, KON, KRB, KRS, KUT, MER, NEV, SIV, VAN **Remarks:** The endemic species is rather widely distributed in Turkey. It has been recorded from 6 Turkish regions. But it has not been recorded only from South-Eastern Anatolian Region until now. **Chorotype:** Anatolian

***C. paradisiacus* Weise, 1900**

Range: A: TR **Records in Turkey:** TR-A: MAR **Remarks:** The endemic species has been recorded only from South-Eastern Anatolian Region until now. **Chorotype:** Anatolian

***C. parvulus* Müller, 1776**

Range: E: AB AL AR AU BE BH BU BY CR CT CZ DE EN FI FR GB GE GG HU IR IT KZ LA LT NL NR NT PL RO SK SL SP SV UK YU **A:** ES FE FUJ HEI IS JA JIA JIL KZ LIA MG NC SCH TR WS **Records in Turkey:** TR-A: BRS, BUR, ISP, KON, SAM **Remarks:** The species has been recorded only from 4 Turkish regions. But it has not been recorded from Aegean Region, Eastern Anatolian Region and South-Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. peyroni* Marseul, 1875**

Range: A: IS JO LE SY TR **Records in Turkey:** TR-A: ART, GAZ, HAT, OSM, TOK **Remarks:** The species has been recorded only from 3 Turkish regions as Black Sea Region, Mediterranean Region and South-Eastern Anatolian Region until now. **Chorotype:** E-Mediterranean (Palaestino-Taurian)

***C. praticola* Weise, 1889**

Range: E: AB AR GG RO ST **A:** TR **Records in Turkey:** TR-A: ART, EZU, KRS, RIZ, SAM – TR-E: KRK **Remarks:** The species has been recorded only from 3 Turkish regions as

Black Sea Region, Eastern Anatolian Region and Marmara Region until now. **Chorotype:** Turano-Mediterranean (Turano-Balkan)

***C. quadriguttatus* (Richter, 1820)**

Range: E: AB AR AU BH BU CR CZ GG HU IT PL RO SK SL ST UK YU **A:** KZ TR WS
Records in Turkey: TR **Remarks:** Provincial distribution of the species is unknown.
Chorotype: Sibero-European

***C. rugicollis* Olivier, 1791**

Range: E: FR GR IT PT SP TR N: AG LB MO TU **A:** JO TR **Records in Turkey:** TR-A: AMA, ANT, AYD, BRS, IZM, MAN, MUG (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The species has been recorded only from 4 Turkish regions as Aegean Region, Black Sea Region, Marmara Region and Mediterranean Region until now. **Chorotype:** Mediterranean

***C. sericeus* (Linnaeus, 1758)**

Range: E: AB AL AR AU BE BH BU BY CR CT CZ DE EN FR GE GG GR HU IT LA LT MC MD NL NR NT PL RO SK SL SP ST SV TR UK YU **A:** ES FE KZ MG TR WS **Records in Turkey:** TR-A: ANK, ARD, ART, BAL, BRS, CNK, COR, ERZ, EZU, GUM, ISP, IZM, KAS, KON, KRS, NEV, SAM, SIV – TR-E: KRK (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The species is rather widely distributed in Turkey. It has been recorded from 6 Turkish regions. But it has not been recorded only from South-Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. sexpunctatus* (Linnaeus, 1758)**

***C. s. sexpunctatus* (Linnaeus, 1758)**

Range: E: AN AU BE BH BU BY CR CT CZ DE EN FI FR GB GE HU IT LA LT LU NL NR NT PL RO SB SK SL SP ST SV SZ UK **A:** ES FE JA JIA JIX TR WS **Records in Turkey:** TR-A: EZU, TOK **Remarks:** The subspecies has been recorded only from 2 Turkish regions as Black Sea Region and Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. signatifrons* Suffrian, 1847**

Range: E: AL AU BH BU CR CZ FR GE HU IT LA MC PL RO SK SL TR UK YU **Records in Turkey:** TR-A: EZU, KOC, MAL **Remarks:** The species has been recorded only from 2 Turkish regions as Eastern Anatolian Region and Marmara Region until now. **Chorotype:** C and E-European

***C. solivagus* Leonardi & Sassi, 2001**

Range: E: BH BU BY CR CT EN GR HU LA LT MC NT PL RO SK ST YU **A:** ES KZ TR UZ WS **Records in Turkey:** TR-A: ART, EZU, KRS, RIZ **Remarks:** The species has been recorded only from 2 Turkish regions as Black Sea Region and Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***C. surdus* Rapilly, 1980**

Range: E: AR GG A: IN JO SY TR **Records in Turkey:** TR-A: ISP **Remarks:** The species has been recorded only from Mediterranean Region in Turkey until now. **Chorotype:** Sw-Asiatic (Anatolo-Caucasian + Irano-Caucasian + Irano-Anatolian + Irano-Palaestinian)

***C. testaceitarsis* Pic, 1915**

Range: A: TR **Records in Turkey:** TR-A: TOK **Remarks:** The endemic species has been recorded only from Black Sea Region until now. **Chorotype:** Anatolian

***C. transcaucasicus* Jakobson, 1898**

Range: E: AB AR GG **Records in Turkey:** TR-A: ANK, ANT, ART, BAY, BIL, BOL, ERZ, EZU, KAS, KAY, MAN, MER, RIZ – TR-E: KRK **Remarks:** The species is rather widely distributed in Turkey. It has been recorded from 5 Turkish regions. But it has not been recorded only from Aegean Region and South-Eastern Anatolian Region until now.

Chorotype: Sw-Asiatic (Anatolo-Caucasian)

***C. trimaculatus* Rossi, 1790**

Range: E: AB AL ARAU BH BU CR FR GG GR HU IT MC RO SL SP SZ YU N: EG A: IS JO SY TR WS **Records in Turkey:** TR-A: ADA, AGR, AMA, ANK, ANT, ART, BAY, BIL, BRS, BUR, COR, ESK, EZU, GUM, ISP, IZM, KAR, KAS, KAY, KON, KRB, MAN, MER, MUG, NEV, OSM, YOZ, ZON **Remarks:** The species is rather widely distributed in Turkey. It has been recorded from 5 Turkish regions. But it has not been recorded only from Aegean Region and South-Eastern Anatolian Region until now. **Chorotype:** W-Palearctic

***C. turcicus* Suffrian, 1847**

Range: E: AL BH BU CR FR GR IT MC RO SL TR YU A: IN JO SY TR **Records in Turkey:** TR-A: ANK, ANT, BAL, BIL, BRS, CAN, DUZ, ESK, ISP, IST, IZM, KAS, KRB, SAM, TRA, YAL, ZON – TR-E **Remarks:** The species is rather widely distributed in Turkey. It has been recorded from 5 Turkish regions. But it has not been recorded only from Eastern Anatolian Region and South-Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Turano-Appenninian)

***C. virens* Suffrian, 1847**

Range: E: AB AU BH BU CR CZ GE HU IT PL RO SB SK SL ST YU A: KZ MG TR WS **Records in Turkey:** TR-A: ANK, ARD, BRS, CAN, ERZ, EZU, GUM, ISP, KRS, SIV, YOZ (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The species has been recorded only from 5 Turkish regions. But it has not been recorded from Aegean Region and South-Eastern Anatolian Region until now. **Chorotype:** Sibero-European

Subgenus *Heterichnus* Warchalowski, 1991

***C. loebli* Sassi, 1997**

Range: A: TR **Records in Turkey:** TR-A: AMA, BOL, KRB, ZON **Remarks:** The endemic species has been recorded only from Black Sea Region until now. **Chorotype:** Anatolian

***C. prusias* Suffrian, 1853**

Range: E: AB AR BU GG MC A: JO SY TR **Records in Turkey:** TR-A: ADA, AMA, ANK, BAL, BIL, BOL, BRS, CNK, ESK, EZU, GUM, HAT, ISP, IST, KON, KUT, MER, MUS, SIV, TOK – TR-E: KRK (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The species is rather widely distributed in Turkey. It has been recorded from 6 Turkish regions. But it has not been recorded only from South-Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Turano-Balkan)

Subgenus *Lamellosus* Tomov, 1979

***C. angorensis* Pic, 1908**

Range: A: TR **Records in Turkey:** TR-A: AMA, ANK, COR **Remarks:** The endemic species has been recorded only from 2 Turkish regions as Black Sea Region and Central Anatolian Region until now. **Chorotype:** Anatolian

Subgenus *Protophysus* Chevrolat, 1836

***C. schaefferi* Schrank, 1789**

***C. s. moehringi* Weise, 1884**

Range: E: GR A: CY JO SY TR **Records in Turkey:** TR-A: AMA, ANK, BIL, BOL, BRS, EZU, ISP, KRS, MER, SAM, TOK – TR-E: EDI, KRK, TEK (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The subspecies is probably rather widely distributed in Turkey. It has been recorded from 5 Turkish regions. But it has not been recorded only from Aegean Region and South-Eastern Anatolian Region until now. **Chorotype:** E-Mediterranean (Palaestino-Cyprioto-Taurian)

***C. wehncke* Weise, 1881**

Range: A: TR **Records in Turkey:** TR-A: ADA, ANT, ISP, MER **Remarks:** The endemic

species has been recorded only from Mediterranean Region in Turkey until now. **Chorotype:** Anatolian

Genus *Pachybrachis* Chevrolat, 1836

Subgenus *Pachybrachis* Chevrolat, 1836

***P. adaliensis* (Weise, 1886)**

Range: A: TR **Records in Turkey:** TR-A: ANT **Remarks:** The endemic species has been recorded only from Mediterranean Region in Turkey until now. **Chorotype:** Anatolian

***P. albicans* (Weise, 1882)**

Range: E: AB GG TR A: IN **Records in Turkey:** TR-A: ART, EZU, TOK **Remarks:** The species has been recorded only from 2 Turkish regions as Black Sea Region and Eastern Anatolian Region until now. **Chorotype:** Sw-Asiatic (Anatolo-Caucasian + Irano-Caucasian + Irano-Anatolian)

***P. anatolicus* Lopatin, 1985**

Range: A: TR **Records in Turkey:** TR-A: VAN **Remarks:** The endemic species has been recorded only from Eastern Anatolian Region in Turkey until now. **Chorotype:** Anatolian

***P. bodemeyeri* (Weise, 1906)**

Range: A: TR **Records in Turkey:** TR-A: BIL, BRS, EZU **Remarks:** The endemic species has been recorded only from 2 Turkish regions as Eastern Anatolian Region and Marmara Region until now. **Chorotype:** Anatolian

***P. cordatus* Sassi & Schöller, 2003**

Range: A: JO SY TR **Records in Turkey:** TR-A: AMA, MER **Remarks:** The species has been recorded only from 2 Turkish regions as Black Sea Region and Mediterranean Region until now. **Chorotype:** Sibero-European

***P. excisus* (Weise, 1897)**

Range: E: BU TR A: SY **Records in Turkey:** TR-A: AKS, ANK, ANT, ISP, NIG, OSM – TR-E **Remarks:** The species has been recorded only from 3 Turkish regions as Central Anatolian Region, Marmara Region and Mediterranean Region until now. **Chorotype:** Turano-Mediterranean (Balkano-Anatolian)

***P. fimbriolatus* (Suffrian, 1848)**

Range: E: AL AU BH BU BY CR CZ FR GE GR HU IT KZ PL RO SK SL SP SZ TR UK YU A: JIL MG WS **Records in Turkey:** TR-A: ADA, AFY, AKS, ANT, ANK, BAY, BIL, BIN, BIT, BOL, CNK, DIY, ERZ, ESK, EZU, GUM, IGD, ISP, IST, KAH, KAR, KON, KRS, MAN, NEV, NIG, OSM, SIV, TOK, TUN, VAN **Remarks:** The species is widely distributed in Turkey. It has been recorded from all Turkish regions. But it has not been recorded only from the most Parts of Marmara Region Hakkari Part in Eastern Anatolian Region, Central Firat Part in South-Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***P. glycyrrhizae* (Olivier, 1808)**

Range: E: AB AR A: AF IN IQ IS JO LE SA SI SY TD TM TR UZ **Records in Turkey:** TR-A: GAZ, IGD, KRS, MER, URF **Remarks:** The species has been recorded only from 3 Turkish regions as Eastern Anatolian Region, Mediterranean Region and South-Eastern Anatolian Region until now. **Chorotype:** SW-Asiatic or SW-Asiatic + Centralasiatic

***P. hieroglyphicus* (Laicharting, 1781)**

Range: E: AL AU BE BH BU CR CT CZ EN FI FR GE GR HU IT LA MC MD NL NT PL RO SK SL SP SV TR UK YU A: WS **Records in Turkey:** TR-A: BIL, KON, MER **Remarks:** The species has been recorded only from 3 Turkish regions as Central Anatolian Region, Marmara Region and Mediterranean Region until now. **Chorotype:** Sibero-European

***P. humeralis* Burlini, 1956**

Range: E: TR **Records in Turkey:** TR-E **Remarks:** The endemic species has been recorded only from Marmara Region in Turkey until now. **Chorotype:** Anatolian

***P. instabilis* Weise, 1887**

Range: A: KI KZ **Records in Turkey:** TR-A: BAL, BRS, SAK – TR-E: KRK **Remarks:** The species has been recorded only from Marmara Region in Turkey until now. **Chorotype:** Centralasiatic + Anatolian

***P. laticollis* (Suffrian, 1860)**

Range: N: EG **A:** IN IS SY **TR Records in Turkey:** TR-A: COR, DIY, MAN, MAR, SIV, VAN **Remarks:** The species is probably rather widely distributed in Turkey. It has been recorded only from 5 Turkish regions. But it has not been recorded only from Marmara Region and Mediterranean Region until now. **Chorotype:** E-Mediterranean

***P. leonardii* Sassi & Schöller, 2003**

Range: E: GR **A:** TR **Records in Turkey:** TR-A: ANT, BUR, IZM, KON, MER, MUG **Remarks:** The species has been recorded only from 3 Turkish regions as Aegean Region, Central Anatolian Region and Mediterranean Region until now. **Chorotype:** E-Mediterranean (Aegean)

***P. limbatus* (Ménétriés, 1836)**

Range: E: AL BH BU CR GR HU IT MC RO SB **TR A:** IS JO SY **Records in Turkey:** TR-A: ADA, ADI, ANK, ANT, BAL, BIL, BOL, BRS, CAN, ESK, EZU, ISP, IST, IZM, KAY, KUT, MAR, MER, NIG, SAM, SIV, YAL – TR-E (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The species is widely distributed in Turkey. It has been recorded from all Turkish regions. But it has not been recorded only the most Parts of Marmara Region, Konya Part in Central Anatolian Region, Eastern Black Sea Part in Black Sea Region and The most Parts of Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Turano-Appenninian)

***P. mardinensis* (Weise, 1900)**

Range: A: IN IQ IS LE SY **TR Records in Turkey:** TR-A: ADA, ADI, AMA, BIT, DEN, ELA, GAZ, HAK, HAT, KAH, MAR, MER, OSM, MUS, VAN **Remarks:** The species is rather widely distributed in Turkey. It has been recorded only from 5 Turkish regions. But it has not been recorded only from Central Anatolian Region and Marmara Region until now. **Chorotype:** SW-Asiatic (Irano-Anatolian + Irano-Palaestinian)

P. mendax* Suffrian, 1860**P. m. mendax* Suffrian, 1860**

Range: E: ST UK **A:** AF IN **TR Records in Turkey:** TR-A: ANK, BAY, CAN, DEN, ERZ, EZU, GUM, KRS, KON, MER, NIG, SIV, VAN **Remarks:** The subspecies is rather widely distributed in Turkey. It has been recorded from 6 Turkish regions. But it has not been recorded only from South-Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Turano-Anatolian)

***P. nigropunctatus* Suffrian, 1854**

Range: E: AB AR **A:** AF IN IQ IS KZ SY TD TM **TR Records in Turkey:** TR-A: ADA **Remarks:** The species has been recorded only from Mediterranean Region in Turkey until now. **Chorotype:** Turano-Mediterranean (Turano-Anatolian)

***P. nitidicollis* (Weise, 1894)**

Range: A: KI KZ TD TM UZ **Records in Turkey:** TR-A: EZU **Remarks:** The species has been recorded only from Eastern Anatolian Region in Turkey until now. **Chorotype:** Centralasiatic + Anatolian

***P. pantheri* (Ganglbauer, 1905)**

Range: A: TR **Records in Turkey:** TR-A: ISP, KAY **Remarks:** The endemic species has

been recorded only from 2 Turkish regions as Central Anatolian Region and Mediterranean Region until now. **Chorotype:** Anatolian

***P. picus* (Weise, 1882)**

Range: E: AU BE BH CR CZ FR GE HU IT PL RO SK SL SP SZ **Records in Turkey:** TR-A: EZU **Remarks:** The species has been recorded only from Eastern Anatolian Region in Turkey until now. **Chorotype:** C and E-European

***P. scripticollis* Faldermann, 1837**

Range: E: AR A: AF IN IQ IS JO LE MG SY TM TR **Records in Turkey:** TR-A: DIY, GAZ, HAK, MAR, URF **Remarks:** The species has been recorded only from 2 Turkish regions as Eastern Anatolian Region and South-Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Turano-e-Mediterranean)

***P. scriptidorsum* Marseul, 1875**

Range: E: BU CZ RO ST UK A: HEB JIL KZ MG NC SHN SY TR WS **Records in Turkey:** TR-A: ART, BOL, DIY, EZU, GUM **Remarks:** The species has been recorded only from 3 Turkish regions as Black Sea Region, Eastern Anatolian Region and South-Eastern Anatolian Region until now. **Chorotype:** Asiatic-European

***P. sinuatus* (Mulsant & Rey, 1859)**

Range: E: AL AU BE BH BU CR CZ FR GE GR HU IT MC MD NL PL RO SK SL TR UK YU A: WS **Records in Turkey:** TR-A: ANK, BOL, EZU, ISP **Remarks:** The species has been recorded only from 4 Turkish regions. But it has not been recorded from Aegean Region, Marmara Region and South-Eastern Anatolian Region until now. **Chorotype:** Sibero-European

***P. tessellatus* (Olivier, 1791)**

***P. t. tauricus* Suffrian, 1848**

Range: E: AB AR UK A: IS JO LE SY TR **Records in Turkey:** TR-A: ADA, AFY, AGR, AKS, AMA, ANK, ANT, BAY, BOL, BRS, CNK, COR, ERZ, EZU, GAZ, GUM, ISP, IZM, KAH, KAR, KAY, KON, KRS, KUT, MAR, MER, NEV, NIG, SIV, TOK, VAN, YOZ (Ekiz et al., 2013; pers. comm., 2013) **Remarks:** The subspecies is widely distributed in Turkey. It has been recorded from all Turkish regions. But it has not been recorded only from the most Parts of Marmara Region and Hakkari Part in Eastern Anatolian Region until now. **Chorotype:** SW-Asiatic

***P. velarum* Warchalowski, 1998**

Range: A: TR **Records in Turkey:** TR-A: ANK, BOL, ERZ, EZU, GUM, KRS, SIV **Remarks:** The endemic species has been recorded only from 3 Turkish regions as Black Sea Region, Central Anatolian Region and Eastern Anatolian Region until now. **Chorotype:** Anatolian

***P. vermicularis* Suffrian, 1854**

Range: E: ST A: IN KZ **Records in Turkey:** TR-A: EZU **Remarks:** The species has been recorded only from Eastern Anatolian Region in Turkey until now. **Chorotype:** Turano-Mediterranean (Turano-Anatolian)

***P. warchalowskii* Lopatin & Nesterova, 2010**

Range: A: TR **Records in Turkey:** TR-A: MAR **Remarks:** The endemic species has been recorded only from South-Eastern Anatolian Region in Turkey until now. **Chorotype:** Anatolian

Genus *Stylosomus* Suffrian, 1848

Subgenus *Stylosomus* Suffrian, 1848

***S. flavus* Marseul, 1875**

***S. f. flavus* Marseul, 1875**

Range: E: AL AU BU CR GR MC RO ST TR UK A: CY TR **Records in Turkey:** TR-A: EZU, KAS, VAN **Remarks:** The subspecies has been recorded only from 2 Turkish regions as Black Sea Region and Eastern Anatolian Region until now. **Chorotype:** Turano-Mediterranean (Balkano-Anatolian)

***S. subelongatus* Pic, 1913**

Range: A: IS SY TR **Records in Turkey:** TR-A: ADA, GUM, HAT **Remarks:** The species has been recorded only from 2 Turkish regions as Black Sea Region and Mediterranean Region until now. **Chorotype:** E-Mediterranean (Palaestino-Taurian)

***S. tamaricis* (Herrich-Schäffer, 1836)**

Range: E: BU CR FR GR IT MC SP ST TR UK N: AG LB MO A: IS KZ SI SY TR **Records in Turkey:** TR-A: DEN, EZU **Remarks:** The species has been recorded only from 2 Turkish regions as Aegean Region and Eastern Anatolian Region until now. **Chorotype:** Mediterranean

ZOOGEOGRAPHICAL ANALYSIS

Turkish Cryptocephalinae includes 107 species group taxa (92 species and 15 subspecies that include nominotypical and other). 26 species group taxa, namely 24.30 % of the taxa have "Sibero-European" chorotype. 21 species group taxa, namely 19.63 % of the taxa have "Anatolian" chorotype. 18 species group taxa, namely 16.82 % of the taxa have "Turano-Mediterranean" chorotype. 13 species group taxa, namely 12.15 % of the taxa have "SW-Asiatic" chorotype. 7 species group taxa, namely 6.54 % of the taxa have "C and E-European" chorotype. 6 species group taxa, namely 5.61 % of the taxa have "E-Mediterranean" chorotype. 6 species group taxa, namely 5.61 % of the taxa have "Mediterranean" chorotype. 3 species group taxa, namely 2.80 % of the taxa have "Centralasiatic + Anatolian" chorotype. 2 species group taxa, namely 1.87 % of the taxa have "European" chorotype. Each of the remaining 5 species group taxa has a different chorotype. One species, namely about 0.93 % of the taxa has "Asiatic-European" chorotype. One species, namely about 0.93 % of the taxa has "E-Palaearctic" chorotype. One species, namely about 0.93 % of the taxa has "S and E-European" chorotype. One species, namely about 0.93 % of the taxa has "Turano-European" chorotype. And one species, namely about 0.93 % of the taxa has "W-Palaearctic" chorotype (Fig. 1). So the dominant chorotype for Turkish Cryptocephalinae is "Sibero-European" (24.30 %). "Anatolian" (19.63 %) and "Turano-Mediterranean" (16.82 %) chorotypes follow it respectively. Also the members of "SW-Asiatic" (12.15 %) chorotype presents an important contribution for Turkish fauna.

For zoogeographical evaluation, the all known species group taxa of Turkish Cryptocephalinae are presented as follows:

A total of 26 species group taxa have "Sibero-European" chorotype as *C. bilineatus*, *C. chrysopus*, *C. elegantulus*, *C. f. fulvus*, *C. o. ocellatus*, *C. populi*, *C. pusillus*, *C. a. androgyne*, *C. anticus*, *C. bameuli*, *C. biguttatus*, *C. cordiger*, *C. flavipes*, *C. janthinus*, *C. moraei*, *C. o. octopunctatus*, *C. parvulus*, *C. quadriguttatus*, *C. sericeus*, *C. s. sexpunctatus*, *C. solivagus*, *C. virens*, *P. cordatus*, *P. fimbriolatus*, *P. hieroglyphicus* and *P. sinuatus*.

A total of 21 species group taxa have "Anatolian" chorotype as *C. amasiensis*, *C. gloriosus*, *C. pseudoreitteri*, *C. ayvazi*, *C. sultani*, *C. tshorumae*, *C. infraniger*, *C. messutati*, *C. paphlagonius*, *C. paradisiacus*, *C. testaceitarsis*, *C. loebli*, *C. angorensis*, *C. wehnckeii*, *P. adaliensis*, *P. anatolicus*, *P. bodemeyeri*, *P. humeralis*, *P. pentheri*, *P. velarum* and *P. warchalowskii*.

A total of 18 species group taxa have “Turano-Mediterranean” chorotype as *C. flexuosus*, *C. e. variceps*, *C. lederi*, *C. bicolor*, *C. biledjekensis*, *C. cribratus*, *C. duplicatus*, *C. ilicis*, *C. praticola*, *C. turcicus*, *C. prusias*, *P. excisus*, *P. limbatus*, *P. m. mendax*, *P. nigropunctatus*, *P. scripticollis*, *P. vermicularis* and *S. f. flavus*.

A total of 13 species group taxa have “SW-Asiatic” chorotype as *A. glabratus*, *A. iranicus*, *C. curda*, *C. phaleratus*, *C. volkovitshi*, *C. fausti*, *C. f. schatzmayri*, *C. surdus*, *C. transcaucasicus*, *P. albicans*, *P. glycyrrhizae*, *P. mardinensis* and *P. t. tauricus*.

A total of 7 species group taxa have “C and E-European” chorotype as *C. apicalis*, *C. quatuordecimmaculatus*, *C. p. vittula*, *C. strigosus*, *C. octomaculatus*, *C. signatifrons* and *P. picus*.

A total of 6 species group taxa have “E-Mediterranean” chorotype as *C. tappesi*, *C. peyroni*, *C. s. moehringi*, *P. laticollis*, *P. leonardii* and *S. subelongatus*.

A total of 6 species group taxa have “Mediterranean” chorotype as *C. macellus*, *C. oranensis*, *C. rufipes*, *C. crassus*, *C. rugicollis* and *S. tamaricis*.

A total of 3 species group taxa have “Centralasiatic + Anatolian” chorotype as *C. t. tschimganensis*, *P. instabilis* and *P. nitidicollis*.

A total of 2 species group taxa have “European” chorotype as *C. labiatus* and *C. b. bipunctatus*.

One species as *P. scriptidorsum* has “Asiatic-European” chorotype.

One species as *C. e. amicus* has “E-Palearctic” chorotype.

One species as *C. imperialis* has “S and E-European” chorotype.

One species as *C. connexus* has “Turano-European” chorotype.

One species as *C. trimaculatus* has “W-Palearctic” chorotype.

On the other side, Turkish Cryptocephalinae includes a total of 107 species group taxa. However, provincial distributions of 5 species group taxa are unknown. So Turkish Cryptocephalinae have 2 different evaluations necessarily. But, results of both assessments are the same except the occurrence ratio.

For the subfamily Cryptocephalinae (according to all species group taxa):

45 species are represented in Marmara Region (42 %)

28 species are represented in Aegean Region (26 %)

54 species are represented in Mediterranean Region (51 %)

49 species are represented in Central Anatolian Region (46 %)

52 species are represented in Black Sea Region (49 %)

55 species are represented in Eastern Anatolian Region (51 %)

20 species are represented in South-Eastern Anatolian Region (19 %)

For the subfamily Cryptocephalinae (according to known provincial distribution of 102 species group taxa):

45 species are represented in Marmara Region (44 %)

28 species are represented in Aegean Region (28 %)

54 species are represented in Mediterranean Region (53 %)

49 species are represented in Central Anatolian Region (48 %)

52 species are represented in Black Sea Region (51 %)

55 species are represented in Eastern Anatolian Region (54 %)

20 species are represented in South-Eastern Anatolian Region (20 %)

So Turkish Cryptocephalinae that includes a total of 107 species group taxa or 102 species group taxa of which are known provincial distributions in Turkey, are

widely distributed in all Turkish Regions. The most number of species is represented in Eastern Anatolian Region and Mediterranean Region. Black sea region follows them. Central Anatolian Region and Marmara Region are represented with an important number of species. However, Aegean Region and especially South-Eastern Anatolian Region are represented with a rather little number of species now.

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Table 1. The regional distribution of all known species of Cryptocephalinae in Turkey.

TAXON	R	E	G	I	O	N	S
	MAR	AER	MER	CAR	BSR	EAR	SEAR
SubfamilyCRYPTOCEPHALINAE							
<i>A. glabratus</i>	-	-	-	-	-	+	-
<i>A. iranicus</i>	-	-	-	-	-	-	+
<i>C. amasiensis</i>	-	-	+	-	+	-	-
<i>C. apicalis</i>	+	-	-	+	-	-	-
<i>C. curda</i>	+	-	-	+	+	+	-
<i>C. flexuosus</i>	?	?	?	?	?	?	?
<i>C. gloriosus</i>	-	-	-	+	-	-	-
<i>C. phaleratus</i>	-	-	-	-	-	-	+
<i>C. pseudoreitteri</i>	-	-	-	+	-	-	-
<i>C. quatuordecimmaculatus</i>	-	-	-	+	-	+	-
<i>C. tappesi</i>	-	-	+	-	-	-	+
<i>C. volkovitshi</i>	-	-	-	-	-	+	-
<i>C. ayvazi</i>	-	-	+	-	-	-	-
<i>C. bilineatus</i>	?	?	?	?	?	?	?
<i>C. chrysopus</i>	-	-	-	-	+	-	-
<i>C. connexus</i>	+	+	+	+	+	+	+
<i>C. elegantulus</i>	-	-	-	+	+	-	-
<i>C. e. amicus</i>	+	-	-	-	-	-	-
<i>C. e. variceps</i>	+	+	+	-	+	+	-
<i>C. fausti</i>	+	-	-	+	-	+	-
<i>C. f. fulvus</i>	+	-	-	+	+	+	-
<i>C. f. schatzmayri</i>	-	+	+	-	-	-	-
<i>C. labiatus</i>	-	-	-	-	+	+	-
<i>C. lederi</i>	-	-	-	+	-	+	-
<i>C. macellus</i>	+	-	+	+	+	+	-
<i>C. o. ocellatus</i>	+	+	+	+	+	+	+

<i>C. oranensis</i>	-	-	+	-	-	-	-
<i>C. populi</i>	-	-	+	+	-	-	+
<i>C. pusillus</i>	-	-	+	+	-	-	-
<i>C. p. vittula</i>	+	+	+	+	-	+	-
<i>C. rufipes</i>	+	-	-	-	-	-	-
<i>C. strigosus</i>	-	-	-	-	-	+	-
<i>C. sultani</i>	-	-	-	+	-	-	+
<i>C. t. tschimganensis</i>	-	+	-	-	-	-	-
<i>C. tshorumae</i>	-	-	-	-	+	-	-
<i>C. a. androgyne</i>	?	?	?	?	?	?	?
<i>C. anticus</i>	+	+	+	+	+	+	+
<i>C. bameuli</i>	-	-	-	-	-	+	-
<i>C. bicolor</i>	-	-	-	-	+	+	-
<i>C. biguttatus</i>	-	-	+	+	+	-	-
<i>C. biledjekensis</i>	+	+	+	+	+	-	-
<i>C. b. bipunctatus</i>	+	+	+	+	+	+	-
<i>C. cordiger</i>	-	-	-	-	-	+	-
<i>C. crassus</i>	?	?	?	?	?	?	?
<i>C. cribratus</i>	+	+	+	+	+	+	-
<i>C. duplicatus</i>	+	+	+	+	+	+	+
<i>C. flavipes</i>	+	+	+	+	+	+	+
<i>C. ilicis</i>	+	+	-	+	-	-	-
<i>C. imperialis</i>	-	-	+	+	+	+	-
<i>C. infraniger</i>	-	-	-	-	+	-	-
<i>C. janthinus</i>	+	-	+	+	-	+	-
<i>C. messutati</i>	-	-	+	-	-	-	-
<i>C. moraei</i>	+	+	+	+	+	+	-
<i>C. octomaculatus</i>	-	-	+	+	-	-	-
<i>C. o. octopunctatus</i>	+	-	+	+	+	+	-
<i>C. paphlagonius</i>	+	+	+	+	+	+	-
<i>C. paradisiacus</i>	+	+	+	+	+	+	-
<i>C. parvulus</i>	+	-	+	+	+	-	-
<i>C. peyroni</i>	-	-	+	-	+	-	+
<i>C. praticola</i>	+	-	-	-	+	+	-
<i>C. quadriguttatus</i>	?	?	?	?	?	?	?
<i>C. rugicollis</i>	+	+	+	-	+	-	-
<i>C. sericeus</i>	+	+	+	+	+	+	-
<i>C. s. sexpunctatus</i>	-	-	-	-	+	+	-
<i>C. signatifrons</i>	+	-	-	-	-	+	-
<i>C. solivagus</i>	-	-	-	-	+	+	-
<i>C. surdus</i>	-	-	+	-	-	-	-
<i>C. testaceitarsis</i>	-	-	-	-	+	-	-
<i>C. transcaucasicus</i>	+	-	+	+	+	+	-
<i>C. trimaculatus</i>	+	-	+	+	+	+	-
<i>C. turcicus</i>	+	+	+	+	+	-	-
<i>C. virens</i>	+	-	+	+	+	+	-
<i>C. loebli</i>	-	-	-	-	+	-	-
<i>C. prusias</i>	+	+	+	+	+	+	-
<i>C. angorensis</i>	-	-	-	+	+	-	-
<i>C. s. moehringi</i>	+	-	+	+	+	+	-
<i>C. wehmckeii</i>	-	-	+	-	-	-	-
<i>P. adaliensis</i>	-	-	+	-	-	-	-
<i>P. albicans</i>	-	-	-	-	+	+	-
<i>P. anatolicus</i>	-	-	-	-	-	+	-
<i>P. bodemeyeri</i>	+	-	-	-	-	+	-
<i>P. cordatus</i>	-	-	+	-	+	-	-

<i>P. excisus</i>	+	-	+	+	-	-	-
<i>P. fimbriolatus</i>	+	+	+	+	+	+	+
<i>P. glycyrrhizae</i>	-	-	+	-	-	+	+
<i>P. hieroglyphicus</i>	+	-	+	+	-	-	-
<i>P. humeralis</i>	+	-	-	-	-	-	-
<i>P. instabilis</i>	+	-	-	-	-	-	-
<i>P. laticollis</i>	+	-	+	-	-	-	-
<i>P. leonardii</i>	-	+	+	+	-	-	-
<i>P. limbatus</i>	+	+	+	+	+	+	+
<i>P. mardinensis</i>	-	+	+	-	+	+	+
<i>P. m. mendax</i>	+	+	+	+	+	+	-
<i>P. nigropunctatus</i>	-	-	+	-	-	-	-
<i>P. nitidicollis</i>	-	-	-	-	-	+	-
<i>P. pentheri</i>	-	-	+	+	-	-	-
<i>P. picus</i>	-	-	-	-	-	+	-
<i>P. scripticollis</i>	-	-	-	-	-	+	+
<i>P. scriptidorsum</i>	-	-	-	-	+	+	+
<i>P. sinuatus</i>	+	+	-	-	-	-	+
<i>P. t. tauricus</i>	+	+	+	+	+	+	+
<i>P. velarum</i>	-	-	-	+	+	+	-
<i>P. vermicularis</i>	-	-	-	-	-	+	-
<i>P. warchalowskii</i>	-	-	-	-	-	-	+
<i>S. f. flavus</i>	-	-	-	-	+	+	-
<i>S. subelongatus</i>	-	-	+	-	+	-	-
<i>S. tamaricis</i>	-	+	-	-	-	+	-

Abbreviations: MAR: Marmara Region, AER: Aegean Region, MER: Mediterranean Region, CAR: Central Anatolian Region, BSR: Black Sea Region, EAR: Eastern Anatolian Region, SEAR: South-Eastern Anatolian Region.

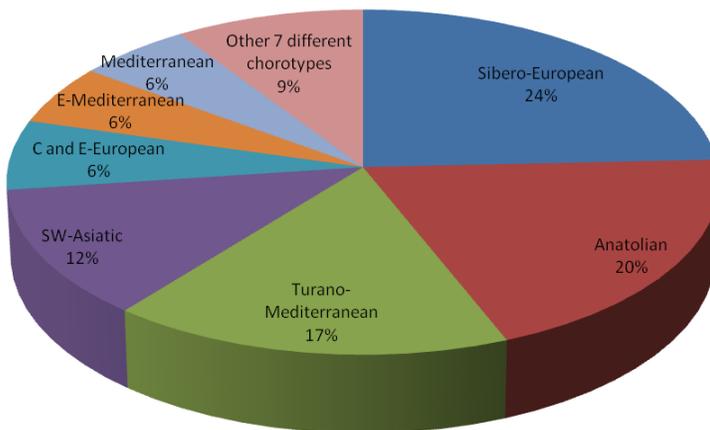


Figure 1. Chorotypical distribution of Turkish Cryptocephalinae.