

A SYNOPSIS OF TURKISH *RHAGIUM* F., 1775 WITH ZOOGEOGRAPHICAL REMARKS (COLEOPTERA: CERAMBYCIDAE: LEPTURINAE)

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ABSTRACT: All taxa of the genus *Rhagium* F., 1775 in Turkey are evaluated and summarized with taxonomical and zoogeographical remarks. Some new faunistical data are given for Turkey in the text. A checklist for Turkish taxa is also given.

KEY WORDS: *Rhagium*, Rhagiini, Lepturinae, Cerambycidae, Coleoptera, Turkey.

The genus *Rhagium* Fabricius, 1775 is a group of insects belonging to the most attractive taxa for especially forestry researchers. As commonly accepted the genus is represented by seventeen species of three subgenera in the whole world fauna from America to Japan in Holarctic region. The members of the genus feed in conifers and deciduous trees. They develops under the bark or in the wood (only the species *R. bifasciatum* F., 1775) of host plants of the genera *Picea*, *Abies*, *Pinus*, *Larix* as conifers and chiefly *Quercus*, *Fagus*, *Castanea*, *Corylus*, *Alnus*, *Betula*, *Tilia*, *Ulmus*, *Acer* as deciduous trees. Therefore the species of the genus are important in forestry. However, the Turkish forestry researches on *Rhagium* species was began by Schmitschek (1944). The works of Turkish forestry researchers who are Acatay (1948, 1961, 1963, 1968), Alkan (1946), Defne (1954), Çanakçıoğlu (1956, 1983), Besçeli (1969), Tosun (1975), Sekendiz (1981), Öymen (1987), Yüksel (1996) and Alkan & Eroğlu (2001) followed it. Unfortunately, five species as *R. inquisitor* (Linnaeus, 1758), *R. mordax* (DeGeer, 1775), *R. sycophanta* (Schrank, 1781), *R. bifasciatum* Fabricius, 1775 and *R. fasciculatum* Faldermann, 1837 among the *Rhagium* species of Turkey have been studied by all references mentioned above. Time to time by beginning at last of nineteen century, foreign researchers have been carried out some works on Turkish species. For example, a new *Rhagium* species, *R. elmalicense*, from S Turkey has been described by Schmid (1999) recently.

ARRANGEMENT OF INFORMATION

Information in the present text is given in following order:

The subfamily and the tribe names are given simply. For the genus and subgenus names, the type species are provided under the taxon names. For each species, the whole subspecies are provided under the taxon names.

The data, **Other names**, **Material examined**, **Records in Turkey**, **Range**, **Chorotype** and **Known host plants for Turkey** under the title for each taxon is given.

Other names. In these parts, as possible as the whole other names including all infraspecific names (synonym, variety, morpha, form, aberration etc.) are provided.

Material examined. Material examined that is provided for only some taxons covers the original records for Turkey. The materials were collected by A. Y. Okutaner from Giresun province in Eastern Black Sea Region of Turkey in 2009. They are deposited in Gazi University (Ankara).

Records in Turkey. On the first line are given the abbreviations of the provinces and lands in Turkey. These parts include previous records that have been given by various authors in different literatures. The whole records are evaluated as only concerning province and land in related reference. The records are accompanied by the authors and publication date of related reference in parenthesis.

Range. In these parts, the whole distribution areas in the world are provided for each taxon.

Chorotype. 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 possible as one chorotype description can be identified for each taxon.

Known host plants for Turkey. In some species, the host plants of collected specimens from Turkey are given by cited references. In other species, host plants have been not recorded for Turkey until now.

ABREVIATIONS OF THE PROVINCES AND LANDS IN TURKEY

ADANA (AD)	ELAZIĞ (EL)	MANİSA (MN)
ADIYAMAN (ADY)	ERZİNCAN (ER)	MARDİN (MR)
AFYON (AF)	ERZURUM (EZ)	MUĞLA (MG)
AĞRI (AG)	ESKİSEHİR (ES)	MUŞ (MU)
AKSARAY (AK)	GAZİANTEP (GA)	NEVŞEHİR (NE)
AMASYA (AM)	GİRESUN (GI)	NİĞDE (NI)
ANKARA (AN)	GÜMÜŞHANE (GU)	ORDU (OR)
ANTALYA (ANT)	HAKKARİ (HA)	OSMANİYE (OS)
ARDAHAN (AR)	HATAY (HT)	RİZE (RI)
ARTVİN (ART)	İĞDIR (IG)	SAKARYA (SA)
AYDIN (AY)	İSPARTA (IP)	SAMSUN (SM)
BALIKESİS (BL)	İÇEL (IC)	SİİRT (SI)
BARTIN (BR)	İSTANBUL (IS)	SİNOP (SN)
BATMAN (BA)	İZMİR (IZ)	SÍVAS (SV)
BAYBURT (BY)	KAHRAMANMARAŞ (KA)	ŞANLIURFA (SU)
BİLECİK (BI)	KARABAĞ (KR)	ŞIRNAK (SK)
BİNGÖL (BN)	KARAMAN (KM)	TEKIRDAG (TE)
BİTLİS (BT)	KARS (KAR)	TOKAT (TO)
BOLU (BO)	KASTAMONU (KS)	TRABZON (TB)
BURDUR (BU)	KAYSERİ (KY)	TUNCELİ (TU)
BURSA (BS)	KIRIKKALE (KI)	UŞAK (US)
ÇANAKKALE (CA)	KIRKLARELİ (KK)	VAN (VA)
ÇANKIRI (CN)	KİRSEHİR (KIR)	YALOVA (YA)
CORUM (CO)	KİLİS (KL)	YOZGAT (YO)
DENİZLİ (DE)	KOCAELİ (KO)	ZONGULDAK (ZO)
DİYARBAKIR (DI)	KONYA (KN)	THRACIA (EUROPEAN TUR.) (TRA)
DÜZCE (DU)	KÜTAHYA (KU)	TURKEY (TUR)
EDİRNE (ED)	MALATYA (MA)	

Subfamily LEPTURINAE Latreille, 1802

According to Bousquet et al. (2009), it includes eight tribes in the world as Desmocerini Blanchard, 1845; Encyclopini LeConte, 1873; Lepturini Latreille, 1802; Oxymirini Danilevsky, 1997; Rhagiini Kirby, 1837; Rhamnusiini Sama, 2009; Teledapini Pascoe, 1871 and Xylosteini Reitter, 1913.

Tribe RHAGIINI Mulsant, 1839

- = Rhagiidae Kirby, 1837: 178
- = Toxotaires Mulsant, 1839: 230
- = Pachytes Motschulsky, 1849: 60
- = Stenocoritae Thomson, 1861: 156
- = Toxoti LeConte and Horn, 1883: 313
- = Pachytini Portevin, 1934: 119 (key), 129

Type genus: *Rhagium* Fabricius, 1775

It includes genera more than thirty in the world fauna. In general, the members of the tribe Rhagini differ from others by prosternum with a deep, transverse groove in front of anterior coxae and by pronotum with lateral knolls. Body is robust but slightly tapering posteriorly. Head is deeply constricted posteriorly. Antennae inserted before eyes or on the level of anterior margin of eyes. Pronotum has or not lateral spines or granules.

Genus *RHAGIUM* Fabricius, 1775

- = *Hargium* Samouelle, 1819: 210
- = *Harpium*; Reitter, 1912: 6
- = *Allorhagium* Kolbe, 1884: 270

Type species: *Cerambyx inquisitor* Linnaeus, 1758

Body robust, medium sized. Cervix elongate. Head square-shaped, robust, and with a medial, longitudinal groove; Temples distinct. Antennae rather short and thick, with apices barely reaching beyond pronotal base. Eyes bulge, finely faceted, poorly emarginate. Pronotum with lateral, medial spines. Elytra wide, subparallel with fine longitudinal keels, rounded apically; mesosternum with longitudinal, smooth keel; abdominal segments usually with medial elevations. It differs from other closely related genera by temples not very convex; by third antennal segment rather long, fourth segment short and third segment not much shorter than fifth; by lateral humps or tubercles of pronotum like a spine and by elytra with clear keels.

The genus *Rhagium* Fabricius, 1775 species are distributed in Holarctic region in the world. Traditionally, it divided three subgenera as the nominotypical subgenus *Rhagium* Fabricius, 1775; *Hagrium* Villiers, 1978 and *Megarhagium* Reitter, 1913. As commonly accepted the genus has sixteen species in the world fauna from America to Japan. The subgenus *Hagrium* Villiers, 1978 is monotypic. It includes only the European species, *R. bifasciatum* Fabricius, 1775. The other subgenus *Megarhagium* Reitter, 1912 includes nine species as *R. caucasicum* Reitter, 1889 (SW-Asiatic), *R. elmalense* Schmid, 1999 (Anatolian), *R. fasciculatum* Faldermann, 1837 (SW-Asiatic), *R. iranum* Heller, 1924 (Iranian), *R. mordax* (DeGeer, 1775) (Sibero-European), *R. phrygium* Daniel, 1906 (Anatolian), *R. pygmaeum* Ganglbauer, 1881 (SW-Asiatic), *R. sycophanta* (Schrank, 1781) (Sibero-European) and *R. syriacum* Pic, 1892 (SW-Asiatic) [Palaearctic]. As commonly accepted that the nominotypical subgenus *Rhagium* Fabricius, 1775 includes seven species as *R. femorale* Ohbayashi, 1994 (Japanese), *R. heyrovskyi* Podaný, 1964 (Japanese), *R. inquisitor* (Linnaeus, 1758) (Holarctic), *R. japonicum* Bates, 1884 (E-Palaearctic), *R. morrisonense* Kano, 1933 (Taiwan), *R. pseudojaponicum* Podaný, 1964 (E-Palaearctic) and *R. qinghaiensis* Chen & Chiang, 2000 (Chinese). In addition to this, the synonymy of all American *Rhagium* species with *R. inquisitor inquisitor* proposed by Linsley & Chemsak (1972). Therefore, e.g. Chemsak et al. (1992) and Monné & Bezark (2009) mentioned only one species as *R. inquisitor* for all American *Rhagium*. However, Vitali (2009) rightly stated that “Linsley & Chemsak (1972)’s approach can not be accepted since erroneous from a biogeographic point of view. Accordingly, *R. inquisitor* resulted widespread from Spain to Middle Siberia, replaced by the ssp. *rugipenne* in Eastern Siberia, and widespread again in North America. Moreover, while only one species is widespread from North Africa to Mexico, 5 endemic taxa inhabit the only Japan. Actually, the North American taxa evidently differ from the typical *inquisitor* and constitute

different entities." So Vitali (2009) accepted Podaný's (1964) worldwide revision and gave all American *Rhagium* as separate species as *R. americanum* Podaný, 1964; *R. canadense* Podaný, 1964; *R. cariniventre* Casey, 1913; *R. lineatum* (Olivier, 1795); *R. mexicanum* Casey, 1913; *R. montanum* Casey, 1913 and *R. quadricostatum* Podaný, 1964. However, the status of American *Rhagium* species is unclear now.

In Palaearctic region, the genus, therefore, is represented by all species in the whole world fauna.

In Europe, it is represented by widely distributed four species of three subgenera as *R. bifasciatum* Fabricius, 1775; *R. mordax* (DeGeer, 1775); *R. sycophanta* (Schrank, 1781) and *R. inquisitor* (Linnaeus, 1758).

The Turkish *Rhagium* is represented by nine species of three subgenera as *R. bifasciatum* Fabricius, 1775; *R. caucasicum* Reitter, 1889; *R. elmalicense* Schmid, 1999; *R. fasciculatum* Faldermann, 1837; *R. mordax* (DeGeer, 1775); *R. phrygium* Daniel, 1906; *R. sycophanta* (Schrank, 1781); *R. syriacum* Pic, 1892 and *R. inquisitor* (Linnaeus, 1758). In addition to this, *R. pygmaeum* Ganglbauer, 1881 was recorded by Lodos (1998) for Turkey. However, Lodos's (1998) list is unrealistic. The species occurs only in Iran and Caucasus (Talysh). So it is not confirmed for Turkey now, but it may be present in NE Turkey.

The Turkish *Rhagium* Fabricius, 1775 taxa are presented as follows:

Subgenus RHAGIUM Fabricius, 1775

Type species: *Cerambyx inquisitor* Linnaeus, 1758

It differs from other subgenera by head swollen and punctured behind eyes and by the eyes with barely pointed out round neckline.

This subgenus is represented only by one species in Turkey.

***R. inquisitor* (Linnaeus, 1758)**

- ssp. ***inquisitor*** Linnaeus, 1758
- ssp. ***schtschukini*** Semenov, 1897 **nom. rest.**
- ssp. ***rugipenne*** Reitter, 1898
- ssp. ***fortipes*** Reitter, 1898
- ssp. ***cedri*** Reymond, 1954

Original combination. - *Cerambyx inquisitor* Linnaeus, 1758

Other names. - *nubecula* Bergstran, 1778; *minutum* Fabricius, 1787; *indagator* Fabricius, 1787; *exile* Gmelin, 1790; *lineatum* Olivier, 1795; *indagatrix* Latreille, 1804; *minor* Voet, 1804-1806; *investigator* Mulsant, 1839; *investigator* Mannerheim, 1852; *sibiricum* Pic, 1905; *californicum* Casey, 1913; *crassipes* Casey, 1913; *parvicorne* Casey, 1913; *boreale* Casey, 1913; *cariniventre* Casey, 1913; *thoracicum* Casey, 1913; *montanum* Casey, 1913; *mexicanum* Casey, 1913; *iberonis* Erichson, 1916; *sudeticum* Plavilstshikov, 1915; *interruptelineata* Krahmer, 1957; *mediofasciata* Krahmer, 1957; *brunnea* Krahmer, 1957; *canadense* Podaný, 1964; *americanum* Podaný, 1964; *quadricostatum* Podaný, 1964; *papayanum* Podaný, 1978; *nigra* Podaný, 1978.

This species distributes rather widely in Turkey. It has five distinct subspecies in the World. In Turkey, it is represented by three subspecies. *R. inquisitor schtschukini* Semenov, 1897 of which original spelling is "Rhagium (*Alorrhagium*) schtschukini" not "stshukini" according to Plavilstshikov (1915), occurs only in NE Turkey; *R. inquisitor fortipes* Reitter, 1898 which was described from Akbez in Hatay province of Turkey, not Syria occurs only in SE

Turkey and the nominative *R. inquisitor inquisitor* (Linnaeus, 1758) occurs in other parts of Turkey. Known other subspecies *R. inquisitor cedri* Reymond, 1954 occurs only in N Africa (Morocco and Algeria), and *R. inquisitor rugipenne* Reitter, 1898 occurs in European Russia, Siberia, China and Mongolia. According to Sama (2002), *R. japonicum* Bates, 1884 occurs in Kunashir Island to Japan is a subspecies of *R. inquisitor*.

Material examined. - Giresun prov.: Eğribel pass-Kümbet plateau, 1-15.06.2009, leg. A. Y. Okutaner, 20 specimens. The specimens were collected from a pheromone trap. The present specimens belong to the nominotypical subspecies.

Records in Turkey. - AM-AN-ANT-ART-BO-BS-BU-DU-EZ-GI-GU-IS-KR-KAR-KS-OR-RI-SA-SN-TB-TRA-TUR (Plavilstshikov, 1915; Alkan, 1946; Schimitschek, 1944; Acatay, 1948, 1961, 1963, 1968; Defne, 1954; Çanakçioğlu, 1956; Demelt, 1967; Tosun, 1975; Sekendiz, 1981; Lobanov et al., 1981; Önder et al., 1987; Althoff & Danilevsky, 1997; Sama, 1982; Çanakçioğlu, 1983; Öymen, 1987; Adlbauer, 1992; Yüksel, 1996; Lodos, 1998; Tozlu, 2001a; Tozlu et al., 2002; Sama, 2002; Özdi̇kmen & Şahin, 2006; Özdi̇kmen, 2007).

Range. - Europe (from Portugal and Spain to European Russia and European Kazakhstan), North Africa (Algeria, Morocco), Siberia, Far East Russia, Mongolia, China, Japan, Caucasus, Turkey, North America (Canada, America, Mexico).

Chorotype. - Holarctic.

Known host plants for Turkey. - *Abies* (Alkan, 1946; Adlbauer, 1992; Yüksel, 1996); *Abies bornmuelleriana* (Schimitschek, 1944; Çanakçioğlu, 1956; Çanakçioğlu, 1983); *Abies cilicica* (Tosun, 1975; Çanakçioğlu, 1983); *Abies nordmanniana* (Çanakçioğlu, 1983); *Juniperus excelsa* (Tosun, 1975); *Picea excelsa* (Çanakçioğlu, 1983); *Picea orientalis* (Schimitschek, 1944; Sekendiz, 1981; Çanakçioğlu, 1983; Yüksel, 1996; Alkan & Eroğlu, 2001); *Pinus* (Alkan, 1946; Demelt, 1967; Adlbauer, 1992); *Pinus brutia* (Öymen, 1987); *Pinus nigra* (Öymen, 1987); *Pinus sylvestris* (Schimitschek, 1944; Çanakçioğlu, 1983; Yüksel, 1996; Alkan, 2000; Tozlu, 2001; Hoskovec & Rejzek, 2009).

Subgenus *HAGRIUM* Villiers, 1978

Type species: *Rhagium bifasciatum* Fabricius, 1775

It differs from the nominative subgenus by head not swollen and punctured behind eyes and the other subgenus *Megarhagium* by long antennae extending distinctly behind the elytral base, by pronotum with smooth, longitudinal, median line and by abdominal sternites with a median, smooth line, without any keel.

This monotypic subgenus is represented in Turkey.

***R. bifasciatum* Fabricius, 1775**

Other names. - *ornatum* Fabricius, 1775; *maculatum* Goeze, 1777; *bicolor* Olivier, 1795; *parisanum* Geoffroy, 1785; *elegans* Herbst, 1786; *anglicum* Gmelin, 1790; *nigrolineatum* Donovan, 1801; *bimaculatum* Marsham, 1802; *varium* Voet, 1804-1806; *unifasciatum* Mulsant, 1839; *ecoffeti* Mulsant, 1839; *lituratum* Fügner, 1891; *latefasciatum* Pic, 1891; *fasciatum* Pic, 1891; *infasciatum* Pic, 1898; *gravei* Hubenthal, 1902; *rufum* Prell, 1908; *deyrollei* Pic, 1909; *medionotatum* Pic, 1910; *mediofasciatum* Pic, 1912; *bistrinotatum* Pic,

1914; *connexum* Everts, 1918; *ictericum* Schleicher, 1924; *simoni* Blair, 1940; *blairi* Kaufmann, 1946; *virgatum* Kaufmann, 1946; *dvoraki* Niedl, 1953; *apicepunctatum* Podaný, 1964; *klinzingi* Podaný, 1964; *montanum* Nüssler, 1969; *andreae* Villiers, 1978.

This species distributes rather widely in Turkey (mostly in N Turkey).

Material examined. - Giresun prov.: Eğribel pass-Kümbet plateau, 1-15.06.2009, leg. A. Y. Okutaner, 4 specimens. The specimens were collected from a pheromone trap.

Records in Turkey. - AM-ANT-ART-BO-BU-DU-EZ-GI-GU-IP-IS-KR-KAR-KS-KK-KO-NI-OR-RI-SA-SN-TB-ZO-TRA-TUR (Plavilstshikov, 1915, 1936; Schimitschek, 1944; Acatay, 1948, 1961, 1968; Defne, 1954; Villiers, 1967; Besceli, 1969; Sekendiz, 1974; Tosun, 1975; Lobanov et al., 1981; Sama, 1982; Çanakçioğlu, 1983, 1993; Danilevsky & Miroshnikov, 1985; Önder et al., 1987; Öymen, 1987; Svacha & Danilevsky, 1988; Adlbauer, 1992; Yüksel, 1996; Althoff & Danilevsky, 1997; Çanakçioğlu & Mol, 1998; Lodos, 1998; Alkan & Eroğlu, 2001; Tozlu, 2001a,b; Sama, 2002; Tozlu et al., 2002; Özdkmen & Şahin, 2006; Hoskovec & Rejzek, 2009).

Range. - Europe (from Portugal and Spain to European Russia), North Africa (erroneous), Caucasus, Transcaucasia, Near East, Turkey.

Chorotype. - European or Turano-Europeo-Mediterranean. According to Sama (2002), the record of Plavilstshikov (1936) from North Africa is erroneous.

Known host plants for Turkey. - *Abies bornmuelleriana* ((Schimitschek, 1944; Besceli, 1969; Çanakçioğlu, 1983; Öymen, 1987); *Abies cilicica* (Tosun, 1975; Çanakçioğlu, 1983); *Abies nordmanniana* (Çanakçioğlu, 1983); *Picea orientalis* (Yüksel, 1996; Alkan & Eroğlu, 2001); *Pinus* (Adlbauer, 1992); *Pinus sylvestris* (Schimitschek, 1944; Çanakçioğlu, 1983; Alkan & Eroğlu, 2001; Tozlu, 2001a); *Populus tremula* (Sekendiz, 1974; Çanakçioğlu, 1983; Tozlu, 2001b).

Subgenus MEGARHAGIUM REITTER, 1913

Type species: *Cerambyx sycophanta* Schrank, 1781

It differs from the nominate subgenus by head not swollen and punctured behind eyes and the other subgenus *Hagrium* by shortened antennae hardly reaching the elytral base, by pronotum without smooth median line and by abdominal sternites with large, longitudinal, median keel.

This subgenus is represented by seven species in Turkey.

R. caucasicum (Reitter, 1889)

ssp. **caucasicum** Reitter, 1889

ssp. **semicorne** Holzschuh, 1974

Original combination. – *Rhagium mordax* var. *caucasicum* Reitter, 1889

This species probably distributes only in N Turkey due to it has been recorded only by Plavilstshikov (1936) from Kars prov. (Kağızman) as a exact locality in Turkey until now. It is represented only by the nominate subspecies in Turkey. Known other subspecies, *R. caucasicum semicorne* Holzschuh, 1974 which

described originally as *R. semicorne* was ranked by Danilevsky (1992) as subspecies. It occurs in Caucasus (Azerbaijan) and Iran.

Records in Turkey. - KAR-TUR (Plavilstshikov, 1915, 1936; Lobanov et al., 1981; Danilevsky & Miroshnikov, 1985; Svacha & Danilevsky, 1988).

Range. - Caucasus, Transcaucasia, Turkey, Iran.

Chorotype. - SW-Asiatic (Anatolo-Caucasian + Irano-Caucasian + Irano-Anatolian).

R. elmaliense Schmid, 1999

This species distributes only in S Turkey. It has been known only from the type locality (Antalya prov.: Elmali) until now.

Records in Turkey. - ANT-TUR (Schmid, 1999; Sama, 2002).

Range. - Turkey.

Chorotype. - Anatolian.

R. fasciculatum Faldermann, 1837

Other names. - *rufipes* Motschulsky, 1838.

This species distributes only in N Turkey.

Records in Turkey. - ART-BO-GI-KAR-RI-SN-TB-TUR (Plavilstshikov, 1936; Defne, 1954; Demelt, 1967; Villiers, 1967; Lobanov et al., 1981; Danilevsky & Miroshnikov, 1985; Svacha & Danilevsky, 1988; Lodos, 1998; Tauzin, 2000; Sama, 2002; Tozlu et al., 2002; Özdi̇kmen & Şahin, 2006; Özdi̇kmen, 2007; Hoskovec & Rejzek, 2009).

Range. - Caucasus, Transcaucasia, Turkey, Iran.

Chorotype. - SW-Asiatic (Anatolo-Caucasian + Irano-Caucasian + Irano-Anatolian).

R. mordax (DeGeer, 1775)

Original combination. - *Lepturna mordax* DeGeer, 1775

Other names. - *inquisitor* Stroem, 1765 (preocc.); *bifasciatum* Schrank, 1781; *linnei* Laicharting, 1784; *vulgare* Samouelle, 1819; *klenkai* Heyrovsky, 1914; ? *altaiene* Plavilstshikov, 1915; *bimaculatum* Jacobson, 1926; *morvandicum* Pic, 1927.

This species distributes mostly in N Turkey.

Records in Turkey. - ART-GI-KR-OR-RI-TB-TRA-TUR (Acatay, 1948, 1961, 1968; Besçeli, 1969; Yüksel, 1996; Althoff & Danilevsky, 1997; Lodos, 1998; Alkan & Eroğlu, 2001).

Range. - Europe (from Spain to European Russia), Siberia, Kazakhstan, Turkey.

Chorotype. - Sibero-European.

Known host plants for Turkey. - *Quercus* (Besçeli, 1969); *Picea orientalis* (Yüksel, 1996).

R. phrygium Daniel, 1906

Original combination. - *Rhagium (Hargium) phrygium* Daniel, 1906

This species was described by Daniel (1906) from Konya prov.: Akşehir (CS Turkey) based on a female specimen according to Plavilstshikov (1915). In 1985, Adlbauer gave description of the male. It distributes only in CS and S Turkey (Taurus Mts.) according to published references. However, Hoskovec & Rejzek (2009) stated that this species was also collected from Syria (Jabal an Nusayriyah Mts.) and Muş province of Turkey in their website entitled longhorn beetles (Cerambycidae) of the West Palaearctic region.

Adlbauer (1988) stated that “*this rare Rhagium species has been known only from unique specimens in Adlbauer (1985) up to now. Body long is changed between 12 and 18 mm in males and 13-21 mm in females. The bright colouring is straw-yellow in some bright specimens, rather red-brown in the other specimens. Dark drawing on the elytrons is only seldom distinctively stronger than mentioned that in the original description, in the prevailing majority of the cases, if it is reduced or even further. On the other hand, the golden brown hairs (especially on the pronotum develops noticeably) develops stronger mostly*”.

Records in Turkey. - IC-KN-TUR (Plavilstshikov, 1915; Winkler, 1924-1932; Adlbauer, 1985, 1988; Sama, 2002).

Range. - Turkey.

Chorotype. - Anatolian.

Known host plants for Turkey. - *Philadelphus*, *Quercus*, *Cornus*, *Pistacia* (Adlbauer, 1988).

R. sycophanta (Schrank, 1781)

Original combination. - *Cerambyx sycophanta* Schrank, 1781

Other names. - *mordax* Herbst, 1784; *inquisitor* Olivier, 1795; *scrutator* Olivier, 1795; *cephalotes* Voet, 1804-1806; *grandiceps* Thomson, 1866; *latefasciatum* Müller, 1890; *apicefasciatum* Heyrovsky, 1952.

This species distributes only in N Turkey. According to Sama (2002), Plavilstshikov (1936) erroneously listed Asia Minor. The present record is the first for Giresun province.

Material examined. - Giresun prov.: Eğribel pass-Kümbet plateau, 1-15.06.2009, leg. A. Y. Okutaner, 14 specimens. The specimens were collected from a pheromone trap.

Records in Turkey. - TB-TRA-TUR (Plavilstshikov, 1915, 1936; Lobanov et al., 1981; Svacha & Danilevsky, 1988; Althoff & Danilevsky, 1997; Lodos, 1998; Alkan & Eroğlu, 2001).

Range. - Europe (from Spain to European Russia), Siberia, Turkey.

Chorotype. - Sibero-European.

***R. syriacum* Pic, 1892**

Original combination. – *Rhagium mordax* F. (*sycophanta* Sch.) var. *syriacum* Pic, 1892

This species distributes only in S Turkey (Amanos Mts.). The type locality of the species is Akbez in Hatay province of Turkey, not Syria. So this species is endemic to Turkey.

There is chiefly two polemics on this species. Firstly, this is a real species or not. This species was described by Pic (1892) as a variation of *R. sycophanta*. It is so close to *R. sycophanta*. He mentioned only “clear band of elytrons passing to a ruddy shade melted in posterior part with the rest of drawings” in the original description. Even it was given by Plavilstshikov (1915) as an aberration of *R. sycophanta*. He stated that “*this form is only a simple aberration, but not race of R. sycophanta*”. However, Sama (2002) gave the taxon in his key as a separate species. He mentioned it with the species *R. phrygium* Daniel, 1906 in the same article (seventh article) in his key. He did not give any diagnostic character to separate them.

Anyway, the second polemic is the synonymy between *R. syriacum* Pic, 1892 (from Amanos Mts.) and *R. phrygium* Daniel, 1906 (from Taurus Mts.) from S Turkey. These taxa are not synonym. Since, *R. syriacum* has the same coloration and pubescent especially on the pronotum and elytra with *R. sycophanta* except posterior parts of elytra. *R. phrygium* easily distinguished from *R. syriacum* and *R. sycophanta* by stronger pronotal and elytral pubescence especially except other diagnostic characters.

Finally, the status of this taxon still needs to be clarified with examination of the type specimen for the present.

The original description of Pic (1892) as follows:

Rhagium mordax F. (*sycophanta* Sch.) var. *syriacum*

“*Bande claire des élytres passant à une teinte rougeâtre fondue dans sa partie postérieure avec le reste des dessins*”.

Records in Turkey. – HT-TUR (Pic, 1892; Lodos, 1998; Sama, 2002).

Range. - Turkey.

Chorotype. - Anatolian.

A CHECKLIST OF THE TURKISH *RHAGIUM* TAXA

Turkish *Rhagium* taxa comprise of nine species with four subspecies of three subgenera. The endemic species are marked with (E).

Genus RHAGIUM Fabricius, 1775**Subgenus RHAGIUM Fabricius, 1775***Rhagium inquisitor* (Linnaeus, 1758)*Rhagium inquisitor inquisitor* (Linnaeus, 1758)*Rhagium inquisitor schtschukini* Semenov, 1897*Rhagium inquisitor fortipes* Reitter, 1898 (E)**Subgenus HAGRIUM Villiers, 1978***Rhagium bifasciatum* Fabricius, 1775**Subgenus MEGARHAGIUM Reitter, 1913***Rhagium caucasicum* Reitter, 1889*Rhagium caucasicum caucasicum* Reitter, 1889*Rhagium elmaliense* Schmid, 1999 (E)*Rhagium fasciculatum* Faldermann, 1837*Rhagium mordax* (Degeer, 1775)*Rhagium phrygium* Daniel, 1906 (E)*Rhagium sycophanta* (Schrank, 1781)*Rhagium syriacum* Pic, 1892 (E)**ZOOGEOGRAPHICAL ANALYSIS**

The present list consists of 9 species of the genus *Rhagium* from Turkey. 33.33 % of the recorded species as *R. elmaliense* Schmid, 1999; *R. phrygium* Daniel, 1906 and *R. syriacum* Pic, 1892 are endemic to Turkey. 22.22 % of the recorded species as *R. caucasicum* Reitter, 1889 and *R. fasciculatum* Faldermann, 1837 have an SW-Asiatic (Anatolo-Caucasian + Irano-Caucasian + Irano-Anatolian) chorotype and also 22.22 % of the recorded species as *R. mordax* (DeGeer, 1775) and *R. sycophanta* (Schrank, 1781) have an Sibero-European chorotype. 11.11 % of the recorded species as only the species *R. bifasciatum* Fabricius, 1775 has an European chorotype and also 11.11 % of the recorded species as only the species *R. inquisitor* (Linnaeus, 1758) has an Holarctic chorotype (Fig. 1).

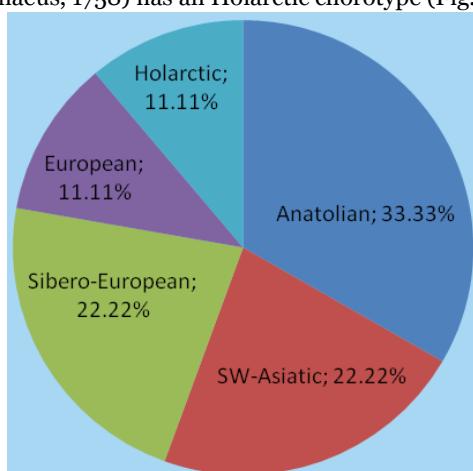


Figure 1. Zoogeographical composition of the *Rhagium* fauna of Turkey.

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