A NEW ARRANGEMENT OF *PLAGIONOTUS* (*NEOPLAGIONOTUS*) *SPECIOSUS* (ADAMS) (COLEOPTERA: CERAMBYCIDAE: CERAMBYCINAE)

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ABSTRACT: The valid specific name of *Plagionotus* (*Neoplagionotus*) bobelayei (Brullé, 1832) is necessarily changed as *Plagionotus* (*Neoplagionotus*) speciosus (Adams, 1817) stat. nov. In connection with this, *Clytus bobelayei* Brullé, 1832 syn. nov. is proposed as a new synonym of *Plagionotus* (*Neoplagionotus*) speciosus (Adams, 1817). Furthermore, the following taxa are proposed as new subspecies to *Plagionotus* (*Neoplagionotus*) speciosus (Adams, 1817) stat. nov.: *Plagionotus* (*Neoplagionotus*) speciosus mouzafferi Pic, 1905 ssp. nov. sic stat. nov. from Iran and Iraq, *Plagionotus* (*Neoplagionotus*) speciosus speciosus (Adams, 1817) ssp. nov. sic stat. nov. from Caucasus (Georgia and Armenia), and *Plagionotus speciosus bobelayei* (Brullé, 1832) ssp. nov. sic stat. nov. from South-Eastern Europe (including European Turkey), Caucasus (Azerbaijan), Middle East (Israel, Jordan and Syria) and Asian Turkey. Accordingly, the known synonyms of *Plagionotus* (*Neoplagionotus*) speciosus (Adams, 1817) as *Plagionotus bobelayei* var. *luristanicus* Pic, 1911 syn. nov. and *Plagionotus persicus* Pic, 1951 syn. nov. are transferred to *Plagionotus* (*Neoplagionotus*) speciosus mouzafferi Pic, 1905 as new synonyms.

KEY WORDS: Cerambycidae, Cerambycinae, Clytini, new subspecies, new status, new synonyms

The genus *Plagionotus* Mulsant, 1842 was divided by Kasatkin (2005) into three genera as *Plagionotus* Mulsant, 1842 (type species: *Leptura detrita* Linnaeus, 1758), *Neoplagionotus* Kasatkin, 2005 (type species: *Clytus bobelayei* Brullé, 1832) and *Paraplagionotus* Kasatkin, 2005 (type species: *Cerambyx floralis* Pallas, 1773) on the base of endofallic characters.

Sama (2008) stated that "A very careful comparative study of the morphology of P. detritus (type of the genus), P. bobelayei (type species of Neoplagionotus), P. scalaris Brullé, 1842 and P. floralis (type species of Paraplagionotus) did not show any significant difference, except the shape of the pronotum, which is more or less transverse in P. detritus, P. arcuatus and in the P. scalaris species group, and about as wide as long in P. floralis". Thus Echinocerus Mulsant, 1863, Neoplagionotus Kasatkin, 2005 and Paraplagionotus Kasatkin, 2005 were given by Sama (2008) as synonyms of the genus Plagionotus Mulsant, 1842. This approach was repeated by Sama in Löbl & Smetana (2010).

However, Özdikmen & Turgut (2009) stated that "Kasatkin's work on the base of endofallic characters is important and valuable for us in terms of to showing diversities in this group. Furthermore, also diversities of known larval host plants of the species are supported the approach of Kasatkin (2005)". In connection with this, the genus Plagionotus Mulsant, 1842 was divided by Özdikmen & Turgut (2009) into three subgenera as Echinocerus Mulsant, 1863 (type species: Cerambyx floralis Pallas, 1773), Neoplagionotus Kasatkin, 2005

(type species: Clytus bobelayei Brullé, 1832) and Plagionotus Mulsant, 1842 (type species: Leptura detrita Linnaeus, 1758).

According to Danilevsky (2015), *Echinocerus* Mulsant, *Neoplagionotus* Kasatkin and *Plagionotus* Mulsant are separate genera.

In the present work, the approach of Özdikmen & Turgut (2009) is accepted.

MATERIAL AND METHOD

Information in the present text is given in following order: The subfamily and the tribe names are given simply. For the genus group names, the type species and synonyms are provided under the taxa names. Within a genus group name, each species group taxon is given alphabetically with the type information and distibutional data. The type information for each species group taxa are arranged under Tavakilian (2015). The data of distribution are given on basis of Löbl & Smetana (2010, 2011), Danilevsky (2010, 2012a,b, 2013, 2015), Özdikmen (2011) and Miroshnikov (2011). Distributional abbreviations for the present work are available to Löbl & Smetana (2010).

RESULTS

Family Cerambycidae Latreille, 1802 Subfamily Cerambycinae Latreille, 1802 Tribe Clytini Mulsant, 1839

Genus Plagionotus Mulsant, 1842: 1

[Type species Leptura detrita Linnaeus, 1758]

Platynotus Mulsant, 1839: 71 [HN] [Type species Leptura detrita Linnaeus, 1758]

Plagyonotus Thomson, 1861: 220 [unjustified emendation]

Subgenus Neoplagionotus Kasatkin, 2005: 51

[Type species Clytus bobelayei Brullé, 1832 (= Callidium speciosum Adams, 1817)]

Plagionotus speciosus (Adams, 1817) stat. nov.

Callidium speciosum Adams, 1817: 309 Clytus bobelayei Brullé, 1832: 253 **syn. nov.** Plagionotus bobelayei var. mouzafferi Pic, 1905a: 114 Plagionotus bobelayei var. luristanicus Pic, 1911: 6 Plagionotus persicus Pic, 1951: 1

The species name was accepted as *Plagionotus* (*Neoplagionotus*) bobelayei (Brullé, 1832). Since the senior name *Callidium speciosum* Adams, 1817 was regarded as a junior homonym of *Callidium speciosum* D. H. Schneider, 1787.

Callidium speciosum was described by Adams (1817) from Georgia (Tbilissi). It was a preoccupied with Callidium speciosum D. H. Schneider, 1787 that is a valid name as Isotomus speciosus (D. H. Schneider, 1787). Thus Callidium speciosum Adams, 1817 is not a homonym name anymore and Plagionotus speciosus (Adams, 1817) should be accepted as a valid specific name.

The species was recently recorded only by Özdikmen et al. (2014) from Iraq. It has not been included any subspecies until now. However, the present specimens belong to a new subspecies of *P. speciosus*. So, the species includes 3 subspecies with 2 new subspecies in the present work as *P. speciosus bobelayei* (Brullé, 1832) is distributed in E Europe, Ciscaucasus, European and Asian Turkey, Syria, Israel

and Jordan, *P. speciosus mouzafferi* Pic, 1905 ssp. nov. sic stat. nov. is distributed in Iraq and Iran, ?NE Syria, ?SE Turkey and ?Turkmenistan, and *P. speciosus speciosus* (Adams, 1817) ssp. nov. sic stat. nov. is distributed in Georgia, Armenia, ?Azerbaijan, ?NETurkey and ?NW Iran now.

Plagionotus speciosus mouzafferi Pic, 1905 ssp. nov. sic stat. nov.

(Figs. 1 and 2)

Plagionotus bobelayei var. mouzafferi Pic, 1905a: 114 [Iran: Susa to Isfahan] Plagionotus bobelayei var. luristanicus Pic, 1911: 6 [Iran: Luristan] syn. nov. Plagionotus persicus Pic, 1951: 1 [Iran] syn. nov.

Plagionotus bobelayei var. mouzafferi was described by Pic (1905a) from Iran (Susa to Isfahan). According to original description of Pic (1905a), prothorax covered with yellow pubescence in its basal third [prothorax ayant son tiers basal revêtu de pubescence jaune]. Pic (1905b) stated that "Plagionotus bobelayei var. mouzafferi distinguishes by the uninterrupted yellow pubescence, and not disposed in the form of distinct bands, on all base of the prothorax, and by the large yellow bands of elytra, especially median" ["Plagionotus bobelayei var. mouzafferi se distingue par la pubescence jaune continue, et non disposée en forme de bandes distinctes, sur toute la base du prothorax, et par les bandes jaunes des élytres, la médiane surtout, larges."]. Pic (1911) also stated that "v. mouzafferi Pic, with an anteapical macula, and not a fascia, on elytra and, besides, the prothorax is provided with a broad yellow basale band" ["La v. mouzafferi Pic, offre une macule, et non une fascie, anteapicale sur les élytres et, en outre, le prothorax est muni d'une large bande jaune basale"].

We found from Iraq such a type of specimens of *Plagionotus speciosus*. And we decided the present specimens that are adequately different from the typical form and *P. speciosus bobelayei* must be a new subspecies of *P. speciosus*. So, we propose *Plagionotus bobelayei* var. *mouzafferi* Pic, 1905 should accept as a new subspecies of *P. speciosus*.

The new subspecies is easily distinguished from the subspecies *P. speciosus bobelayei* by relatively larger size (relatively smaller size in *P. speciosus bobelayei*), relatively much widened yellow bands of elytra (yellow bands of elytra relatively much narrowed in *P. speciosus bobelayei*), relatively large apical spot of elytra, so anteapical and apical spots relatively close to each other (apical spot of elytra relatively small, so anteapical and apical spots relatively far from each other in nominal subspecies), a much narrowed blackened transversal band in posterior half of pronotum or absence of blackened transversal band in posterior half of pronotum, so completely covered with yellow pubescence (blackened transversal band in posterior half of pronotum much widened in *P. speciosus bobelayei*) and much thicker antennae (antennae much thinner in *P. speciosus bobelayei*) chiefly.

Also the new subspecies differs from the nominal subspecies *P. speciosus speciosus* by relatively larger size (relatively smaller size in *P. speciosus speciosus*), relatively much widened yellow bands of elytra (yellow bands of elytra relatively much narrowed in *P. speciosus speciosus*) and relatively thicker antennae (antennae relatively thinner in *P. speciosus speciosus*) chiefly.

Besides, some of the current synonyms of *P. speciosus* as *Plagionotus* bobelayei var. *luristanicus* Pic, 1911 and *Plagionotus* persicus Pic, 1951 from Iran have also relatively much widened yellow bands of elytra and relatively large apical spot of elytra, so anteapical and apical spots relatively close to each other. Therefore, the described taxa should accept as new synonyms of the new subspecies *Plagionotus* speciosus mouzafferi Pic, 1905 stat. nov..

Variability. Body relatively more narrowed and smaller size, subparallel in form in *Plagionotus persicus*, while relatively more widened and larger size, not subparallel in form in the others. Even if narrowed, a blackened transversal band in posterior half of pronotum is present in the specimens from Iraq and *Plagionotus bobelayei* var. *luristanicus* Pic, 1911, while such a band is absent, so completely covered with yellow pubescence in the typical form and *Plagionotus persicus* Pic, 1951. Ground pubescence of elytra, while brown to blackish brown in the specimens from Iraq, is black in the specimens from Iran. Anteapical spot of elytra is maculiform, not a fascia, in the typical form and in the specimens from Iraq while as a fascia, not maculiform in *Plagionotus bobelayei* var. *luristanicus* Pic, 1911 and *Plagionotus persicus* Pic, 1951. And median band of elytra is especially widened in the typical form, while not especially widened in the others.

Material. Iraq: Mosul, Hamam Al-Alil, IV.2012, 1 σ that is deposited at Gazi University, Ankara (Turkey); Iraq: Erbil, Topzawa, 08.VI.2002, 1 σ that is deposited in Entomology Museum of Erbil (Iraq). The new subspecies *P. speciosus mouzafferi* was also given by Ismail (1983) as *P. speciosus* on the base of a specimen from Mosul (Zaho). The specimen is deposited in the Entomology Museum of Abu Garip (Baghdad).

Distribution. The new subspecies is known from Iran and Iraq now. Probably it can occur also in NE Syria, SE Asian Turkey and even Turkmenistan.

Plagionotus speciosus speciosus (Adams, 1817) ssp. nov. sic stat. nov. (Fig. 1)

Callidium speciosum was described by Adams (1817) from Georgia (Tbilissi). It was accepted as a synonym of *Plagionotus bobelayei* (Brullé, 1832) from Greece (Peloponnese). It should be accepted as a nominal subspecies of *P. speciosus*.

In the new subspecies, yellow bands relatively widened and apical spot of elytra relatively large, so anteapical and apical spots relatively close to each other.

Moreover, according to original description of the new subspecies, blackened transversal band in posterior half of pronotum is much narrower than that of the nominotypical subspecies, and anteapical band of elytra in the shape of semilunar macula.

".....ceterum laevis tomento compacto decumbente breviore viridi-flavo vestitus, fascia transversali lata utrinque attenuata in medio lineaque tenuiore postice atris....."

"......4. macula semilunari aut rotundata paulo infra et tandem......"

The new subspecies is easily distinguished from the subspecies *P. speciosus bobelayei* by relatively large apical spot of elytra, so anteapical and apical spots relatively close to each other (apical spot of elytra relatively small, so anteapical and apical spots relatively far from each other in *P. speciosus bobelayei*), relatively widened yellow bands of pronotum and elytra (yellow bands of pronotum and elytra relatively narrowed in *P. speciosus bobelayei*), a much narrowed blackened transversal band in posterior half of pronotum (blackened transversal band in posterior half of pronotum much widened in *P. speciosus bobelayei*) and relatively thicker antennae (antennae relatively thinner in *P. speciosus bobelayei*) chiefly.

Also the new subspecies differs from the subspecies *P. bobelayei mouzafferi* by relatively smaller size (relatively larger size in *P. bobelayei mouzafferi*), relatively much narrowed yellow bands of elytra (yellow bands of elytra relatively

much widened in *P. bobelayei mouzafferi*) and relatively thinner antennae (antennae relatively thicker in *P. bobelayei mouzafferi*) chiefly.

Distribution. The new species is known from Georgia and Armenia now. Probably it can occur also in Azerbaijan, NE Asian Turkey and NW Iran.

Plagionotus speciosus bobelayei (Brullé, 1832) ssp. nov. sic stat. nov. (Fig. 1)

Clytus bobelayei was described by Brullé (1832) from Greece (Peloponnese). It was accepted as a valid specific name of *Plagionotus speciosus* (Adams, 1817) that was regarded as a homonym name with *Callidium speciosum* D. H. Schneider, 1787. It should be accepted as a subspecies of *Plagionotus speciosus* (Adams, 1817).

The new subspecies is easily distinguished from the other subspecies by above mentioned characters in the parts of *Plagionotus speciosus mouzafferi* Pic, 1905 and *Plagionotus speciosus speciosus* (Adams, 1817).

Distribution. The new species is known from South-Eastern Europe (including European Turkey), Caucasus (Azerbaijan), Middle East (Israel, Jordan and Syria) and Asian Turkey.

Consequently, a necessarily new arrangement for the species *Plagionotus* speciosus is presented as follows:

Genus Plagionotus Mulsant, 1842: 1

[Type species Leptura detrita Linnaeus, 1758]

Platynotus Mulsant, 1839: 71 [HN] [Type species Leptura detrita Linnaeus, 1758] Plagyonotus Thomson, 1861: 220 [unjustified emendation]

Subgenus Neoplagionotus Kasatkin, 2005: 51

[Type species *Clytus bobelayei* Brullé, 1832 (= *Callidium speciosum* Adams, 1817)]

Species Plagionotus speciosus Adams, 1817: 309 (Callidium) stat. n.

Subspecies P. s. bobelayei Brullé, 1832: 253 (Clytus) ssp. n. sic stat. n.

Type information. Syntypes $\sigma\sigma$ & 99, Muséum National d'Histoire Naturelle, Paris [type locality "Morea" (Creece)]

Range. E: AL BU GR MC RO ST TR UK A: AB IS JO SY TR

Subspecies P. s. mouzafferi Pic, 1905a: 114 ssp. n. sic stat. n.

Plagionotus bobelayei var. luristanicus Pic, 1911: 6 [Iran: Luristan] syn. nov. Plagionotus persicus Pic, 1951: 1 [Iran] syn. nov.

Type information. Syntypes, ex collection M. Pic, Muséum National d'Histoire Naturelle, Paris [Type locality "from Susa to Isfahan" (Iran)] **Range. A:** IN IQ ?SY ?TM ?TR

Subspecies P. s. speciosus Adams, 1817: 309 (Callidium) ssp. n. sic stat. n.

Type information. Holotype, ex collection M. Adams, Zoological Museum of Moscow University, Moscow [Type locality "Tbilissi" (Georgia)]

Range. A: ?AB AR GG ?IN ?TR

A key to the described taxa of *Plagionotus speciosus* (Adams, 1817)

- 1. Apical spot of elytra relatively small, anteapical and apical spots relatively far -. Apical spot of elytra relatively large, anteapical and apical spots relatively close 2. Yellow bands of elytra relatively much widened; antennae relatively thicker....3 -. Yellow bands of elytra relatively much narrowed; antennae relatively 3. Posterior half of pronotum covered with uninterrupted yellow pubescence, and -. Posterior half of pronotum covered with interrupted yellow pubescence, and so 4. Yellow drawings partly less developed, median band of elytra not especially large; pronotum less large; body relatively more narrowed and smaller size,
- -. Yellow drawings well developed, median band of elytra especially large;
- pronotum larger; body relatively more widened and larger size, not subparallel in

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Figure 1. *Plagionotus speciosus mouzafferi* Pic, 1905 ssp. nov. sic stat. nov. from N Iraq: Mosul (left), *Plagionotus speciosus speciosus* (Adams, 1817) ssp. nov. sic stat. nov. (from D. Kasatkin in http://cerambycidae.org/taxa/bobelayei-(Brull%C3%A9-1832)) (center), *P. speciosus bobelayei* (Brullé, 1832) from S Turkey: Antalya (right).



Figure 2. *Plagionotus speciosus mouzafferi* Pic, 1905 ssp. nov. sic stat. nov. from N Iraq (in Entomology Museum of Erbil).