

Clarification of confusions in the taxonomy and the nomenclature in the genus *Leiodes* Latreille, 1796 (Coleoptera: Leiodidae: Leiodini). Part I.

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Abstract. *Leiodes subtilissima* sp. nov. from Kazakhstan, is described and compared to similar species *L. subtilis* Reitter, 1885. Some of lasting confusions in nomenclature of *Leiodes* Latreille, 1796 and contemporary concept of *L. subtilis* Reitter, 1885 are discussed.

INTRODUCTION

As compared to majority of the other Coleoptera families and genera, the nomenclature and also the concept of the family Leiodidae as well as the lower taxonomic names, especially the genus *Leiodes* Latreille, 1796, have encountered problems due to unusually numerous changes, misunderstandings, mistakes and inaccuracies since the year of establishing the family by Fleming (1821). Almost permanent difficulties have accompanied the generic name *Leiodes* and also concepts of some *Leiodes* species since the time of establishing the genus by Latreille (1796).

The aim of this paper is to contribute to the solution of the question concerning the gender of the name *Leiodes*, to refine the clarification of the of *Leiodes subtilis* Reitter, 1885 concept, to clarify the status of specimens labelled as the types of *L. subtilis*, preserved in both the National Museum in Prague (NMPC) and the Hungarian Natural History Museum in Budapest, and to describe a new species of the genus *Leiodes* that seems to be very similar to *L. subtilis*.

As the original description of *L. subtilis* was very brief and because the later concept of the species (Daffner 1983) was questionable, the currently accessible information about the morphology of the species was presented in this paper.

The description of a new species is presented in the part Taxonomy, and the gender of the genus *Leiodes*, the status of the known types and the concept of *L. subtilis* are considered in the part Discussion.

MATERIAL AND METHODS

The present paper is based on the leiodid material collected in Kazakhstan by Matúš Kocian (Praha, Czech Republic) and on the material deposited in the NMPC, HNHM and in the author collection (ZSPC).

Three specimens of *Leiodes subtilis* Reitter labelled as “Holotype” or “Paratype”, respectively, have been housed in the National Museum in Prague (NMPC). Two other specimens determined by Daffner as *L. subtilis* that had been deposited in the NMPC were

originally labelled by Hlisnikovský as the holotype and the allotype of *Liodes transcaspica*. Another two specimens originally labelled by Hlisnikovský as the holotype and the paratype of *Liodes afghana* determined by Daffner as *L. subtilis* Reitter had also been deposited in NMPC. Beside them one more specimen of *L. subtilis* Reitter also labelled as the “Holotype” has been deposited in the Hungarian Natural History Museum in Budapest (HNHM). My opinion on the status of all those specimens is presented in the paragraph Discussion.

The above mentioned facts do not exclude the possibility of the existence of further “types”. It was known, that the part of the Reitter’s collection, coming from the period when *L. subtilis* was originally described, was sold to some French entomologists (Cambefort, Y. 2006). Those Reitter’s leioidids were included in the Grouvelle’s collection and deposited in the National History Museum in Paris (NHMP). NHMP was two times asked via its relevant application “colhelper” if any types of *L. subtilis* were housed in the museum but the response came too late to be included in this paper. Therefore only the examination of the “types” housed in the NMPC and HNHM is presented in the paragraphs Taxonomy and Discussion.

Collecting data cited in quotation marks are taken from the locality labels accompanying the examined examples. The individual lines from the original locality labels are separated by a slash “/”; the individual labels are separated by double slash “//” and the text on the reverse side of a label follows after colon “:” in this work. My remarks are presented in square brackets - e.g : [hw] = hand written, [p] - printed. Holotype and paratypes are indicated by a red label bearing the status of the specimen (holotypus or paratypus, respectively) name of the species, the name of the author, the year 2019 and attached to the same pin as the relevant specimen in the original description.

The specimens examined were relaxed in 4% acetic acid first, then rinsed in water and dissected (if appropriate) in a drop of water. The male genitalia were mounted in polyvinylpyrrolidone (Lompe 1986) on a transparent slide added to the same pin as the dissected specimen or directly on the card near the relevant specimen; the female genitalia were not examined as the spermatheca is membranous in *Leiodes*.

The description of the new species is based on the holotype. The variability is mentioned in the paragraph “Variability” and includes features exhibited by the paratypes or by the other material examined. Important characters of the sexual dimorphism are also included in the paragraph mentioned. Those characters that seem to be usual in the genus - e.g micro-sculpture of venter, setosity on antennae, legs and venter are not mentioned in the description.

The measurements of the total body length mentioned in the original description were taken from all specimens examined. Specific measurements of the individual body parts were taken from the holotype only. The measurements of morphologic body parts were measured to the first decimal place of millimetre, the measurements of the genitalia were measured to the second decimal place of millimetre.

Abbreviations of body parts and measurements:

- AII-AXI Antennomeres II-XI.
- TI-TIII Tarsomeres I-III.
- AXI/AX The ratio of the length or width of the antennomeres III:II, analogously ratios of others antennomeres.

L Length.
W Width.
L/W or W/L Ratio between measurements.

Terminology of the mesoventral longitudinal carina follows that in Švec (2008).

TAXONOMY

Leiodes subtilissima sp. nov.

(Figs. 1-3)

Type material. Holotype (♂): “KAZAKHSTAN or., Charyn NP/ Ashen Grove, 630m/17.-19.5.2014/ 43.67030N 79.39024E/ M. Kocian lgt.”, (ZSPC). Paratypes: (3 ♂♂, 5 ♀♀): the same data, (ZSPC).

Description. Length of body 2.2.-2.4 mm, in holotype 2.3 mm. Length of body parts in holotype: head 0.2 mm, pronotum 0.6 mm, elytra 1.5 mm, antenna 0.7 mm, aedeagus 0.47 mm. Maximum widths of body parts in holotype: head 0.6 mm, pronotum 1.2 mm at base, elytra 1.3 at anterior quarter of their length. Dorsum without transverse strigosities or microsculpture except of punctation.

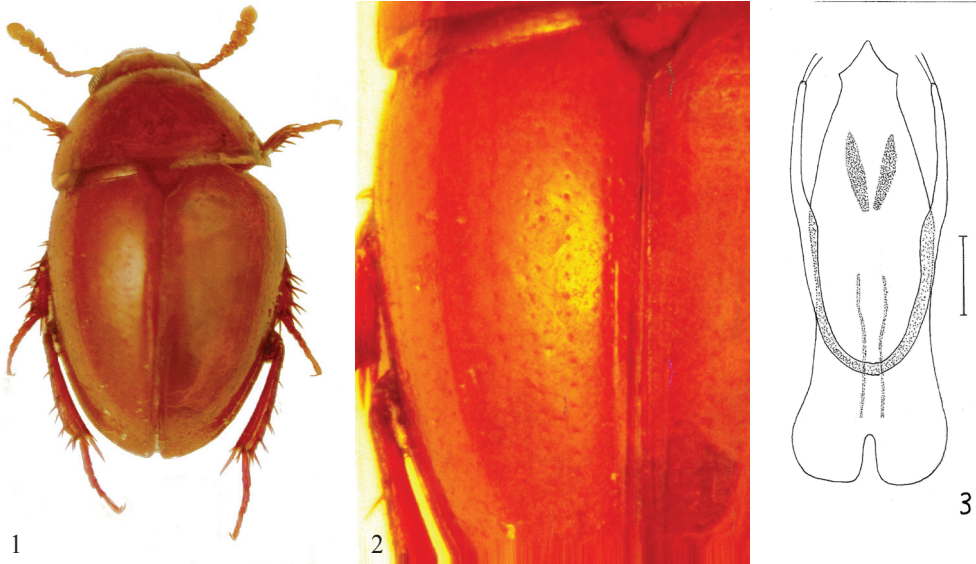
Oval (Fig. 1), head, pronotum, scutellum and elytra except of narrow brown strip along lateral margins yellow-red. Antennomeres yellow- red, unicolorous. Venter yellow-brown, margins of coxal cavities, trochanters and longitudinal mesoventral carina dark.

Head. Dorsal surface with distinct punctures separated by 2-4 times their own diameters, with very small and fine rare punctures interposed. Vertex with 4 large punctures. Last antennomere almost as wide as the previous one, longer than broad. AVIII short, well visible between the neighbours. Ratios of lengths of antennomeres VII-XI (AVII=1.0): 1.0-0.4-1.3-1.3-1.9. Ratios of widths of antennomeres VII-XI (AVII=1.0): 1.0-0.8-1.3-1.4-1.3. W/L AVII-AXI: 1.3-2.7-1.3-1.4-0.9.

Pronotum. Widest at base. Sides very flatly roundly tapered toward anterior angles in dorsal view; flatly round in lateral view. Posterior angles feebly acute broadly rounded in dorsal view and obtuse, tightly rounded in lateral view. Base feebly bowed backward. Punctation irregular, punctures separated by about 3-5 or more times their own diameter. With rare large pre-basal punctures aligned transversally.

Scutellum. With punctures larger and more densely arranged than those on pronotum.

Elytra. Broadest approximately at basal quarter of their length. With nine very finely punctured striae. Stria 9 short, first parallel, distant from lateral margin by about 5 times its punctures diameter, later obliquely joining lateral channel. Striae not deepened. Strial punctures feebly expressed, separated predominantly by about 2-6 times their own diameter longitudinally, separated by about 6 or more times their diameter laterally (as in Fig. 2). Interval punctures fine and small, a little smaller than those on pronotum, separated by about 2-6 times their diameters. With very rare small punctures interposed. Sparse large punctures in odd intervals at least as large as or a little larger than strial punctures. Sutural stria deepened all along its length, reaching approximately anterior third of elytral length. Lateral channel without larger punctures or foveae. Epipleura without setae. Lateral elytral channels narrow, not simultaneously visible in dorsal view along their entire length.



Figs. 1-3: *Leiodes subtilissima* sp. nov., holotype: 1- dorsum; 2- elytra; 3- aedeagus dorsally (scale = 0.1 mm).

Legs. Anterior tibiae and tarsomeres slim, inner terminal thorn of anterior tibia with simple tip slightly bent, longer than lateral one; at least as long as TI and TII together. Mesotibiae of usual size and shape, a little wider than anterior tibiae. Hind margin of metafemur with small lobe apically on ventral side, with even smaller lobe on dorsal side. Hind tibiae feebly but distinctly bent.

Mesoventrite. Longitudinal carina of type A.

Genitalia. Aedeagus as in Fig. 3.

Variability. Female hind tibiae straight. The strial punctures even smaller and finer in some paratypes separated by more than 8 times their own diameter from lateral neighbours.

Differential diagnosis. *Leiodes subtilissima* sp. nov. is very similar to *L. subtilis* Reitter, 1885 in the size, colouring and shape of the body, presence 4 large frontal punctures, in AXI approximately as wide as AX, the shape of pronotum and in the identical mesoventral longitudinal carina of the type A. The new species differs distinctly from *L. subtilis* mainly the roof-like shaped apex of the median lobe (Fig. 3) and by feebly and shallowly punctate elytral striae (Fig. 2) that are deepened and distinctly punctured by deep punctures in *L. subtilis* (Fig. 7).

Etymology. The name of the new species should attract the attention to the very subtle elytral striae. (Lat. *subtilissimus* = finest).

Leiodes subtilis Reitter, 1885

(Figs. 4-9)

Reitter, 1885, in Heyden & Kraatz, Dtsch. entomol. Z., 25(2): 286.

Leiodes (Oosphaerula) subtilis, Daffner 1981: 234. [Taxonomy, Faunistics: United Arab Emirates].

Leiodes (Oosphaerula) subtilis, Daffner 1983: 122. [Taxonomy].

Leiodes subtilis: Angelini & Švec 1998, Acta Soc. Zool. Bohem., 62 (2): 82. [Faunistics: Kazakhstan].

Leiodes subtilis: Švec 1998: 220. [Faunistics: Turkey].

Liodes subglobosa J. Sahlberg, 1903: 13.

Liodes (Oosphaerula) fleischeri Jacobson, 1910: 621.

Liodes fleischeri Joy, 1911: 110. [New name for *L. similata* Ganglbauer, 1899].

Liodes fleischeriana Roubal, 1917, Soc. Entomol., 32 (2): 9. [New name for *L. fleischeri* Joy, 1911].

Liodes alaiensis Portevin, 1942: 76.

Liodes (Oosphaerula) afghana Hlisenikovsky, 1964: 177.

Liodes similata Ganglbauer, 1899: 226.

Material examined, labelled as types:

Nr 1: *Leiodes subtilis*. ♂, transparent slide with aedeagus, "genitalia in/ polyvinylpyrrolidin [p]// Namagan/ Tashkent [hw]// ♂ [p]// Liodes/ subtilis m : Edmund Reitter/ scripsit [hw]// Type [p, red label]// LIODES ♂ Holotyp/ SUBTILIS Reitt. [hw]// Hlisenikowski 19 [p]32 [hw, pink label]// ex. coll J. Hlisenikowsky/ National Museum/ Prague, Czech republic [p]", NMPC, [not fully matured specimen, one of its antenna missing];

Nr 2: *Leiodes subtilis* Reitter, 1885. ♂, [previously dissected example, genitalia missing], "Turkestan, Chawat/ subtil. Rtt. typ [hw]// ♂ [p]; // Paratypus [p, red label]// Museum Nat. Pragae [p]/ inv. 18584 [hw, orange label]// subtilis Rtt. [hw] : DR. A. FLEISCHER/ SCRIBSIT [hw]// Liodes ♂ [hw]// subtilis Rtt. [hw]// det Hlisenikovsky [p 19]p61[hw]// ex. coll J. Hlisenikowsky/ National Museum/ Prague, Czech republic [p]// No type, locality/ differs from/descr. [hw] Z. Švec det. [p]", [NMPC];

Nr 3. *Leiodes subtilis* Reitter, 1885. ♀, "Turkestan, Chawat/ subtilis typ Rtt. [hw]// Paratypus [p, red label] // Museum Nat. Pragae [p]/ inv. 18585 [hw, orange label]// subtilis[hw]// Fleischer det. [p]// LIODES ♂/ SUBTILIS Rtt. [hw]// det. Hlisenikovsky 19[p]61[hw]// ex. coll J. Hlisenikowsky/ National Museum/ Prague, Czech Republic [p]// No type, locality/ differs from/descr. [hw] Z. Švec det. [p]", [NMPC];

Nr 4. *Leiodes subtilis* Reitter, 1885. ♀, "Namagan/ Turkst./ Staudgr. 85 [p]// coll. Reitter [p]// Holotypus [red, p] 1885 [hw]// Liodes/ subtilis/ Reitter [hw] [white label, red margin]// Liodes/ subtilis m./ 1885 [hw]//", HNHM;

Nr 5. *Leiodes lehmanni* Švec, 1999, ♂, transparent slide with aedeagus, "♂[p]// Transcaspia / Saramsakli [p]// type [p, red label]// Liodes ♂ Holotypus/ transcaspica m. [hw]// det Hlisenikovsky 19[p]61[hw] [pink label]// Liodes/ Oosphaerula/ subtilis Rtt./ det. Daffner 79 [hw]// Unpublished/ manuscript name [p]// Švec [hw] 20 [p]19 [hw]// ex. coll J. Hlisenikowsky/ National Museum/ Prague, Czech Republic [p]", [NMPC];

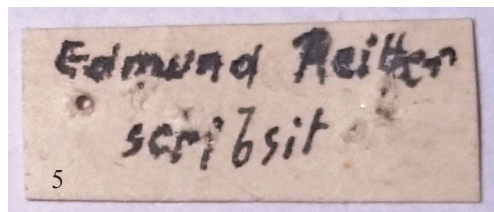
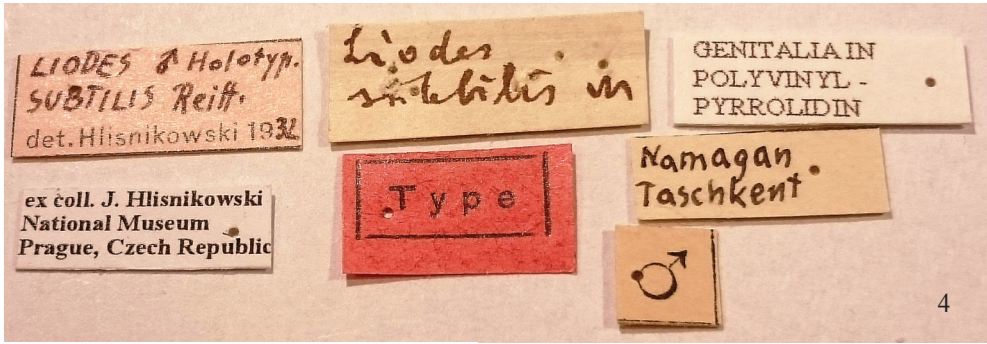
Nr 6. *Leiodes subtilis* Reitter, 1885. ♀, "Transcaspia/ Saramsakli [p]// ♀ [p]// Type [p, red label]//LIODES ♀ Allotypus/ TRANSCASPICA m. [hw]// det. Hlisenikovsky 19[p]61 [hw, pink label]// LIODES subtilis Rtt./ det. Daffner 79 [hw]// Unpublished/ manuscript name 20 [p]// ex. coll J. Hlisenikowsky/ National Museum/ Prague, Czech republic [p]", [NMPC];

Nr 7. *Leiodes subtilis* Reitter, 1885. ♀, "Kuschk/ Afghan. Aiis [hw]// ♀ [p]// Holotypus [red label, p]// LIODES OOSPHERULA/ AFGHANA m. Holot. ♀ [hw]// det. Hlisenikovsky 19 [p] 63 [hw] [pink label]// Corpus/ struktura/ antenna – Designatus/ 28.12. 63 Nr. 562/ Hlisenikovsky [hw]// Mus. Nat. Pragae [p]/ inv. 26587 [hw] [orange label]// Leiodes (Oosph.)/ subtilis Rtt. [hw]// det. Daffner 198[p] 2 [hw]// ex. coll J. Hlisenikowsky/ National Museum/ Prague, Czech Republic [p]", [NMPC];

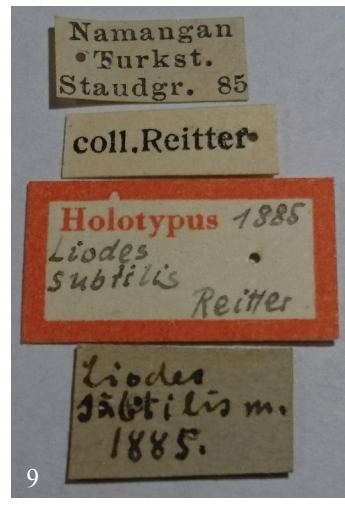
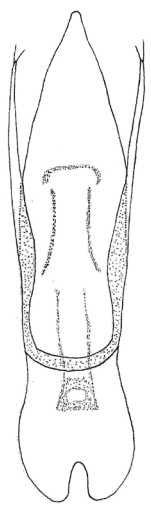
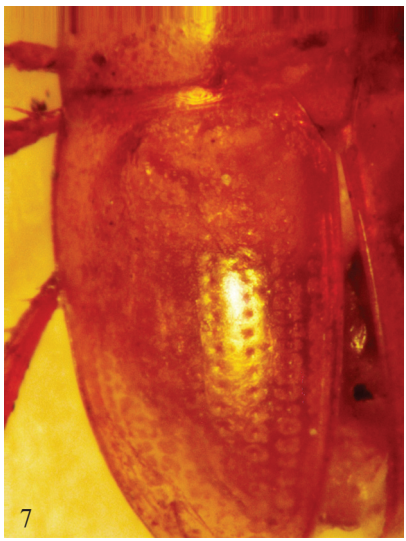
Nr 8. *Leiodes subtilis* Reitter, 1885. ♀, "Kuschk/ Afghan. Aiis [hw]// ♀ [p]// Paratypus [red label, p]// LIODES OOSPHERULA/ AFGHANA m. Parat. [hw]// det. Hlisenikovsky 19 [p] 63 [hw] [pink label]// Mus. Nat. Pragae [p]/ inv. 26588 [hw] [orange label]// LEIODES (OOSPHER.)/ subtilis Rtt. [hw]// det. Daffner 198[p] 2 [hw]// ex. coll J. Hlisenikowsky/ National Museum/ Prague, Czech Republic [p]", [NMPC].

Other material examined:

Leiodes subtilis Reitter, 1885, det. Švec. Altogether 279 specimens from Austria, Kazakhstan, Tajikistan, China.



Figs. 4-8: *Leiodes subtilis* Reitter, 1885, specimen Nr. 1 (see text above): 4, 5- labels; 6- dorsum; 7- elytra; 8- aedeagus; Fig. 9 – labelling of *Leiodes subtilis* Reitter, 1885, specimen Nr. 4 (see text above).



Diagnosis (based on the specimen Nr. 1, see above).

Length of body 2.0 mm. Length of body parts: head 0.1 mm, pronotum 0.6 mm, elytra 1.3 mm, antenna 0.5 mm, aedeagus 0.45 mm. Maximum widths of body parts: head 0.6 mm, pronotum 1.1 mm at base, elytra 1.2 at anterior quarter of their length. Dorsum without transverse strigosites or microsculpture except of punctation.

Oval (Fig. 6), head, pronotum, scutellum, elytra and antenna yellow-red. Legs a little darker than dorsum. Venter yellow-brown, margins of coxal cavities, trochanters and longitudinal mesoventral carina dark

Head. Dorsal surface with distinct punctures separated by 1-3 times their own diameters, very small rare and fine punctures interposed. Vertex with 4 large punctures. Last antennomere almost as wide as the previous one, longer than broad. AVIII short, well visible between the neighbours. Ratios of lengths of antennomeres VII-XI (AVII=1.0): 1.0-0.3-1.3-1.3-2.3. Ratios of widths of antennomeres VII-XI (AVII=1.0): 1.0-0.9-1.3-1.3-1.2. W/L AVII-AXI: 1.3-4.0-1.5-1.5-0.8.

Pronotum. Widest at base. Sides very flatly roundly tapered toward anterior angles in dorsal view; flatly round in lateral view. Posterior angles feebly acute tightly rounded in dorsal view and distinctly obtuse, tightly rounded in lateral view. Base feebly bowed backward. Punctation sparse. With few large pre-basal punctures aligned transversally.

Scutellum. With several fine punctures similar to those on pronotum.

Elytra. Broadest approximately at basal quarter of their length. With nine predominantly very finely punctate striae. Stria 9 short, first distant from lateral margin by about 4 times punctures diameter, later obliquely joining lateral channel. Striae deepened at least medially and on disc, strial punctures well expressed, deep, distinct, separated predominantly by 0.5-2 times their own diameter longitudinally and by about 3-4 times laterally (as in Fig. 7). Interval punctures fine and small, sparse. Sparse large punctures as large as strial punctures in odd intervals. Sutural stria deepened reaching approximately anterior third of elytral length. Lateral channel without larger punctures or foveae. Epipleura without setae. Lateral elytral channels narrow, not simultaneously visible in dorsal view along their entire length.

Legs. Anterior tarsomeres slim. Inner terminal thorn of anterior tibia with simple tip, slightly bent, longer than lateral one; as long as tarsomeres I and II together. Meso-tibiae of usual size and shape. Hind margin of metafemur with small lobe apically on ventral side, with even smaller lobe on dorsal side. Hind tibiae very feebly bent.

Mesoventrite. Longitudinal carina of type A.

Genitalia. Aedeagus as in Fig. 8

Variation. Size of body varies between 1.9-2.5 mm. Head distinctly punctate, punctures separated by about 2-5 time their diameter. Pronotum punctured similarly as head. Elytral intervals distinctly punctured. Punctures in intervals a little smaller than those on pronotum, separated by about 4-6 times their diameter. Very rare very small punctures interposed.

Remark. The specimen had not been fully mature, therefore the dorsal structures are feebly developed and that is why only the distinct characters are mentioned. Some of the structures are presented in more detail in the part Variation.

Distribution. Europe: Austria, Hungary, Italy; Asia: Afghanistan, China, European Russia, Iran, Kyrgyzstan, Kazakhstan, Mongolia, Saudi Arabia, Turkmenistan, Turkey, Tajikistan, Uzbekistan.

DISCUSSION

1. Gender of the name *Leiodes* Latreille, 1796

The name Leiodidae is derived from the name of the genus *Leiodes* Latreille, 1797. The first problem regarding the name *Leiodes* arose in 1845, when Erichson published unjustified emendation as *Liodes*. This form of the name was accepted by the following, especially European authors, among them Edmund Reitter. Subsequently also the name of the family was perceived as Liodidae. As Reitter had been kept for the greatest taxonomic authority in Coleoptera in Europe, the name *Liodes* and Liodidae has been used by the majority European authors more than following hundred years despite the fact that Leng (1920) and Hatch (1929) pointed out that *Leiodes* was the correct spelling for the name of the genus. Still in eighties of the twentieth century some authors continued to use the name Liodidae, *Liodes* (e.g. Decelle, 1988).

To make the problem more complicated, the name *Liodes* used to be use also as the name of Acari and Lepidoptera. The issue were cleared up by Halliday & Majka (2000) who got to the conclusion, that: “...the names *Leiodes* Latreille 1796 and Leiodidae Fleming 1821 are available for a genus and family of beetles; (2) the names *Neoliodes* Berlese 1888 and Neoliodidae Sellnick 1928 are available for a genus and family of mites; (3) the names *Liodes* and Liodidae are not available for any group of animals, and should not be used.”

Further misunderstanding regarding the use of the name *Leiodes* arose not only by the emendation of the name but also so much the more Erichson thoroughly used the name *Liodes* for those beetles that belonged to the genus *Anisotoma* Panzer, 1797 and also conversely the species of the genus *Leiodes* attributed to the genus *Anisotoma*. This attitude some other authors kept up to the beginning of the 20th century.

Another problem concerning to the genus *Leiodes* has been lasting up to nowadays. When Latreille erected *Leiodes* in the year 1797, he did not mention any etymology or any species belonging to the genus. Therefore it was not possible to judge which grammar gender is the name. This fact let rather free field for various opinions. One of possible interpretations issued from the fact that the entomological nomenclature frequently contains names derived from the antique sources. Therefore the generic name *Leiodes* could be hypothetically derived from the name of priest of the suitors who courted the queen Pénélopé, the wife of the king Odysseus. According to Homer's *Odyssey* a priest named Liodes begged for his life in vein and therefore he was among those suitors who were killed by Odysseus. Also the possibility, that name of the priest inspired Erichson to emendate *Leiodes* to *Liodes*, should not be excluded. Independently of the indicated explanation, some entomologists got to the conclusion about the masculine gender according to his own interpretation of the International Zoological Code of the Zoological Nomenclature. That was why all the species names belonging to the genus *Leiodes* were emendated from feminine to masculine in Fauna Europaea (<http://www.faunaeur.org/>).

I consulted the issue of the gender of the name *Leiodes* with various specialists. Alfred Newton (person. comm. 2008) attracted my attention to Article 30.1.4.4. of the International

Code of the Zoological Nomenclature. The opinion that the name *Leiodes* should be treated as feminine props upon the fact that *Leiodes* is a compound word derived from Greek “leios” (smooth) and suffix “-odes” (similarity) and is supported by the International Code of the Zoological Nomenclature. The above indicated meaning of the word *Leiodes* is also confirmed by perhaps a little forgotten but still useful book that explains the names used in Reitter’s Fauna Germanica (Schenkling 1917). Schenkling explained the meaning of the name *Liodes*, *Leiodes* (Edmund Reitter thoroughly used *Liodes* instead of *Leiodes*) as follows: “*Liodes*, gr. *Leiodes*, glatt” (it means smooth). According to Article 30.1.4.4. of the International Code of the Zoological Nomenclature” a compound genus-group name ending in the suffix *-ites*, *-oides*, *-ides*, *-odes*, or *-istes* is to be treated as masculine unless its author, when establishing the name, stated that it had another gender or treated it as such by combining it with an adjectival species-group name in another gender form.” In the case of using the name *Leiodes* is appropriate to take into account the part of Article 30.1.4.4 beginning by the words “...unless it author, ...”.

The reason why to use Article 30.1.4.4. and consider *Leiodes* for feminine consists in Latreille’s treating the name *Leiodes* after establishing the genus. Latreille originally did not attribute any species to his genus *Leiodes* but later (Latreille 1807) added to the genus two species in feminine gender - *L. picea* and *L. ferruginea*.

2. Type material of *Leiodes subtilis* Reitter, 1885

The original description of *Leiodes subtilis* stated at its end following: “Namagan. Zwei Exemplare.” As there have not been established any lectotype, it is obvious that the types of the species must be represented by two syntypes.

Provided that no type could be found in the museum in Paris, the most probable type of *L. subtilis* is the specimen marked as Nr. 1 in this paper. This opinion is supported by the locality data (“Namagan”) and the morphologic characters of the specimen and further by the handwritten label “*Liodes subtilis* m.” with reverse side bearing text “Edmund Reitter/ scripsit” that seemed to be originally written by Reitter (figs 4, 5). The text on the label was compared to the Reitter’s handwriting text as it is presented by Horn & Kahle (1936). Nevertheless I have some doubts about the status of the specimen, as I have learned from the experiences of my colleagues Josef Jelínek and Lukáš Sekerka (both Prague, Czech Republic) who provided me with their opinions, that Reitter labelled his types as follows: “*name* n. sp.” In the case of specimen Nr. 1 there is a written by Reitter on the label: *Liodes subtilis* m. (Fig. 4). The labelling “Holotype” made by Hlisenikový was not based on any evidence known to me. Therefore the diagnosis, not redescription of *Leiodes subtilis*, provided above has been based on specimen Nr. 1.

The second “holotypus” of *Leiodes subtilis* preserved in the HHNM was labelled in the manner initiating even more doubts about the type status of the specimen. On the one hand, the locality data agree well with the original description, on the other hand although the label on Fig. 9. bears obviously the original Reitter’s handwritten text, the year added to the Reitter’s name indicates suspicion that the text arose later, after the original description. As I learned, Reitter was not used to put the year of the description to the labels of his types.

3. Concept of *Leiodes subtilis* Reitter, 1885

Leiodes similis Reitter, 1885 was briefly described in six lines. The original description was attributed to Reitter in Heyden & Kraatz (1885). Very few specific characters were mentioned in the original description. Reitter compared the species with “*Liodes badia*” and “*similata*” by the size of the species mentioning characters differing the new species from the *L. badia* [*L. similata* (Rye, 1871) is considered for the junior synonym of *L. badia* (Sturm, 1807) nowadays]. Later Ganglbauer (1896) established the subgenus *Oosphaerula* and classified four species - *L. badia* (erroneously attributed to Erichson instead of Sturm); *L. carpathica* Ganglbauer, 1896; *L. parvula* - now *L. gyllenhalii* Stephens, 1829; *L. flavicornis* Brisout de Barneville, 1883) to the subgenus. He did not mention *L. subtilis*. Much more later Daffner in his monograph of Palaearctic Leiodinae (1983) attributed *L. subtilis* to the subgenus *Oosphaerula* typical by high angled mesoventral carina, thus causing the subsequent confusion in the perceiving the species. No other author dealing later with the genus *Leiodes* changed the status of *L. subtilis*, therefore the awareness that *L. subtilis* possessed high mesoventral carina is still lasting.

Our studies of the extensive material of *Leiodes subtilis* Reitter, 1885 lead us to the conclusion that the species belongs to those possessing low longitudinal mesoventral carina differing it from habitually similar species.

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