Studies and reports of District Museum Prague-East
Taxonomical Series 4 (1-2): 241-258, 2008

New Chinese and Nepalese *Leiodes* Latreille (Coleoptera: Leiodidae: Leiodinae)

Zdeněk ŠVEC

Kamenická 4, CZ-170 00 Praha 7, Czech Republic
e-mail: zd.svec@volny.cz

Taxonomy, new species, faunistic records, key, Leiodidae, Leiodinae, *Leiodes*, China, Nepal

Abstract. *Leiodes carinata* sp. n. from Sichuan (China), *L. apicata* sp. n., *L. daliana* sp. n. and *L. yunnanica* sp. n. from Yunnan (China), *L. fuscosuturalis* sp. n. and *L. fernandoi* sp. n. from Nepal are described and distinguished from similar species. All the species of the genus known from China and Nepal are keyed. Three species are recorded from China for the first time: *Leiodes matthiasi* Švec, 1999 and *L. triepkei* (Schmidt, 1841) from the Chinese province of Qinghai and *L. silesiaca* (Kraatz, 1852) from Gansu. *Leiodes schneideri* Švec, 2000 from Gansu, *L. curvidens* Angelini & Švec, 1994 from Sichuan, *L. nikodymi* Švec, 1991 from Yunnan and Shaanxi, *L. sichuanica* Švec, 2000 from Shaanxi and *L. lucens* (Fairmaire, 1815) from Quinghai are recorded newly.

INTRODUCTION

Altogether 31 species of the genus *Leiodes* Latreille, 1796 including the four newly described in the present paper are known from China (Perreau 2004, Cooter & Kilian 2002, Švec 2000).
Occurrence of the genus *Leiodes* in Nepal was studied by Daffner (1986) and Švec (1998 and 2003). The genus comprising 14 species including the 2 new to science described in the present paper.
Two species of the genus *Leiodes* occur in both China and Nepal.

MATERIAL AND METHODS

The present paper is based on the material collected recently by Aleš Smetana (Ottawa), Jan Růžička (Prague) and Michael Schülke (Berlin) in China, through the kindness of Matthias Hartmann (The Naturkundemuseum, Erfurt) and Fernando Angelini (Brindisi) interesting leiodid material collected recently in Nepal has been studied as well.
The type and other material is preserved in the author's collection (SC), collections of J. Růžička (JRC), M. Schülke (SCHC), F. Angelini (FAC), S. B. Peck (Otawa - SBPC), J. Cooter (JC) and in the collection of the Naturkundemuseum, Erfurt (NKME).
The length of body given in the descriptions is taken from the type specimens, other measurements and ratios are taken from the holotypes only; the length of body presented in the key is obtained from type and other material preserved in the author's collection

and from the literature cited in the references. The measurements given in the descriptions were approximated to the nearest first decimal place, the ratios were reckoned from the unapproximated measurements.

The term "mesosternal carina" used in this paper refers to the longitudinal carina present on mesosternum. Types of mesosternal carina indicated in this work are a modification of those presented by Daffner (1983 and 1986). Daffner (1983) figured 6 types of mesosternal carina in the *Leiodes* species. Low carinas were designated as the types A, B, C. The highly raised type of carina was in Daffner's Revision (1983) confined to sub-genus *Oosphaerula* Ganglbauer, 1896 without any letter designation. Baranowski (1993) synonymized the sub-genus *Oosphaerula* with *Leiodes*. Later (1986) Daffner retained his types A and B mesosternal carinas according to his 1983 paper but re-defined the type C referring it to one type of the highly raised carinas. In addition, Daffner (1986) added one more type D stated for highly raised carina. Later, in the year 1993 Baranowski, revising the North American *Leiodes* species, found the development of mesosternal carina in that fauna to vary considerably and figured the various shapes of mesosternal carina of the American *Leiodes* species but did not attempt to classify them. Believing that the shape of mesosternal carina is one of the basic characters in the genus *Leiodes* and taking into account all the cited papers, a modified version of Daffner's concept is presented in the present paper. The types of mesosternal carina A, B and C follows Daffner's1983 concept but with five additional types of mesosternal carina - D, α, β, γ and δ. In this version the types of low carina are designated by the Latin capital letters A, B, C and D (Figs 1 - 4), while the types of highly developed carina are designated by Greek letters α, β, γ and δ (Figs 5 - 7, 10). The reason for the designation of the metasternal carinas by two different series of letters is the necessity to let the possibility of the future modification or supplementation of the concept. These eight types of mesosternal carina are exhibited by African, European and Asian species of *Leiodes*. Types C, α and δ has been detected only in some European species up to now and so it is illustrated by the schematic figures of the metasternal carina of *L. skalitzkyi* (Ganglbauer, 1899) - type C in the Fig. 3, *L. badia* (Sturm, 1807) - type α in the Fig. 5 and *L. gyllenhalii* (Stephens, 1829) - type δ in the Fig. 10.

RESULTS

Key to the Chinese and Nepalese Leiodes Latreille, 1796

1 All elytral rows of punctures regularly developed. 2

\- Elytral rows of punctures confined to basal two thirds of elytra. Lateral rows irregular. Mesosternal carina of type B (Fig. 2). Parameres with setose apices, tegmen with apical notch (Cooter & Kilian 2002, Fig. 2f). Length 2.7-3.3. China (Hong Kong). ..... *L. confusa* Cooter & Kilian, 2002

2(1) Pronotal base distinctly emarginate before hind angles or hind angles protracted caudally, therefore base seemingly emarginate laterally. 3

\- Pronotal base straight up to posterior angles. 7

3(2) Lateral margins of elytra with large punctures of similar size as in elytral rows. 4

\- Lateral margins of elytra with several very large punctures. Largest apical spine of anterior tibia strong, curved. Mesosternal carina of type A (Fig. 1). Parameres of usual type, bisetose (Angelini & Švec, 1994, Fig. 76). Length 4.2-4.5 mm. China (Yunnan, Sichuan). ..... *L. curvidens* Angelini & Švec, 1994

4(3) Base of pronotum distinctly concave before hind angles. 5

\- Base of pronotum evenly curved before caudally protracted hind angles. Elytral row 9 of punctures parallel,

joining lateral margin at basal third of elytra. Mesosternal carina of type A (Fig. 1). Tegmen constricted before rounded apex, parameres of usual size, multisetose (Angelini & Švec, 1994, Fig. 79). Length 3.5-3.7 mm. China (Xinjiang), Kyrghyzstan. ..... *L. snizeki* Angelini & Švec, 1994

5(4) Largest apical spine of anterior tibia simple. 6

- Largest apical spine of anterior tibia bifurcate. Mesosternal carina of type A (Fig. 1). Apices of parameres unusually widened, multisetose (Švec, 2000, Fig. 7). Length 4.7-5.0 mm. China (Sichuan, Gansu). .... *L. schneideri* Švec, 2000

6(5) Dorsally unicolorous. Mesosternal carina of type A (Fig. 1). Apex of parameres normal, bisetose (Daffner, 1983, Fig. 189). Length 3.5-4.5 mm. Europe, Caucasus, Siberia, Mongolia, China (Qinghai), Nearctic. .... *L. triepkei* (Schmidt, 1841)

- Elytra distinctly darker at apical half or third. Mesosternal carina of type B (Fig. 2). Parameres multisetose, thickened apically (Fig. 9). Length 4.3-4.8. China (Yunnan). ..... *L. apicata* sp. n.

7(2) Lateral margins of elytra without strikingly large punctures. 8

- Lateral margins of elytra with strikingly large punctures. Elytral row of punctures 9 lacking; intervals without punctures. Mesosternal carina of type B (Fig. 2.). Tegmen feebly constricted shortly before rounded apex, parameres bisetose (Daffner, 1986, Fig. 14). Length 2.2-2.6 mm. Nepal. ..... *L. smetanai* Daffner, 1986

8(7) Elytral intervals punctured, lacking granules. 9

- Elytral intervals 3 and 4 punctate and with several very small granules placed approximately between first basal quarter and middle of elytra. Mesosternal carina of type A (Fig. 1). Tegmen with small notch at apex (Švec 2000, Fig. 10). Length 2.9 mm. China (Sichuan, Shaanxi). ..... *L. sichuanica* Švec, 2000

9(8) Mesosternal carina of type A, B, β or γ (Figs 1, 2, 6, 7). 10

- Mesosternal carina of type D (Fig. 4). Last antennal segment distinctly narrower than penultimate . Elytral row 9 oblique. Aedeagus as in Fig. 8. Length 3.0. China (Sichuan). ..... *L. carinata* sp. n.

10(9) Mesosternal carina of type A (Fig. 1) 11

- Mesosternal carina of types B, β or γ (Figs 2, 6, 7). 21

11(10) Last antennal segment distinctly narrower than penultimate. 12

- Last antennal segment approximately as wide as penultimate. 15

12(11) Pronotum beside usual puncturation with a transverse row of 4-6 large punctures far before base. (Fig. 124 in Daffner, 1983). 13

- Pronotum beside usual puncturation with some large punctures aligned just before base. 14

13(12) Interval punctures tending to form irregular rows. Anterior tibia twice as wide at apex than at base. Tegmen conicaly tapered to rounded apex. Parameres without appendages (Fig. 4 in Švec, 2000). Length 3.8 mm. China (Gansu). ..... *L. mirkae* Švec, 2000

- Interval punctures irregularly arranged. Anterior tibia 3 times as broad at apex than at base. Tegmen triangularly narrowed to apex. Parameres with appendages. (Fig. 121 in Daffner, 1983). Length 3.5-5.0 mm. Europe, Siberia, Asian Far East, China (Gansu). ..... *L. silesiaca* (Kraatz, 1852)

14(12) Elytral row 9 absent. Antennae unicolorous red-brown, body black-brown. Head with two pairs of large punctures. Parameres short extending to half of tegmen length (Fig. 237 in Daffner, 1983). Length 4.5-6.5 mm. Siberia, Mongolia, China (Nei Mongol). ..... *L. rufipes* (Gebler, 1833)

= Elytral row 9 oblique, well developed at basal third of elytra. Antennae rufous with brown club. Body yellow-red. Head with 2 large punctures. Parameres a little shorter than tegmen (Fig. 5 in Švec, 1998). Length 2.8 mm. Nepal. ..... *L. hartmanni* Švec, 1998

15(11) Maximum width of pronotum at middle or at least far before base. 16

- Maximum width of pronotum at base 18

16(15) Body elongate. 17

- Body shortly oval. Usually with dark head and pronotum, elytra rufous. Head with 2 or 4 large punctures. Pronotum strongly and densely punctured. Male hind femora double curved. Tegmen broadly rounded (Fig. 322 in Daffner 1983). Length 2.5-3.8 mm. N. Africa, Europe, Siberia, Mongolia, Afghanistan, Pakistan, India, China (Gansu, Sichuan, Xinjiang). ..... *L. bicolor* (Schmidt, 1841)

17(16) Head and pronotum strongly and densely punctured; pronotal punctures separated by about 1-3 times their own diameter. Male hind tibia double curved. Parameres much shorter than tegmen (Fig. 330 in Daffner 1983). Length 2.8-4.0 mm. Iran, Mongolia, Far East of Asia, Kyrghyzstan, China (Xinjiang), Nearctic. .... *L. dilutipes* J. Sahlberg, 1903

- Head and pronotum weakly punctured; pronotal punctures separated by about 2-6 times their own diameter. Hind tibia of male simply curved. Parameres longer than tegmen (Fig. 3 d in Cooter & Kilian, 2002). Length 2.5 mm. China (Hong Kong). ..... *L. taipoensis* Cooter, 2002

18(15) Elytral intervals feebly and sparsely or even scattered punctured. 19
- Elytral intervals densely irregularly punctured; punctures separated by about 1-3 times their own diameter. Pronotum densely and distinctly punctured without microsculpture. Anterior tibia approximately 2.5-3.0 times as wide at apex as at base. Elytral margins visible along entire elytral length in dorsal view. Tegmen with small apical lobe; parameres with appendages apically (Fig. 357 in Daffner, 1983). Length 3.0-4.0 mm. Europe, Siberia, Far East of Asia, China (Gansu). .....*L. ferruginea* (Fabricius, 1787)
19(18) Puncturation of pronotum sparser and finer than on head. Tegmen evenly rounded or conically narrowed to apex (Fig. 3 in Švec 1999 and Fig. 9 in Švec, 2000). 20
- Puncturation of pronotum stronger than on head. Elytral intervals fine and sparse but distinctly punctured. Tegmen constricted before apex (Fig. 23 in Daffner, 1986). Length 2.5-3.0 mm. Nepal. ....*L. franki* Daffner, 1986
20(19) Posterior angles of pronotum well-marked, in lateral view. Pronotal punctures separated by about 3 - 4 times their own diameter. Lateral margins of elytra visible at shoulders only, in dorsal view. Parameres longer than tegmen, each paramere with appendage apically (Fig. 9 in Švec, 2000). Length 2.3 mm. China (Shaanxi). .. ..*L. semipunctata* Švec, 2000
- Posterior angles of pronotum broadly rounded in lateral view. Pronotal punctures separated by about 4 - 8 times their own diameter. Parameres distinctly shorter than tegmen, simple (Fig. 3 in Švec, 1999). Length 2.0-2.9 mm. Uzbekistan, Kazakhstan, China (Quinhai).....*L. matthiasi* Švec, 1999
21(10) Mesosternal carina of type B (Fig. 2). 22
- Mesosternal carina of type β or γ (Figs 6, 7). 40
22(21) Head with 2 or at most 3 large punctures. 23
- Head with 4 large punctures. 24
23(22) Elytral row 9 almost parallel to lateral margin. Parameres much shorter than tegmen; without appendages (Fig. 12). Length 2.5-2.9 mm. China (Yunnan)..... *L. yunnanica* sp. n.
- Elytral row 9 present but short, oblique. Parameres with apendix at tip; a little shorter than tegmen (Fig. 20 in Daffner 1986). N. India, Nepal. .....*L. atricolor* (Champion, 1923)
24(22) Last antennal segment as wide as or at most only slightly narrower than penultimate 25
- Last antennal segment distinctly narrower than penultimate 29
25(24) Elytral row 9 developed, oblique. 26
- Elytral row 9 absent or at most consisting of several punctures placed close to lateral channel. Pronotum and elytra microsculptured. Intervals with fine very scattered puncturation. Tegmen slightly constricted before narrowely rounded apex (Fig. 1 in Švec, 1998). Length 2.4-3.5 mm. Nepal. ....*L. annapurnai* Švec, 1998
26(25) Dorsum with microsculpture. 27
- Microsculpture lacking on dorsum. Punctures in elytral rows separated by 2 - 4 times their own diameter. Tegmen constricted before narrowly rounded apex, parameres bisetose (Fig. 83 in Angelini & Švec, 1994). Length 3.0-3.1 mm. China (Gansu), Nepal. .....*L.chinensis* Angelini & Švec, 1994
27(26) Microsculpture on elytra, lacking on pronotum and head. Tegmen narrowly rounded at apex, parameres without appendages (Fig. 84 in Angelini & Švec, 1994). Length 2.8 mm. China (Yunnan). …….. ....*L. becvari* Angelini & Švec, 1994
- Microsculpture on head and pronotum, lacking on elytra.....28
28(27) Antennal club dark. Tegmen pointed, parameres multisetose (Fig. 8 in Švec, 2000). Length 2.8-3.0 mm. China (Sichuan). ..... *L. puetzi* Švec, 2000
- Antennae yellowish unicolorous. Tegmen truncate, parameres bisetose with obtrusive appendages at apex (Fig. 26 in Daffner, 1986). Length 2.5-3.0 mm. N. India, Nepal. ....*L. contracta* (Portevin, 1903)
29(24) Elytral row 9 absent or parallel to lateral margin or substituted by several punctures close to lateral margin or at most very slightly oblique. 30
- Elytral row 9 oblique clearly distant from lateral margin. 37
30(29) Elytral intervals very finely sparsely punctured or with hardly detectable puncturation. 31
- Elytral intervals distinctly even sometimes sparsely punctured.....33
31(30) Elytral row 9 absent. 32
- Elytral row 9 first approximate then merging with lateral channel. Basal half of lateral margin of pronotum straight but converging anteriorly; rounded in anterior half. Tegmen with a small lobe at apex, parameres

with two setae some distance before apex (figs 1 d, 1 f in Cooter & Kilian, 2002). Length 2.8 mm. China (Zhejiang). ..... *L. tianmushanica* Cooter & Kilian, 2002

32(31) Head strongly and densely, pronotum finely and sparsely punctured. Antennal club slightly infuscate. Dorsum yellowish black-brown. Tegmen narrowly rounded at apex, parameres bisetose (Fig. 11 in Daffner, 1986). Length 3.0-4.0 mm. Nepal. ..... *L. variabilis* Daffner, 1986

- Head and pronotum finely and densely punctured. Antennae unicolorous yellow-brown. Dorsum red-brown. Tegmen truncate at apex, parameres trisetose (Fig. 225 in Daffner, 1983). Length 5.0 mm. Nepal. ..... *L. nepalensis* Daffner, 1983

33(30) All elytral intervals with punctures of one size; beside them usual large punctures present in odd intervals. ...34

- All elytral intervals with punctures of two different size; beside them usual large punctures present in odd intervals. 35

34(33) Pronotum with weak microsculpture; lateral margins of pronotum parallel shortly before base, in dorsal view. Elytra without microsculpture. Dorsum lightly yellow with brown surface patterns (Fig. 15). Parameres distinctly longer than tegmen (Fig. 17). Length 2.8 mm. Nepal. ..... *L. fuscosuturalis* sp. n.

- Pronotum without, elytra with microsculpture. Lateral margins of pronotum straight but converging to middle then curved to anterior angles. Dorsum reddish-brown without patterns. Parameres as long as tegmen (Fig. 11 in Švec, 2000). Length 2.5-2.8 mm. China (Shaanxi). ..... *L. schuelkei* Švec, 2000

35(33) Pronotum broadest at base, lateral margins parallel at least in basal third. 36

- Pronotum broadest in middle, distinctly narrowed toward base. Lateral outline of elytra oblong oval. 3rd segment of anterior tarsi half as wide as pro- and mesotibia in male. Tegmen simply narrowed toward apex (Fig. 221 in Daffner, 1983). Length 3.2-5.0 mm. Europe, Mongolia, Siberia, Russian Far East, China (Sichuan, Qinghai, Yunnan), Nepal. ..... *L. lucens* (Fairmaire, 1855)

36(35) Anterior tarsal segments 1-4 extremely dilated in male. Tarsal segment 3 as wide as pro- and mesotibia in male. Elytra parallel-sided from base to middle. Punctures of 3 sizes on head. Sides of tegmen slightly emarginate before rounded apex (Fig. 6 in Švec, 2000). Length 3.9-4.5 mm. China (Gansu). ..... *L. paralella* Švec, 2000

- Only second protarsal segment slightly dilated in male. Head simply and densely punctured. Tegmen with small lobe at apex (Fig. 6 in Švec, 1991). Length 2.6-3.6 mm. China (Gansu, Sichuan, Shaanxi, Yunnan). .. .. *L. nikodymi* Švec, 1991

37(29) All elytral intervals with punctures of two different sizes; beside them usual large punctures scattered in odd intervals. 38

- All elytral intervals with punctures of one size; beside them usual large punctures in scattered in odd intervals. 39

38(37) Head with 4 large punctures. Pronotum finely but distinctly punctured, punctures spaced by about 2-4 times of their own diameter; lateral margins straight from base to middle, slightly rounded anteriorly in lateral view. Tegmen constricted before broadly rounded apex (Fig. 82 in Angelini & Švec, 1994). Length 3.4 mm. China (Sichuan). ..... *L. alexandrae* Angelini & Švec, 1994

- Head with 2 large punctures. Pronotum finely sparsely punctured, punctures separated by about 6 - 10 times of their own diameter. Lateral margins roundly narrowed anteriorly in lateral view. Tegmen emarginate at apex (Fig. 2 in Švec, 2003). Length 2.8-3.2 mm. Nepal. ..... *L. schmidti* Švec, 2003

39(37) Elytra with traces of microreticulation. Punctures in elytral rows separated by 1-2 times of their own diameter. Elytral intervals densely punctured. Parameres shorter than tegmen lacking appendages (Fig. 11). Length 2.6-2.7 mm. China (Yunnan)..... *L. daliana* sp. n.

- Dorsum without microsculpture. Punctures in elytral rows separated by about 0.25 times of their own diameter; interval punctures extremely fine and scattered punctured. Parameres longer than tegmen, with appendages (Fig. 290 in Daffner, 1983). Taiwan. ..... *L. klapperichi* Daffner, 1983

40(21) Mesosternal carina of type β (Fig. 6). 41

- Mesosternal carina of type γ (Fig. 7). 42

41(40) Pronotum finely but distinctly punctured. Tegmen widely rounded at tip (Fig. 85 in Angelini & Švec, 1994). Length 2.1-2.3 mm. China (Xinjiang). ..... *L. jaroslavi* Angelini & Švec, 1994

- Pronotum nearly impunctate. Median lobe narrowly rounded at apex (Fig. 86 in Angelini & Švec, 1994). Length 2.5 mm. China (Xinjiang). ..... *L. xinjiangensis* Angelini & Švec, 1994

42(40) Last antennal segment distinctly narrower than penultimate. Eyes normally developed, 2.5 times longer than wide in dorsal view. Head with 4 large punctures. Tegmen with small lobe at apex (Fig. 13). Length 1.9-2.1 mm. Nepal. ..... *L. fernandoi* sp. n.

- Last antennal segment as wide as penultimate. Eyes strongly reduced; as long as wide in dorsal view. Head with two large punctures. Tegmen with narrow truncate process apically (Fig. 29 in Daffner 1986). Length 2.0-2.5 mm. India (W. Bengal), Nepal. ..... *L. besucheti* Daffner, 1986

Leiodes carinata sp. n.
(Figs 4, 8)

Type material. Holotype (♂): "China, W. Sichuan, 15 km W Kanding, Rte 138, 3250 m, 29º57N 102º54E, 19.vii. 98, A. Smetana [C86]; 1998 China Expedition J. Farkač, D. Král, J. Schneider & A. Smetana", SC.

Description. Length 3.0 mm, head 0.3 mm, pronotum 0.8 mm, elytra 1.9 mm, antenna 1.0 mm. Maximum width of head 0.8 mm, pronotum 1.5 mm at base, elytra 1.7 mm at basal fifth. Oblong oval, reddish including antennae. Dorsum without microsculpture. Underside red-brown, meso- and meta-coxal margins darker.

Head. Irregularly punctured. Punctures of one size; separated by 2-6 times their own diameter. With four large punctures. Ratios of length of antennal segments 2 to 11 (the 2nd equal to 1.0) = 1.0-1.3-1.2-0.8-0.7-1.0-0.4-1.2-1.2-1.6. Last antennal segment distinctly narrower than segment 10. Ratios of width of club segments 2 to 11 (2nd equal to 1.0): 1.0-1.1-1.1-1.3-1.3-2.3-1.7-2.6-2.9-2.4. Ratios of width: length of the antennal club segments 1.3-2.4-1.3-1.4-0.9.

Pronotum. Lateral margins straight but convergent at basal third, then rounded toward anterior angles. Base straight. Posterior angles slightly acute rounded, in dorsal view. In lateral view, lateral margins arcuate; slightly concave before blunt widely rounded posterior angles. Puncturation distinct, punctures smaller than on head, separated by 3 or more times their own diameter, more evident basally and basolaterally. Some larger punctures aligned before base.

Scutellum. With punctures as on pronotum.

Elytra. Both lateral elytral margins simultaneously detectable all along their length in dorsal view. Lateral margins with punctures of usual size and intensity. Elytral surface with well expressed, punctured, regular rows. Punctures in rows separated by about 0.5-2.0 times of their own diameter. Ninth row short, oblique, joining lateral channel at basal fourth of elytral length. Elytral intervals simply punctured with punctures similar as on pronotum, separated by about 2-4 times their own diameter. Beside them punctures of the same size and intensity as those in rows scattered in odd intervals. Sutural stria clearly impressed and extending approximately to middle of elytra. Epipleuron without detectable setae.

Legs. Anterior tarsomeres 1-3 slightly dilated in male. Anterior tibia 3.5 times as wide at apex as at base. Posterior tibia simply curved, posterior femora with small lobe ventrally at apex.

Mesosternum. Mesosternal carina of type D (Fig. 4).

Male genitalia. Aedeagus as in Fig. 8.

Name derivation. Derived from the mesosternal carina type D, which is a type not commonly displayed in the genus.

Differential diagnosis. *L. carinata* sp. n. is similar to *L. gallica* (Reitter, 1884) in the similar

type of mesosternal carina, by last antennal segment narrower than the 10th and by the similar shape of tegmen. It differs by elytral intervals similarly punctured as pronotum, while pronotum is densely and elytral intervals sparsely punctured in *L. gallica*. Parameres are multisetose in *L. carinata* sp. n., in contrast to parameres in *L. gallica* that are bisetose.

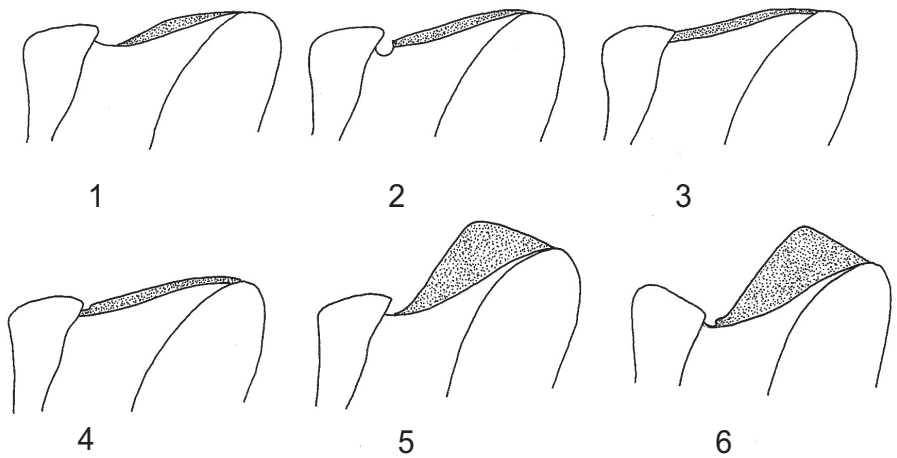
Leiodes apicata sp. n.

(Figs 2, 9)

Type material. Holotype (♂): "China: N. Yunnan, Dali Bai Nat. Aut. Pref., Diancang Shan, 3 km W Dali, 24º4.1´N 100º06.8´E, 2650 - 2750 m, 30.8.03, A. Smetana [C141]". Paratypes (2 ♀♀): the same data, (all SC).

Description. Length 4.3-4.8 mm, in holotype 4.8 mm, head 0.6 mm, pronotum 1.2 mm, elytra 3.0 mm, antenna 1.4 mm. Maximum width of head 1.1 mm, pronotum 2.2 mm at base, elytra 2.4 mm at basal third. Oblong oval, reddish with apical third of elytra gradually darker to dark brown; antennal segments 7, 9-11 brown-black, antennal segment 8 dark brown. Dorsum without microsculpture. Underside chestnut, coxal margins darker.

Head. Strongly densely punctured, punctures of two different sizes. Larger punctures separated by 1-2 times their own diameter, small punctures interposed. Two large punctures located just behind clypeal line and four large punctures present on vertex. Ratios of length of antennal segments 2 to 11 (the 2nd equal to 1.0) = 1.0-1.5-0.8-0.8-0.3-1.0-0.4-1.1-1.1-1.8. Last antennal segment distinctly narrower than segment 10. Ratios of width of club segments 2 to 11 (2nd equal to 1.0): 1.0-1.1-1.2-1.2-1.1- 2.2-1.8-2.9-2.9-2.4. Ratios of width: length of the antennal club segments 1.3-2.7-1.4-1.4-1.8.



Figs 1-6. Types of mesosternal carina, schematically. 1- type A (*Leiodes matthiasi*); 2- type B (*L. annapurnai*); 3- type C (*L. skalitzkyi*); 4- type D (*L. carinata*); 5- type α (*L. badia*); 6- type β (*L. jaroslavi*).

Pronotum. Lateral margins rounded toward anterior angles. Base straight, far before angles emarginate. Posterior angles slightly blunt, broadly rounded in dorsal view. In lateral view, lateral margins arcuate; posterior angles blunt broadly rounded. Puncturation distinct, double. Punctures separated by 2-3 times their own diameter, more evident basally and basolaterally. Some small punctures scattered between larger punctures. A few large punctures aligned before base as usual.

Scutellum. With punctures as on pronotum.

Elytra. Both lateral elytral margins simultaneously visible all along their length in dorsal view. Lateral margins with punctures of usual size and intensity. Elytral surface with well expressed, punctured regular rows. Punctures in rows separated by about 0.5-1.0 times of their own diameter laterally punctures more densely arranged, apically more sparsely aligned. Ninth row short, parallel to lateral margin joining lateral channel at basal fourth of elytral length. Elytral intervals double punctured with larger punctures similar those of pronotum separated by about 2-3 times their own diameter. Some smaller punctures scattered between them. Odd interstices with scattered punctures of same size and intensity as those of the elytral rows. Sutural stria clearly impressed and extending approximately to apical third. Epipleuron without detectable setae.

Legs. Anterior tarsomeres 1-4 dilated in male. Anterior tibia 2.5 times as wide at apex as at base. Posterior tibia simply curved, posterior femora of similar shape as in *L. lucens* (Fairmaire, 1855).

Mesosternum. Mesosternal carina of type B (Fig. 2).

Male genitalia. Aedeagus as in Fig. 9.

Variation. Dark coloring of elytral apex extending up to half or even up to basal third of elytral length in the paratypes. Anterior tarsi are not widened, posterior tibiae almost straight, posterior femora lobed dorsally at apex in females.

Name derivation. It is derived from the type of the elytral coloring.

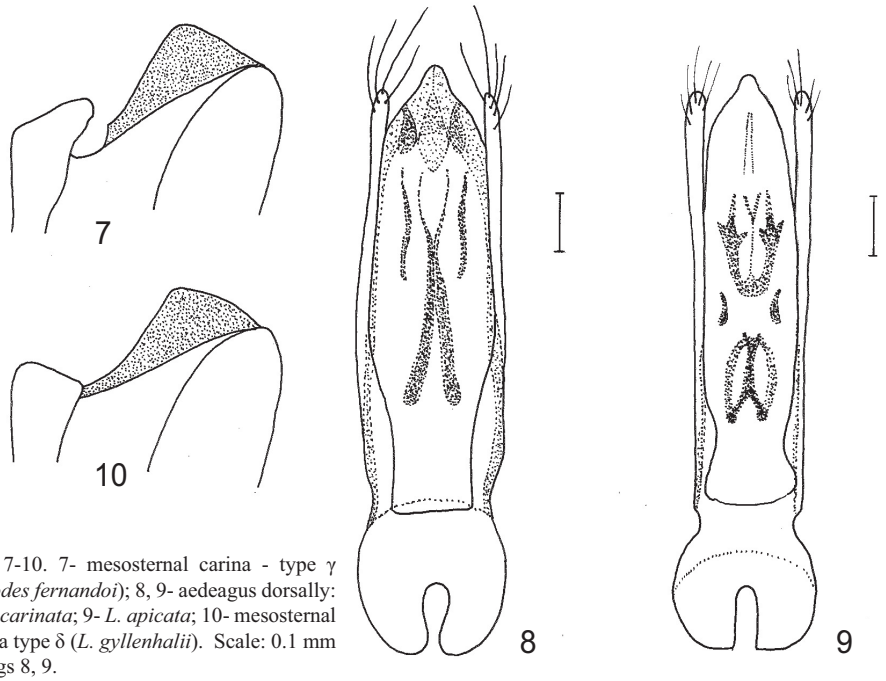
Differential diagnosis. *L. apicata* sp. n. is similar to *L. lucens* (Fairmaire, 1855) in the type of mesosternal carina, in having last antennal segment narrower than the 10th and by the similar shape of tegmen. It differs by the emarginate base of pronotum, coloring of elytra and by the shape and length of parameres that are thickened apically and a little shorter than tegmen in *L. apicata* sp. n.; parameres are slim and distinctly shorter than tegmen in *L. lucens*.

Leiodes daliana **sp. n.**

(Figs 2, 11)

Type material. Holotype (♂): “China: N. Yunnan, Dali Bai Nat. Aut. Pref., Diancang Shan, 5 km W Dali, 25º38.7´N 100º08.3´E, 2800 m, 26.viii. 2003, A. Smetana [C136]”. Paratype (1 ♂): “China: N. Yunnan, Dali Bai Nat. Aut. Pref., Diancang Shan, 3 km W Dali, 25º41.1´N 100º06.8´E, 2700 m, 30.8 - 1.9. 2003, A. Smetana [C142]”, (all SC).

Description. Length 2.6-2.7 mm, in holotype 2.7 mm, head 0.2 mm, pronotum 0.7 mm, elytra 1.8 mm, antenna 0.8 mm. Maximum width of head 0.7 mm, pronotum 1.3 mm at base, elytra 1.4 mm at basal third. Oblong oval, brown, apex of elytra lighter, antennal segments 1-



Figs 7-10. 7- mesosternal carina - type γ (*Leiodes fernandoi*); 8, 9- aedeagus dorsally: 8- *L. carinata*; 9- *L. apicata*; 10- mesosternal carina type δ (*L. gyllenhalii*). Scale: 0.1 mm in Figs 8, 9.

6 reddish, mouth-parts yellow-red, antennal club brown. Elytra with traces of microsculpture. Underside brown-red.

Head. Distinctly punctured, punctures irregularly distributed, separated by about 2-6 times their own diameter except very scattered punctured vertex. Beside basal puncturation four large punctures present on vertex. Ratios of length of antennal segments 2 to 11 (the 2nd equal to 1.0) = 1.0-1.1-0.7-0.7-0.6-1.0-0.6-1.4-1.4-1.7. Last antennal segment distinctly narrower than segment 10. Ratios of width of club segments 2 to 11 (2nd equal to 1.0): 1.0-1.0-1.0-1.0-1.1-2.0-1.6-2.9-3.0-2.4. Ratios of width: length of the antennal club segments 1.4-1.8-1.4-1.5-1.0.

Pronotum. Lateral margins conically tapered to their mid-length than roundly narrowed toward anterior angles. Base straight. Posterior angles acute shortly rounded, in dorsal view. In lateral view, lateral margins slightly arcuate; posterior angles blunt, rounded. Puncturation distinct. Punctures separated by 2 - 6 times their own diameter, denser basally and basolaterally. Large punctures aligned behind anterior margin, some large punctures irregularly scattered before base.

Scutellum. With several punctures.

Elytra. Both lateral elytral margins simultaneously not visible from above. Lateral margins with punctures of usual size and intensity. Elytral surface with well expressed punctured, regular rows. Punctures in rows separated by about 1.0-2.0 times their own diameter apically punctures more sparsely aligned. Ninth row short, irregular, oblique, joining lateral channel at basal third of elytral length. Elytral intervals distinctly simply punctured by punctures

similar as on pronotum separated by about 2-5 times their own diameter. Puncturation become sparser lateraly and apically. Punctures tend to form 2 irregular rows in 3 median intervals. Odd intervals with scattered punctures of size and intensity as those of elytral rows. Sutural stria clearly impressed and extending approximately to basal fifth. Epipleuron without detectable setae.

Legs. Anterior tarsomeres 2-4 distinctly dilated in male. Anterior tibia 1.5 times as wide at apex as at base. Mid-tarsi with tarsomeres 1-4 feebly dilated. Posterior tibia simply curved, posterior femora without obtrusive characters.

Mesosternum. Mesosternal carina of type B (Fig. 2).

Male genitalia. Aedeagus as in Fig. 11.

Variation. Dark brown head and pronotum with chestnut colored elytra in the paratype.

Name derivation. From the name of the original locality.

Differential diagnosis. *L. daliana* sp. n. is similar to *L. klapperichi* Daffner, 1983 by the type of mesosternal carina, by last antennal segment distinctly narrower than the 10th and by the similar shape of tegmen. It differs by more sparsely arranged punctures in elytral rows and by the shape and length of parameres lacking appendages. Parameres are shorter than median lobe in *L. daliana* sp. n. while parameres bearing appendages are longer than median lobe in *L. klapperichi*.

Leiodes yunnanica sp. n.
(Figs 2, 12)

Type material. Holotype (♂): "China: N. Yunnan, Diquing Tibet Aut. Pr. Dequin Co., Meili Xue Shan E-side, 14 km W Dequin 28º27.47´N 98º46.35´E, 2580 m, 11.vi. 2005, A. Smetana [C158]". Paratypes (1 ♂, 2 ♀♀): the same data; (1 ♀): "China: N. Yunnan, Diquing Tibet Aut. Pr. Dequin Co., Meili Xue Shan E-side, 12 km SW Dequin, 28º26.30´N 98º48.47´E, 2890 m, 9.vi. 2005, A. Smetana [C158]"; all SC; (2 ♂♂): "China: N. Yunnan [C2005-07], Diquing Tibet Aut. Pref. Dequin Co., Meili Xue Shan E-side, 12 km SW Dequin, 2890 m; 28º25.30´N 98º48.47´E small creek valley, mixed forest with bamboo, leaf litter, moos, dead wood, sifted, 9.vi. 2005, leg. M. Schülke [C2005-7]", 1 ♂, SCHC, 1 ♂, SC; (4 ♂♂, 5 ♀♀): "China: N. Yunnan, [C2005-09], Diquing Tibet Aut. Pref. Dequin Co., Meili Xue Shan E-side, 14 km W Dequin 28º27.47´N 98º46.35´E; creek valley below glacier, mixed forest, leaf litter, moos, dead wood, sifted, 2580 m, 11.vi. 2005, M. Schülke [C2005-09]", 1 ♂, 3 ♀♀, SC, 3 ♂♂, 2 ♀♀, SCHC.

Description. Length 2.5-2.9 mm, in holotype 2.9 mm, head 0.4 mm, pronotum 0.8 mm, elytra 1.7 mm, antenna 1.0 mm. Maximal width of head 0.8 mm, pronotum 1.4 mm at base, elytra 1.5 mm at basal third. Oblong oval, dark chestnut, antennal segment 1-6 and tarsi brown-red, antennal club slightly infuscate, legs chestnut. Scutellum and elytra slightly but distinctly microsculptured. Underside dark brown.

Head. Distinctly strongly punctured, punctures separated by about 2-3 times their own diameter. With two large punctures on vertex. Ratios of length of antennal segments 2 to 11 (the 2nd equal to 1.0) = 1.0-1.3-0.7-0.7-0.7-1.2-0.5-1.2-1.2-1.7. Antennal club broad, last antennal segment almost as wide as the penultimate. Ratios of width of club segments 2 to

11 (2nd equal to 1.0): 1.0-1.2-1.2-1.3-1.5-2.3-1.8-3.7-3.7-3.5. Ratios of width: length of the antennal club segments 1.9-1.8-1.6-1.6-1.1.

Pronotum. Lateral margins conically tapered to second third of their length then roundly narrowed toward anterior angles. Base straight. Posterior angles rounded, blunt, in dorsal view. In lateral view, lateral margins slightly arcuate; feebly concave before blunt shortly rounded posterior angles. Puncturation distinct strong. Punctures separated by 1 - 4 times their own diameter, irregularly distributed in some places.

Scutellum. With several punctures.

Elytra. Both lateral elytral margins simultaneously not visible from above. Lateral margins with punctures of usual size and intensity. Elytral surface with well expressed, punctured, regular rows. Punctures in four medial rows separated by about 0.5-1.0 times their own diameter; laterally punctures more sparsely aligned separated by 2 times their own diameter. Ninth row short, first parallel to lateral margin, then oblique, joining lateral channel at basal third of elytral length. Elytral intervals distinctly simply punctured by punctures similar as on pronotum separated by about 2 - 4 times their own diameter. Puncturation become sparser laterally and apically. Punctures tend to form 2 irregular rows in 3 median intervals. Odd intervals with scattered punctures of size and intensity of those of the elytral rows. Sutural stria long, clearly impressed, extending to scutellar proximity. Epipleuron without detectable setae.

Legs. Anterior tarsomeres 2-4 slightly dilated in male. Anterior tibia 1.5 times as wide at apex as at base. Mid-tarsi with tarsomeres 1-4 feebly dilated. Posterior tibia slightly double curved, posterior femora feebly dilated ventrally and with slight small lobe dorsally at apex.

Mesosternum. Mesosternal carina of type B (Fig. 2).

Male genitalia. Aedeagus as in Fig. 12.

Variation. The dorsal coloring varies from dark chestnut to specimens with brown elytra and black-brown head and pronotum or even to entirely black individuals with very slightly lighter elytra apex and suture. Also coloring of antennal club varies to entirely black. Sutural stria longer - extending to basal quarter in one of the paratypes. One of the paratypes with 3 large punctures on head.

Name derivation. From the the place of discovery of the species.

Differential diagnosis. *L. yunnanica* sp. n. is similar to *L. atricolor* (Champion, 1923) by the type of mesosternal carina and by the presence of less than 4 large punctures on head. The new species differs from the species mentioned by elytral row 9 that is first parallel to lateral margin and by parameres that are well shorter than tegmen lacking appendages. In contrast to the new species in *L. atricolor* elytral row 9 is oblique and parameres bearing appendage at tip are a little shorter than tegmen.

Leiodes fuscosuturalis sp. n.

(Figs 2, 14-17)

Type material. Holotype (♂): "Nepal, Manaslu Mts., 2100 m, NN Bhara Pokhari, 11.iv. 1999, leg. J. Schmidt", (NKME).

Description. Length 2.8 mm, head 0.4 mm, pronotum 0.8 mm, elytra 1.6 mm, antenna 0.9

mm. Maximum width of head 0.7 mm, pronotum 1.2 mm at base, elytra 1.4 mm at basal fourth. Oblong oval (Fig. 14), yellow with brown head and brown patches on pronotum and elytra as in Fig. 15. Antennal club black. Pronotum slightly microsculptured. Underside lightly yellow-brown, margins of meso- and metacoxae darker.

Head. Distinctly strongly punctured, punctures separated by about 2-3 times their own diameter. Beside basal puncturation four large punctures present.

Antenna as in Fig. 16. Ratios of length of antennal segments 2 to 11 (the 2nd equal to 1.0) = 1.0-1.2-0.8-0.7-0.7-0.9-0.5-1.0-1.0-1.5. Last antennal segment distinctly narrower than segment 10. Ratios of width of club segments 2 to 11 (2nd equal to 1.0): 1.0-1.0-1.2-1.2-1.3-2.0-1.5-3.0-3.3-2.8. Ratios of width: length of the antennal club segments 1.1-1.5-0.7-1.6-0.9.

Pronotum. Lateral margins very shortly before base parallel then roundedly narrowed toward anterior angles. Base straight. Posterior angles rectangular closely rounded, in dorsal view. In lateral view, lateral margins slightly arcuate; posterior angles blunt closely rounded. Puncturation distinct strong. Punctures separated by 2-4 times their own diameter, irregularly distributed in some places. In addition, as usual, large punctures irregularly aligned along base before basal margin.

Scutellum. With punctures similar those occurring in elytral intervals.

Elytra. From above, both lateral margins simultaneously visible at shoulders only. Lateral margins with punctures of usual size and intensity. Elytral surface with well expressed, punctured, regular rows. Punctures in rows separated by about 0.5-1.0 times their own diameter. Ninth row first very close to lateral channel then coalescent. Elytral intervals simply punctured by punctures separated by about 3-5 times their own diameter. Punctures tend to form 2 irregular rows intervals. Odd intervals with scattered punctures of size and intensity as those of elytral rows. Sutural stria extending to middle. Epipleuron without detectable setae.

Legs. Anterior tarsomeres 2-4 slightly dilated in male. Anterior tibia less than 2 times as wide at apex as at base. Posterior tibia slightly simply curved, posterior femora feebly and narrowly dilated in small lobe dorsally at apex.

Mesosternum. Mesosternal carina of type B (Fig. 2).

Male genitalia. Aedeagus as in Fig. 17.

Name derivation. The name is derived from the dorsal coloring of the species.

Differential diagnosis. *L. fuscosuturalis* sp. n. is similar to Holarctic *L. puncticollis* (Thomson, 1862) and Nearctic *L. curvata* (Mannerheim, 1853) by the elongated shape of body, by dense strong puncturation of pronotum, by the type of mesosternal carina, by the ninth elytral row very close to lateral channel of elytra and by the shape of aedeagus. The new species differs by last antennal segment distinctly narrower than segment 10, by coloring of dorsum and by presence of two paired endophalic sclerites. In contrast to *L. fuscosuturalis* sp. n. both species mentioned are characterized by last antennal segment not narrower than segment 10. Endophallic structures are indistinct in *L. puncticollis* while endophallus contains only two sclerites in *L. curvata*.

Leiodes fernandoi sp. n.
(Figs 7, 13)

Type material. Holotype (♂): "Nepal, Trisuli-Tal, 3200 m, iv. 1970", SC. Paratypes (1 ♂): "Nepal, Phulchocki", SC; (1 ♀): "Nepal, Ilara, Sitang Khola", FAC; (1♀), "Nepal, Panchthar Distr., Dhorpar Kharka", FAC.

Description. Length 1.9-2.1 mm, in holotype 1.9 mm, head 0.2 mm, pronotum 0.6 mm, elytra 1.1 mm, antenna 0.6 mm. Maximum width of head 0.6 mm, pronotum 1.2 mm at base, elytra 1.1 mm at basal fourth. Broadly oval, reddish, antennae brown-yellow. Temples with slight longitudinal microsculpture, pronotal microsculpture in traces. Underside reddish, mesosternal carina darker.

Head. Distinctly strongly punctured, punctures separated by about 3-4 times their own diameter. Beside basal puncturation four large punctures present on vertex. Eyes normally developed. Ratios of length of antennal segments 2 to 11 (the 2nd equal to 1.0) = 1.0-1.3-0.4-0.7-0.6-0.9-0.3-1.0-1.0-1.3. Last antennal segment distinctly narrower than segment 10. Ratios of width of club segments 2 to 11 (2nd equal to 1.0): 1.0-1.0-1.0-1.0-1.3-2.3-2.0-3.3-3.5-2.8. Ratios of width: length of the antennal club segments 1.1-2.7-1.4-1.6-0.9.

Pronotum. Lateral margins roundedly narrowed toward anterior angles. Base straight. Posterior angles rectangular rounded, in dorsal view. In lateral view, margins straight to basal third; posterior angles slightly blunt rounded. Puncturation distinct, strong. Punctures a little finer than on head separated by 3-5 times their own diameter. As usual, several large punctures irregularly aligned along base before basal margin.

Scutellum. Punctured with several punctures similar those on pronotum.

Elytra. Both lateral elytral margins simultaneously not visible from above. Lateral margins with punctures of usual size and intensity. Elytral surface with fine but well expressed, punctured, regular rows. Punctures in rows separated by about 2-3 times their own diameter. Ninth row oblique and confluent lateral channel at basal third of elytral length. Elytral intervals simply punctured by punctures smaller than those on pronotum; punctures separated by about 4-6 times their own diameter. Interval punctures tend to form irregular row in some places. Odd intervals with scattered punctures of size and intensity as those of elytral rows. Sutural stria extending to middle. Epipleuron without detectable setae.

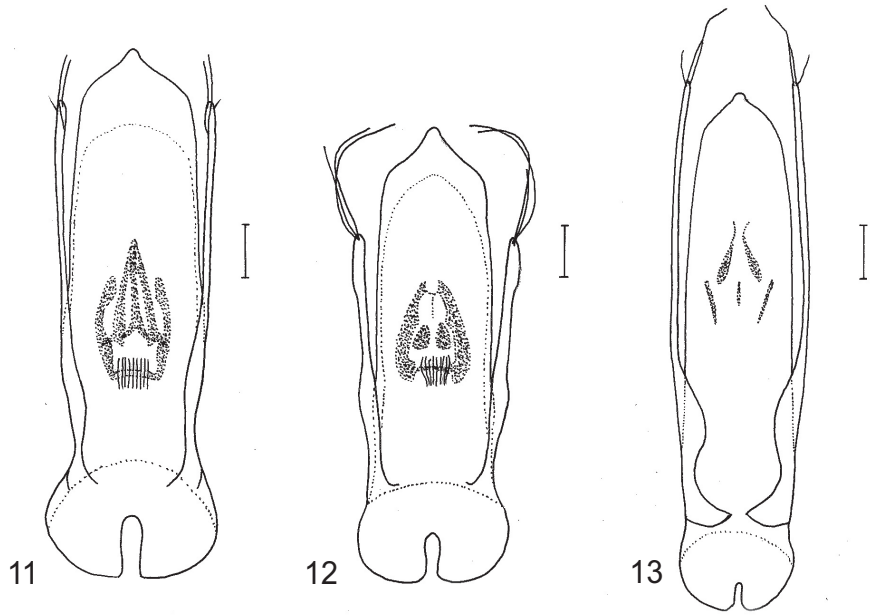
Legs. Anterior tarsomeres 1-4 slightly dilated in male. Anterior tibia 2 times as wide at apex as at its base. Mid-tibia short and widened, broader than anterior and posterior tibia as well. Posterior tibiae slightly simply curved, posterior femora very feebly dilated dorsally at apex.

Mesosternum. Mesosternal carina of type γ (Fig. 7).

Male genitalia. Aedeagus as in Fig. 13.

Name derivation. The new species is dedicated to my friend Fernando Angelini, specialist in Leiodidae.

Differential diagnosis. *L. fernandoi* sp. n. is similar to *L. besucheti* Daffner, 1986 by the shape of body, by dorsal sculptures, by the type of mesosternal carina and also by the shape of median lobe of aedeagus. The new species differs mainly by normally developed eyes



Figs 11-13. Aedeagus dorsally: 11- *L. daliana*; 12- *L. yunnanica*; 13- *L. fernandoi.* Scale: 0.1 mm.

that are strongly reduced in *L. besucheti*. Endophallic structures are feebly developed as two paired and one single sclerite separated in the new species while endophallic sac is compact horse-shoe resembling structure in the species compared.

NEW FAUNISTIC RECORDS

Leiodes curvidens Angelini & Švec, 1994

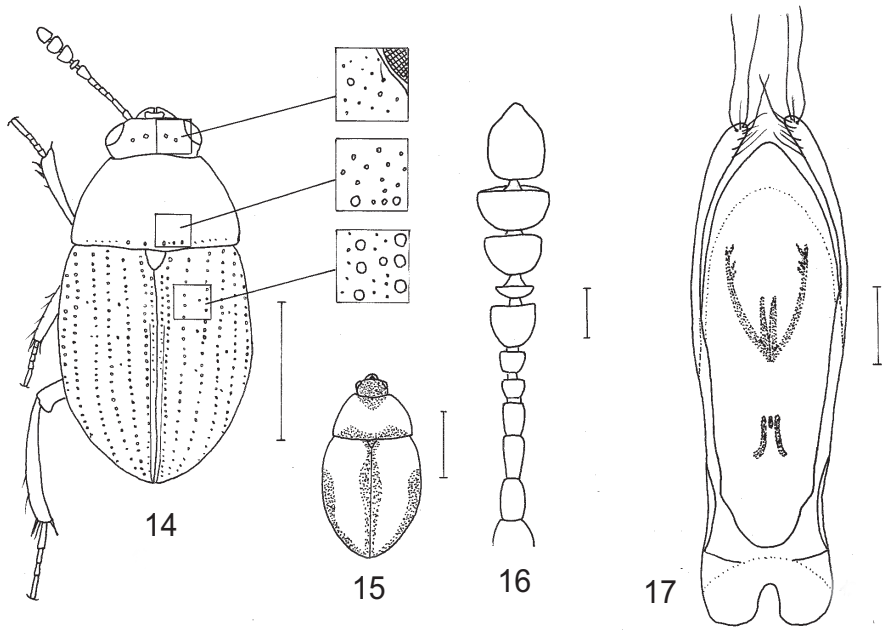
Material examined. "China, Sichuan Prov., Liangshan mts. S of Xichang, 3000 m, 1.vii. 2002, S. Murzin & I. Shokin leg.", 1 ♂, (JRC). Up to now known only from the type series from Yunnan.

Distribution. China (Yunnan, Sichuan), new to Sichuan.

Leiodes lucens (Fairmaire, 1815)

Material examined. "China, Quinghai Province, Yunning SL [lamasery], 2980 m, 36º45.6´A, 102º10.6´E (GPS), 1-16.vii. 2005, J. Hájek, D, Král & J. Růžička lgt.; [CH19], baited pitfall traps (fish meat) with ethylene glycol, wet coniferous forest, close valley above the village", 1 ♂, (SBPC).

Distribution. Europe, Siberia, Mongolia, China (Sichuan, Yunnan, Qinghai), new to Qinghai.



Figs 14-17. *Leiodes fuscosuturalis.* 14- shape of body; 15- distribution of dorsal patterns; 16- antenna; 17- aedeagus dorsally. Scale: 1.0 mm in Figs 14, 15; 0.1 mm in Figs 16, 17.

Leiodes matthiasi Švec, 1999

Material examined. "China, Quing Hai Province, 7 km NE of Ulan, 3020 m, 36º57.6´N 098º30.6´E (GPS), 7.vii. 2005, J. Hájek, D. Král & J. Růžička leg. [C413]; temporary flooding of the river (against a dam) after heavy rains, individually on stems of the grass, sandy bank of the river; mounted in DMHF (water soluble medium) by Jan Růžička 2007", 6 ♂♂, 15 ♀♀, (13 JRC, 2 JC, rest in SC). First finding since the species was described .

Distribution. Uzbekistan, Kazakhstan, China (Qinghai), new to China.

Leiodes nikodymi Švec, 1991

Material examined. "China: N. Yunnan [C03-19A], Dali Bai Nat. Aut. Pref. Diancang Shan 3 km W Dali old town, pine forest at "Cloud Road" right upper chairlift station, 25º41.1´N, 100º06.8´E 2650-2750 m; [C03-19A], pine needles, moss (dry) in ditches, mushrooms, 30.viii.2003, leg. M. Schülke", 1 ♂, (SCHC); "China, Shaanxi, Quinling Shan, 108.47 E, 33.51 N, Mt. W pass autor. km 70, 47 km S Xian, 2500-2600 m, 26. - 29.viii. 1995, leg. Wrase", 1 ♂, (NKME).

Distribution. China (Gansu, Sichuan, Yunnan, Shaanxi), new to Yunnan and Shaanxi.

Leiodes schneideri Švec, 2000

Material examined. "China, Gansu, Yonghai, ca 20 km SW Yuzhong, 2700-2800 m, 9.viii. 94, A. Smetana lgt.", 1 ♂, (JC).

Distribution. China (Sichuan, Gansu), new to Gansu.

Leiodes sichuanica Švec, 2000

Material examined. "China, Shaanxi, Quinling Shan, 108.47 E, 33.51 N, Mt. W pass autor. km 70, 47 km S Xian, 2500-2600 m, 26-29.viii. 1995, leg. Wrase", 1 ♂, (NKME).

Distribution. China (Sichuan, Shaanxi), new to Shaanxi.

Leiodes silesiaca (Kraatz, 1852)

Material examined. "China, S-Gansu (Yuzhong), Xinglongshan massive, 35.50N/104.02E, ca 2400 m, conifer forest, stream ravine, 6.vii. 1995, M. Janata lgt." 1 ♂, (SC).
The specimen is unusually bicolorous having apical two thirds dark brown, while the rest of body is typically reddish.

Distribution. Europe, Siberia, Far East of Russia, China (Gansu), new to China.

Leiodes triepkei (Schmidt, 1841)

Material examined. "China, Quing Hai Province, 7 km NE of Ulan, 3020 m, 36º57.6´N 098º30.6´E (GPS), 7.vii. 2005, J. Hájek, D. Král & J. Růžička leg. [C413]; temporary flooding of the river (against a dam) after heavy rains, individually on stems of the grass, sandy bank of the river; mounted in DMHF (water soluble medium) by Jan Růžička 2007", 2 ♂♂, (1 JRC, 1 SC).

Distribution. Europe, Mongolia, Far East of Russia, China (Qinghai), Canada, USA, new to China.

ACKNOWLEDGEMENTS. My best thanks belong to all my entomological friends and colleagues who provided me with valuable Chinese material, namely to Aleš Smetana, Fernando Angelini, Matthias Hartmann, Michael Schülke and Jan Růžička. Last but not least I am obliged to my friend Jonathan Cooter (Hereford, England) for reading of the manuscript and for his valuable remarks.

REFERENCES

Angelini F. & Švec Z. 1994: Review of Chinese species of the subfamily Leiodinae (Coleoptera: Leiodidae). *Acta Societatis Zoologicae Bohemicae* 58: 1-31.

Baranowski R. 1993: Revision of the Genus *Leiodes* Latreille of North and Central America (Coleoptera: Leiodidae). *Entomologica Scandinavica* Supplements 42: 1-149.

Cooter J. & Kilian A. 2002: New species of *Leiodes* Latreille, 1796 (Col., Leiodidae) from China. *The Entomologist's Monthly Magazine* 138: 157-164.

Daffner H. 1983: Revision der paläarktischen Arten der Tribus Leiodini Leach (Coleoptera, Leiodidae). *Folia Entomologica Hungarica* 44: 9-163.

DAFFNER H. 1986: Die Arten der Gattung *Leiodes* Latreille (Coleoptera, Leiodidae) aus Indien und Nepal. *Revue Suisse Zoologie* 93: 71-87.

PERREAU M., 2004: Family Leiodidae Fleming, 1821, pp. 133-203. In: LÖBL I. & SMETANA A. (eds.): *Catalogue of Palaearctic Coleoptera*, *Vol. 2. Hydrophiloidea - Histeroidea - Staphylinoidea.* Stenstrup: Apollo Books, 942 pp.

ŠVEC Z.1991: *Leiodes nikodymi* sp. n. from China with review of Chinese species of the genus Leiodes Latr. (Coleoptera, Leiodidae). *Acta Entomologica Bohemoslovaca* 88: 377-380.

ŠVEC Z. 1998: Two new *Leiodes* species (Coleoptera: Leiodidae) from Nepal in the collection of the Naturkundemuseum Erfurt. *Veröffentlichungen Naturkundemuseum Erfurt* 17: 31-38.

ŠVEC Z. 1999: New Asian *Leiodes* species with notes on Leiodidae from the collection of the Naturkundemuseum Erfurt (Coleoptera, Leiodidae). *Veröffentlichungen Naturkundemuseum Erfurt* 18: 163-168.

ŠVEC Z. 2000: Chinese species of the genus *Leiodes* (Coleoptera: Leiodidae: Leiodinae). *Acta Societatis Zoologicae Bohemicae* 64: 97-113.

ŠVEC Z. 2003: New Nepalese species of the genera *Leiodes* Latreille and *Pseudcolenis* Reitter (Insecta: Coleoptera: Leiodidae: Leiodinae), 197-199 pp. In: HARTMANN M. & BAUMACH H. (eds.): *Biodiversität und Naturasstattung im Himalaya*, Verein der Freunde und Förderer des Naturkundemuseums Erfurt e.V., Erfurt, 389 pp.