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Objektyp: **Article**

Zeitschrift: **Mitteilungen der Schweizerischen Entomologischen Gesellschaft =
Bulletin de la Société Entomologique Suisse = Journal of the
Swiss Entomological Society**

Band (Jahr): **79 (2006)**

Heft 3-4

PDF erstellt am: **22.07.2024**

Persistenter Link: <https://doi.org/10.5169/seals-402922>

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Lacconectus Motschulsky collected in Laos, with the description of a new species (Coleoptera, Dytiscidae)

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The distribution of the genus *Lacconectus* in Laos is still very incompletely known. Apart from single records, collections have only been made in a few provinces in the northern part of Laos. The author gives some new locality records and describes a new species, *Lacconectus geiseri* n.sp. from Phongsaly Province.

Key words: Coleoptera, Dytiscidae, *Lacconectus*, Laos, taxonomy, new species, distribution.

INTRODUCTION

Since my revision of the species of *Lacconectus* Motschulsky occurring in China and neighbouring countries (Brancucci 1986, 2003), there have been several visits to Laos and an extensive material has accumulated. Apart from a few isolated reports, *Lacconectus* species were previously reported mainly from the provinces of Louangphrabang and Oudomxai. The present paper reports on a collection made in the Phongsaly Province in the northern part of Laos. One species collected in the small village of Ban Sano Mai has proved to be new to science and is described here as *Lacconectus geiseri* n.sp. Including this new species and also taking into account the species recently described from Eastern India (Brancucci, in press), the genus *Lacconectus* now comprises 71 species, 10 of which are recorded from Laos.

MATERIAL AND METHODS

The material studied was collected during expeditions to Laos in 2003 and 2004 and is in the collection of the Natural History Museum, Basel (NMB), and also by Michael Geiser, Basel (MG) in Phongsaly Province and deposited in his personal collection. In this paper, I use the terminology for the aedeagus proposed by Miller & Nilsson (2003).

TAXONOMY

Lacconectus geiseri n.sp.

Figs 1–2

Body broadly oval, dark brown, shining; vertex, frons, sides of pronotum as well as base and apex of elytra testaceous.

Head brown, broadly darker alongside eyes and on disc, semi-matt. Microsculpture consisting of small, distinctly impressed, almost rounded meshes and of dense but irregularly-distributed and deeply impressed punctures. Clypeal grooves, a row of deep punctures alongside eyes and a transverse depression beside eyes deeply impressed. Antennae testaceous; joints elongate, the fifth 1.8 times as long as broad.

Pronotum dark brown, the sides broadly testaceous, the anterior and posterior margins somewhat lighter, semi-matt. Microsculpture consisting of small polygonal, almost rounded and well-impressed meshes and of irregularly-distributed small punctures. Longitudinal median suture short and very superficial. Anterior and lateral rows consisting of large punctures coalescing at side. Punctures at each latero-basal quarter coarse. Lateral margins finely bordered, broadly interrupted before reaching anterior border.

Elytra shining, brown, with a distinct and broad subbasal testaceous band as well as a postmedian and a subapical testaceous spot; the latter only slightly visible. Margin alongside epipleura brownish-black. Epipleura ferruginous-brown along entire length. Reticulation consisting of polygonal meshes at base, with a distinctly impressed minute puncture at their intersections. Meshes becoming elongate after mid-length, giving way to a fine striolation on apical third. Sutural row of punctures reduced to a few large punctures on apical 1/3. Discal row of punctures not reaching base with medium-sized punctures in a straight line but spaced. Sublateral row with punctures in a straight line on anterior half. 2nd interspaces with some spaced large punctures.

Underside testaceous-brown. Prosternal process short, only 1.25 times as long as broad, strongly bordered at sides and broadly rounded at apex. Metacoxal lines represented only by deep and short striae at their mid-length. Sternites 3, 4 and 5 each with very sparse and irregularly-distributed medium-sized punctures, particularly at their mid-length. Anal sternite with obsolescent, almost indiscernible microstriolation posteriorly, slightly reticulated and almost smooth posteriorly, with an oblique row of broad setae on both sides of middle. Posterior margin finely bordered and broadly rounded.

Measurements. Holotype: TL: 4.5 mm; TL-h: 4.1, TW = 2.6 mm. Paratypes: TL: 4.6–4.7 (4.63, n = 3), TL-h: 4.2–4.4 (4.3 mm, n= 3), TW: 2.6–2.75 (2.66 mm, n= 3).

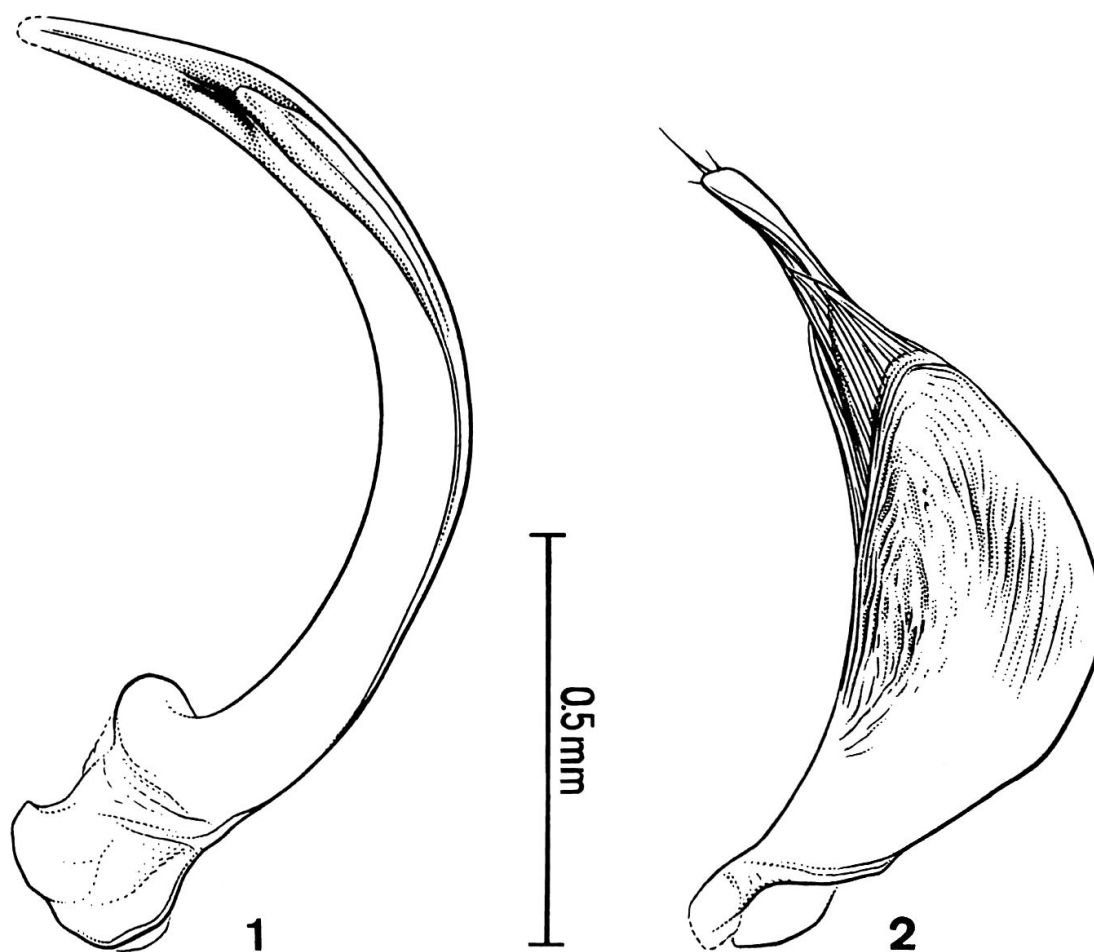
♂. Aedeagus, in lateral view, broadly curved, distinctly narrowed and tapered on apical part and very narrowly rounded at apex. The extreme apex of the aedeagus of the single male known is slightly broken (Fig. 1). Parameres broad (Fig. 2).

♀. Similar to ♂. Valvae elongated, long, flattened, narrowly rounded at apex. Seta subapical.

Derivatio nominis. Named after the young student and entomologist Michael Geiser, Basel, who has made several visits to Laos and is thereby contributing to our knowledge of the fauna of that country.

Type material. Holotype ♂ (NMB): Laos, Phongsaly Prov., Ban Sano Mai, 21°21' N, 102°03' E, ~1150 m, 19–26.V.2004, V. Kubáň. 3 paratypes ♀♀ (NMB): Idem, M. Brancucci.

Differential diagnosis. Because of the colour and the elytral microreticulation, this species is close to *L. formosanus* Takizawa. It can easily be distinguished by the aedeagus, which is very characteristic. It can be readily distinguished from all



2: *Lacconectus geiseri* n.sp. 1, Aedeagus in lateral view. 2, Left paramere.

the *Lacconectus* species known from Laos by the elytral microreticulation, in which the meshes are polygonal on the anterior half, becoming elongate after mid-length and giving way to a fine striolation on apical third.

Habitat. One of the specimens was collected in a small spring-fed pool in a forest near Ban Sano Mai.

Distribution. Laos: Phongsaly Province.

***Lacconectus kubani* Brancucci**

Lacconectus kubani Brancucci, 2003, Water Beetles of China III: 98.

Material studied. Laos: Phongsaly Prov., Phongsaly env., 21°41-2'N, 102°6-8' E, 28.V.–20.VI.2003, ~1150 m, P. Pacholátko (numerous specimens NMB); Idem, M. Brancucci (numerous specimens, NMB); Idem, V. Kubáň (numerous specimens). Phongsaly Prov., Phongsaly env., 21°41'N, 102°6-8' E, 6–17.V.2004, ~1150 m, V. Kubáň (numerous specimens NMB); Idem, M. Brancucci (numerous specimens, NMB). Phongsaly Prov., Ban Sano Mai, 21°21'N, 102°03' E, ~1150 m, 19–26.V.2004, M. Brancucci (26 ex., NMB) ; Idem, V. Kubáň (5 ex., NMB); Idem, P. Pacholátko (5 ex., NMB). Phongsaly Prov., Ban Hatsa, 21°44' N, 102° 12' E,

9–17.V.2004, ~ 500 m, M. Brancucci (1 ex., NMB). Phongsaly Prov., Phufa, 26.VII.2006, 1500–1600 m, M. Geiser (18 ex., MG).

This species was described from Laos (Louangphrabang Province and Oudomxai Province) and from China (Yünnan). It is here recorded for the first time from Phongsaly Province.

Distribution: China (Yünnan) and Laos.

***Lacconectus basalis* Sharp**

Lacconectus basalis Sharp, 1882, Sci. Trans. R. Dublin Soc. 2: 598

Material studied. Laos: Bolikhamxai Prov., Pakkading, 26–27.V.2003, 18°20' N, 104°00' E, 300 m, M. Brancucci (9 ex., NMB). Vientiane Prov., Van Vieng, ca. 2 km SW, 15.VIII.2004, leg. M. Geiser (2 ex., MG).

Lacconectus basalis Sharp seems to be widespread in Laos, particularly at lower altitudes.

***Lacconectus meyeri* Brancucci**

Lacconectus meyeri Brancucci, 2003, Water Beetles of China III: 101.

Material studied. Laos: Phongsaly Prov., Phongsaly env., 21°41–2' N, 102°6–8' E, 28.V.–20.VI.2003, ~1150 m, V. Kubáň (28 ex., NMB); Idem, M. Brancucci (3 ex., NMB). Phongsaly Prov., Bun Neua (41 km E), 21°38' N, 101°57' E, 20.VI.2003, ~1100, V. Kubáň (3 ex., NMB). Phongsaly Prov., Ban Sano Mai, 21°21' N, 102°03' E, 19–26.V.2004, ~1150 m, V. Kubáň (2 ex., NMB); Idem, M. Brancucci (1 ex., NMB).

Hitherto known from Oudomxai and Louangphrabang Provinces in Laos. The localities listed here are the first record for Phongsaly Province.

***Lacconectus similis* Brancucci**

Lacconectus similis Brancucci, 1986, Entomologica Basiliensia 11: 109.

Material studied. Laos: Phongsaly Prov., Ban Sano Mai, 21°21' N, 102°03' E, ~1150 m, 19–26.V.2004, V. Kubáň (2 ex., NMB); Idem, M. Brancucci (2 ex., NMB). Phongsaly Prov., Ban Hatsa, 21°44' N, 102° 12' E, 9–17.V.2004, ~ 500 m, M. Brancucci (1 ex., NMB).

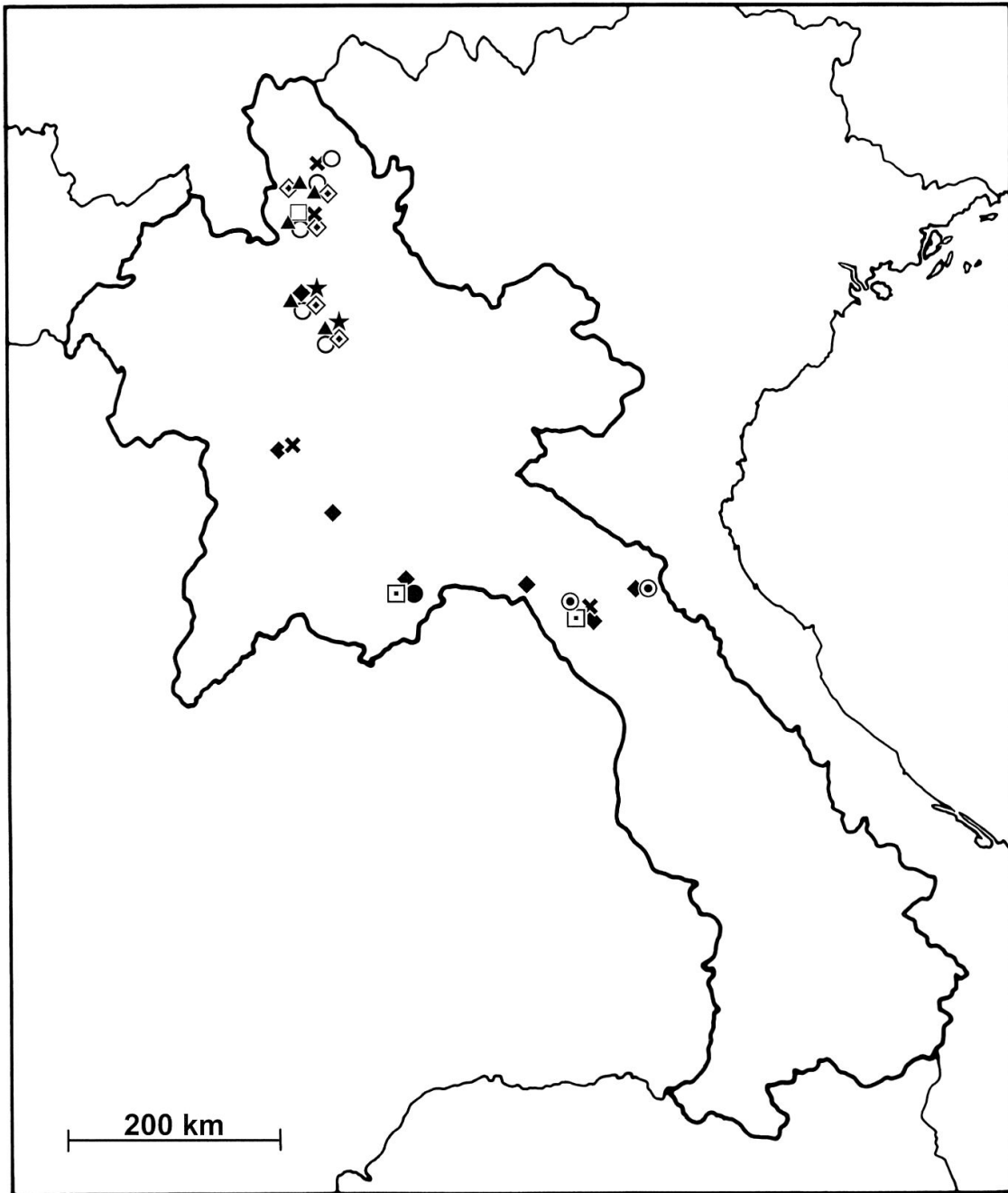
Known from the Laotian provinces Kham Mouan and Louangphrabang. This is the first record for Phongsaly Province.

***Lacconectus pseudonicolasi* Brancucci**

Lacconectus pseudonicolasi Brancucci, 2003, Water Beetles of China III: 106.

Material studied. Laos: Phongsaly Prov., Phongsaly env., 21°41–2' N, 102°6–8' E, 28.V.–20.VI.2003, ~1150 m, M. Brancucci (2 ex., NMB). Phongsaly Prov., Bun Neua (41 km E), 21°38' N, 101°57' E, 20.VI.2003, ~1100 m, V. Kubáň (15 ex., NMB). Phongsaly Prov., Ban Sano Mai, 21°21' N, 102°03' E, ~1150 m, 19–26.V.2004, M. Brancucci (9 ex., NMB).

Described from Louangphrabang Province and Oudomxai Province. This species has not previously been recorded from Phongsaly Province.



Map 1: Hitherto known distribution of the *Lacconnectus* species in Laos. (◆: *L. basalis* Sharp; ○: *L. kubani* Brancucci; ✕: *L. similis* Brancucci; ◇: *L. meyeri* Brancucci; ⊙: *L. pseudosimilis* Brancucci; ★: *L. nigrita* Brancucci; □: *L. punctatus* Brancucci; ▲: *L. pseudonicolasi* Brancucci; ●: *L. schillhammeri* Brancucci; ◻: *L. geiseri* n.sp.).

CONCLUSIONS

The material treated here has been collected mainly in Phongsaly Province (Map 1). All the species reported here are new records for this province, which demonstrates how poorly known is the fauna of Laos.

ACKNOWLEDGEMENTS

I should like to thank my Czech colleagues Petr Pacholátko (Brno) and Vit Kubáň (Brno) as well as Michael Geiser (Basel) for their large and interesting collections of specimens. My thanks go also to Adrian Pont (Oxford) for correcting the English of this manuscript. The illustrations were made by Armin Coray, and I thank him for his excellent work.

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(received October 4, 2006; accepted October 26, 2006)