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New genus, species and faunistic records of lichen-moths (Lepidoptera, Arctiidae, Lithosiinae) from Vietnam

Новые род, виды и фаунистические находки бабочек-лишайниц (Lepidoptera, Arctiidae, Lithosiinae) Вьетнама

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Key words: Lepidoptera, Arctiidae, Lithosiinae, new species, new genus, faunistic records, Vietnam, Indochina, Oriental Region.

Ключевые слова: Lepidoptera, Arctiidae, Lithosiinae, новый вид, новый род, Вьетнам, Индокитай, Ориентальная область.

Abstract. A genus and seven new species, *Denteilema unicolora* Dubatolov, **gen. et sp.n.**, *Dolgoma rectoides* Dubatolov, **sp.n.**, *D. striata* Dubatolov, **sp.n.**, *Gandhara vietnamica* Dubatolov, **sp.n.**, *Danielithosia zolotuhini* Dubatolov, **sp.n.**, *Prabhasa monastyrskii* Dubatolov, **sp.n.**, *Macotasa nedoshivinae* Dubatolov, **sp.n.**, are described from southern provinces of Vietnam. Two autapomorphic characters of the new genus are: presence of a distinct ventral process at the valve base and of a similar harp-like process on the inner surface of valve near the base. New generic combinations within *Brunia* Moore are proposed for *Eilema gibonica* Černý, 2009, and *E. lacrima* Černý, 2009; these two species together with *Macotasa orientalis* (Hampson, 1905) and *Pseudoscaptia rothschildi* (Draudt, 1912) are for the first time reported from Vietnam.

Резюме. С территории южных провинций Вьетнама описываются новый род и 7 новых видов: *Denteilema unicolora* Dubatolov, **gen. et sp.n.**, *Dolgoma rectoides* Dubatolov, **sp.n.**, *D. striata* Dubatolov, **sp.n.**, *Gandhara vietnamica* Dubatolov, **sp.n.**, *Danielithosia zolotuhini* Dubatolov, **sp.n.**, *Prabhasa monastyrskii* Dubatolov, **sp.n.**, *Macotasa nedoshivinae* Dubatolov, **sp.n.** В род *Brunia* Moore в качестве новых комбинаций перенесены *Eilema gibonica* Černý, 2009 и *E. lacrima* Černý, 2009; эти два вида, а также *Macotasa orientalis* (Hampson, 1905) и *Pseudoscaptia rothschildi* (Draudt, 1912) впервые указываются с территории Вьетнама.

Introduction

Lichen-moths (Lithosiinae) are a group with an insufficiently studied species composition in the Oriental Region. Hampson [1900, 1914] was the first reviewer of the Oriental Lithosiinae and their systematics but he did not use their genitalia in his investigations. The male genitalia structure started to be used in the Lithosiinae systematics only in the middle of twentieth century by Daniel [1951–1955] in his review of Chinese fauna. Later, there were only two authors who prepared reviews of Lithosiinae genera and species from the Oriental fauna using the genitalia structure, namely Holloway [2001] and Bucsek [2012] in their books on the fauna of Borneo and Malay Peninsula species respectively. Černý and Pinratana [2009] figured all species from Thailand, but mainly without genitalia. These remain the only works that can be used for determination of the Oriental lichen-moths, in addition to various journal articles.

Fauna of lichen-moths of Vietnam is very poorly studied. There are only two well known articles included Lithosiinae from Vietnam: Candèze [1927] concerning the Indochina territory, and de Joannis [1928]. These articles contain descriptions of several new species, and record of 71 other species. However, species from Vietnam cited in these articles had been collected in the northern part on this country only. Information about distribution of some species throughout South-Eastern Asia can be found in: Holloway [2001], Černý and Pinratana [2009], Bucsek [2012].

The author received two sets of lichen-moths collected in South Vietnam by A. Monastyrsky in 2006 and by S. Nedoshivina, S. Pugaev and A. Solovyev in 2011. They contained several new species and several new faunistic records presented in this paper. The type materials are deposited in the Institute of Systematics and Ecology of Animals, SB RAS (Novosibirsk, Russia, SZMN ISEA).

Descriptions

Dolgoma rectoides Dubatolov, **sp.n.**

Plate III: 1; Fig. 1.

Material. Holotype, ♂, Vietnam, Ngoc Linh, Kon Tum Prov., 14°45'–15°15' N, 107°21'–108°20' E, III–IV.2006, Monastyrsky.

Description. Male. Forewing length 9.5 mm, yellow, dusted with diffuse black dots more densely in wing basal part. There is a diffuse narrow transversal band forming right angle directed outwards at vein M_3 and bent at costal margin. Hindwing unicolorous light yellow. Head, patagiae, tegulae and thorax bright yellow. Abdomen light yellow.

Male genitalia (Fig. 1). Uncus moderate in width, slightly broadening to apex but strongly narrowing at tip. Valves roughly oval, with a straight costal margin and ventral margin convex at 1/3 from the apex. Cucullus apex broad, rounded, covered with fine hairs. Sacculus ventral margin convex but not bulged; its apex bears several strong and long downwards directed chaetae of different length, three of them the strongest, about 0.2 mm in length. Juxta desk-shaped. Saccus broad, rounded. Aedeagus straight, broad, without spines.

Diagnosis. The new species strongly resembles *Dolgoma recta* Černý, 2009 from Thailand but differs in possessing unicolorous light yellow hindwings, while in *D. recta* the hindwings have a grey external suffusion. Another similar species is *D. angulifera* (Felder, 1868) from the Himalayas and Thailand [Černý, Pinratana, 2009]; it also has unicolorous light yellow hindwings, but the brown band on the forewings is broader, diffuse, and not angled at the costa. The male genitalia structure of the new species is similar to *D. recta* (Fig. 9) but the ventral margin of the sacculus in the latter species is bulged subapically; the apex with only two but strong chaetae, about 0.25 mm in length. All other *Dolgoma* Moore species with known male genitalia structure have no strong chaetae at the apex of the sacculus.

Дифференциальный диагноз. Новый вид по внешности очень напоминает *Dolgoma recta* Černý, 2009 из Таиланда, но отличается одноцветными светло-жёлтыми задними крыльями, тогда как у *D. recta* задние крылья имеют диффузное серое внешнее окаймление. Другой похожий вид — *D. angulifera* (Felder, 1868) из Гималаев и Таиланда [Černý, Pinratana, 2009]; у него также задние крылья одноцветно светло-жёлтые, но поперечная перевязь на передних крыльях шире, диффузная, и не изогнута прямым углом у костального края. По строению гениталий самцов новый вид близок к *D. recta* (рис. 9), но вентральный край саккулюса последнего вида выпячивается близ вершины; вершина несёт только две крупные хеты длиной 0,25 мм. У других видов рода *Dolgoma* Moore, у которых известно строение гениталий, крупные хеты на вершине саккулюса отсутствуют.

Dolgoma striata Dubatolov, **sp.n.**

Plate III: 2, 3; Fig. 2.

Material. Holotype, ♂, Vietnam, Hon Ba, Khanh Hoa Prov., 12°12'–15° N, 108°57'–109°05' E, 20–22.IV.2006, Monastyrsky. Paratype — 1♀, with the same data.

Description. Male. Forewing length 10 mm, dark yellow, dusted with diffuse brown dots. There are two longitudinal stripes along forewing, one going from middle of discal cell towards outer margin between veins M_2 and M_3; the outer going from wing base beyond discal cell towards tornal angle between veins Cu_2 and A. Hindwing unicolorous light yellow. Head, patagiae, tegulae and thorax bright yellow. Abdomen yellow.

Female. Forewing length 11 mm. Wing pattern like in male but forewing more strongly suffused with brown dots.

Male genitalia (Fig. 2). Uncus moderate in width, slightly broadening to apex, but strongly narrowing at tip. Valves elongate, with roughly parallel costal and ventral margins, but ventral margin is slightly convex 3/5 of its length from the apex. Cucullus apex constricted, covered with fine hairs. Sacculus apex broad, rounded at apex, covered with very small spines. Juxta desk-shaped. Saccus broad, rounded. Aedeagus straight, broad, without spines.

Diagnosis. The new species differs significantly from all other *Dolgoma* Moore species by presence of two brown longitudinal stripes on the forewings, while in other species the forewings are either just dusted with dark dots or bear a transverse angular band. In the male genitalia structure, the new species is characterized by possessing the longest and narrowest valves among other congeners.

Дифференциальный диагноз. Новый вид сильно отличается по внешности от всех других видов рода *Dolgoma* Moore наличием двух коричневых продольных штрихов на передних крыльях, тогда как у остальных видов передние крылья или покрыты тёмными точками, или несут также поперечную изогнутую перевязь. По строению гениталий новый вид характеризуется наиболее длинными и узкими вальвами.

Gandhara vietnamica Dubatolov, **sp.n.**

Plate III: 4; Fig. 3.

Material. Holotype, ♂, Vietnam, Ngoc Linh, Kon Tum Prov., 14°45'–15°15' N, 107°21'–108°20' E, III–IV.2006, Monastyrsky.

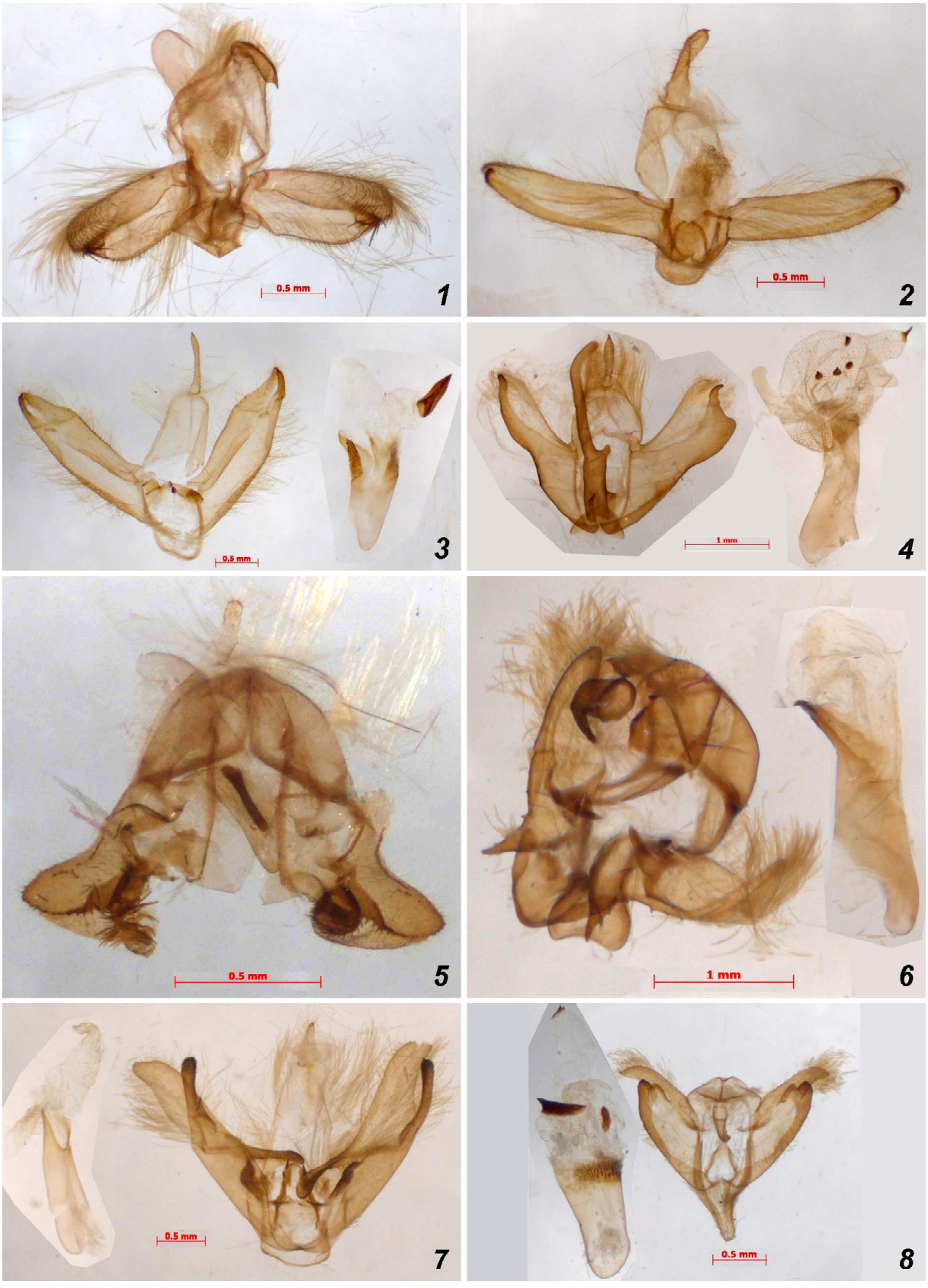
Description. Male. Forewing length 14 mm, ground colour greyish brown, costal margin convex at apical 1/3, yellow from base to 1/3 from apex. No visible adroconial scales beyond discal vein. Hindwing unicolorous light yellow. Head, patagiae and tegulae yellow; thorax greyish brown. Abdomen yellow.

Male genitalia (Fig. 3). Uncus moderate in width, slightly broadening to apex but strongly narrowed at tip. Valves with a narrowly constricted costal process of sacculus and a long ventral process, reflexed apically and reaching the cucullus apex. Juxta with an apical processes presented as spinulose brushes fused with lateroapical parts of aedeagus tube. Saccus short, broad, rounded at apex. Aedeagus very short, triangular, strongly broadening to apex. Vesica short, globular, without zones of scobination; cornutus single, massive, spine-like, as long as aedeagus diameter.

Diagnosis. By general appearance, the new species resembles the type species of the genus, *G. serva* (Walker, 1854) from the Himalaya but differs by the absence of

Figs 1–8. Male genitalia of Lithosiinae from Vietnam. 1 — *Dolgoma rectoides* sp.n., holotype, Kon Tum Prov., Ngoc Linh; 2 — *Dolgoma striata* sp.n., holotype, Khanh Hoa Prov., Hon Ba; 3 — *Gandhara vietnamica* sp.n., holotype, Kon Tum Prov., Ngoc Linh; 4 — *Danielithosia zolotuhini* sp.n., holotype, Kon Tum Prov., Ngoc Linh; 5 — *Prabhasa monastyrskii* sp.n., holotype, Kon Tum Prov., Ngoc Linh; 6 — *Denteilema unicolora* gen. et sp.n., holotype, Kon Tum Prov., Ngoc Linh; 7 — *Macotasa nedoshivinae* sp.n., holotype, Dong Nai, Vinh Cuu National Reserve; 8 — *Brunia gibonica*, Dong Nai, Vinh Cuu Nat. Res.

Рис. 1–8. Гениталии самцов Lithosiinae из Вьетнама. 1 — *Dolgoma rectoides* sp.n., голотип, Kon Tum Prov., Ngoc Linh; 2 — *Dolgoma striata* sp.n., голотип, Khanh Hoa Prov., Hon Ba; 3 — *Gandhara vietnamica* sp.n., голотип, Kon Tum Prov., Ngoc Linh; 4 — *Danielithosia zolotuhini* sp.n., голотип, Kon Tum Prov., Ngoc Linh; 5 — *Prabhasa monastyrskii* sp.n., голотип, Kon Tum Prov., Ngoc Linh; 6 — *Denteilema unicolora* gen. et sp.n., голотип, Kon Tum Prov., Ngoc Linh; 7 — *Macotasa nedoshivinae* sp.n., голотип, Dong Nai, заповедник Vinh Cuu; 8 — *Brunia gibonica*, Dong Nai, заповедник Vinh Cuu.


0.5 mm
1
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8

Fig. 9. *Dolgoma recta*, male genitalia, paratype, Thailand.
Рис. 9. *Dolgoma recta*, гениталии самца, паратип, Таиланд.

forewing androconial scales beyond the discal vein on the forewing upper surface. By the male genital structure, the new species is characterized by a shorter and apically constricted cucullus and a long apical process of sacculus which touch each other at their apices. In *G. serva* the cucullus apex is broader, not constricted, and noticeably more protruding than the sacculus apex. The vesica shape differs significantly in both species: it is short and globular in the new species and strongly tubular in *G. serva* Wlk. The cornutus shape is also different, straight and massive in the new species, while in *G. serva* Wlk. it is twice as narrow and curved basally.

Дифференциальный диагноз. По внешности новый вид очень похож на типовой вид рода *G. serva* (Walker, 1854) из Гималаев. Однако он отличается отсутствием андрокониальных чешуек за дискальной жилкой сверху передних крыльев. По строению гениталий самцов новый вид характеризуется более коротким кукуллюсом, суженным к вершине, длинным апикальным отростком саккулюса, соприкасающимся на вершине с вершиной кукуллюса. У *G. serva* вершина кукуллюса заметно шире, не сужена к апексу и заметно длиннее вершины саккулюса. Строение везики сильно отличается у обоих видов: она короткая и округлая у нового вида и сильно вытянутая у *G. serva* Wlk. Форма корнутуса также разная: он прямой и массивный у нового вида, тогда как у *G. serva* он в два раза уже и изогнут у основания.

Taxonomic remarks. *Gandhara serva* was recorded from Thailand [Černý, Pinratana, 2009]; however, the moth figured there on pl. 30, fig. 297 shows absence of androconial scales beyond the discal vein and therefore this record, most probably, should be also attributed to *Gandhara vietnamica* sp.n.

Danielithosia zolotuhini Dubatolov, **sp.n.**

Plate III: 5; Fig. 4.

Material. Holotype, ♂, Vietnam, Ngoc Linh, Kon Tum Prov., 14°45'–15°15' N, 107°21'–108°20'E, III–IV.2006, Monastyrsky. Paratype: 1♂, with the same data.

Description. Male. Forewing length 10–10.5 mm, yellowish buff with a diffuse brownish patch beyond discal cell and at discal vein. Hindwings unicolorously yellow. Head, patagiae, tegulae and thorax yellowish-buff. Abdomen greyish buff.

Male genitalia (Fig. 4). Uncus moderate in width and length, slightly broadening at 1/3 from apex but strongly narrowing at tip. Cucullus narrow, constricted towards apex. Sacculi asymmetrical. Left sacculus slightly bent at apex, its apical 1/3 rounded, its ventral edge slightly concave at middle. Right sacculus with a rectangular broadening with two rounded corners, apical process noticeably deflexed. Juxta apical process also asymmetrical, its left branch very long, 1.5 times longer than process base, reflexed at apex; right branch very small. Aedeagus thick, without processes or any armament. Vesica rounded, with four conical cornuti, and a process bearing the fifth spine-like cornutus at apex.

Diagnosis. By the general appearance of the male genitalia structure, the new species belongs to the *immaculata* group including: *D. immaculata* (Butler, 1880) from Japan, *D. mesospila* (Fang, 2000) from Sichuan, and *D. fuscipennis* Dubatolov, Kishida et Wang, 2012 from Nanling Mts. in Guangdong [Butler, 1880; Fang, 2000; Dubatolov et al., 2012]. All these species have similarly asymmetrical valves and apical process of juxta. However, the number of cornuti is different and rather constant within species: two in *D. fuscipennis*, three in *D. mesospila*, five in the new species, seven in *D. immaculata*.

Дифференциальный диагноз. По общему габитусу строения гениталий самцов новый вид относится к группе близких между собой видов: *D. immaculata* (Butler, 1880) из Японии, *D. mesospila* (Fang, 2000) из Сычуани, и *D. fuscipennis* Dubatolov, Kishida et Wang, 2012 из гор Наньлиня в Гуандуне [Butler, 1880; Fang, 2000; Dubatolov et al., 2012]. Все эти виды имеют близкие по строению асимметричные вальвы и апикальный отросток юксты. Однако число корнутусов заметно различается: два у *D. fuscipennis*, три у *D. mesospila*, пять у нового вида, семь у *D. immaculata*.

Prabhasa monastyrskii Dubatolov, **sp.n.**

Plate III: 6; Fig. 5.

Material. Holotype, ♂, Vietnam, Ngoc Linh, Kon Tum Prov., 14°45'–15°15' N, 107°21'–108°20' E, III–IV.2006, Monastyrsky. Paratype: 1♂, with the same data.

Description. Male. Forewing length 9.5 mm. Forewings elongate, costal margin slightly convex at apical third, dark grey with a lighter costal margin, a dark shadow beyond discal cell; there is an elongate patch of androconial scales in central cell along radial vein. Hindwings brownish-grey, with lighter bases.

Male genitalia (Fig. 5): uncus membranous, small, straight, finger-like. Tegumen membranous also. Sacculi almost fused by their ventral edges. Cucullus apex constricted subapically, forming an upturned oval process. This process has a dentate longitudinal keel and a dentate spherical bulb on its inner side, ventrally from the keel, this bulb possesses long chaetae on innerside. Transtilla membranose, not visible. Juxta reduced. Saccus short but wide, rounded. Aedeagus straight, with a long straight cornutus that is rounded at both apices.

Diagnosis. Species of the genus *Prabhasa* Moore, 1878 are similar in wing pattern and show well differentiated male genitalia structure: in both *P. venosa* Moore, 1878 and *P. plumbeomicans* Hampson, 1894, the apical processes of cucullus and sacculus are clearly visible, separated and with-

out any structure on the innerside [Dubatolov, Zolotuhin, 2011]; in the new species there is a single apical process of a complicated structure on the inner side.

Дифференциальный диагноз. Виды, правильно помещённые в род *Prabhasa* Moore, 1878, похожи по рисунку крыльев, но хорошо отличаются по строению гениталий самцов: у обоих видов *P. venosa* Moore, 1878 и *P. plumbeomicans* Hampson, 1894 вершинные отростки кукуллюса и саккулюса хорошо видны, разделены и без структурных изменений на внутренней стороне [Dubatolov, Zolotuhin, 2011]; у нового вида развит только один апикальный отросток вальвы, имеющий сложную структуру на внутренней стороне.

Macotasa nedoshivinae Dubatolov, **sp.n.**

Plate III: 7, 8; Fig. 7.

Material. Holotype, ♂, Vietnam, Dong Nai, Vinh Cuu Nat. Res., Ma Da, Rang Rang, 11.34704° N, 107.01208° E, h=78 m, 23–25.VI.2011, S. Nedoshivina, S. Pugaev, A. Solovyev. Paratype: 1♀, the same data as holotype; 1♂, 2♀♀, Vietnam, Dong Nai, Vinh Cuu Nat. Res., Hieu Liem, Chien Khu D, 11.26528° N, 106.98769° E, h=145 m, 20–22.VI.2011, S. Nedoshivina, S. Pugaev, A. Solovyev; 1♀, Vietnam, Dong Nai, Tan Phu, Nam Cat Tien, Da Ko, 11.46361° N, 107.46135° E, h=170 m, 09.VII.2011, A. Solovyev, S. Pugaev, S. Nedoshivina.

Description. Forewing length 10–12 mm in males, 12–13 mm in females. The species exhibits sexual dimorphism of the wing pattern. Male forewing elongate, with a convexity of costal margin at middle and a brownish black trapezoid spot at middle of costa. There is an elongate patch of androconial scales in discal cell along radial vein. Hindwing constricted at apex, yellow in basal, medial and tornal parts, with brownish grey apex and outer margin. Head and thorax brownish grey. Abdomen yellowish grey. Female forewing grey with lighter costal margin. There is a black triangular spot at costa at 3/5 from base and a subapical shadow. Hindwing yellow.

Male genitalia (Fig. 7). Uncus triangular. Cucullus narrow, constricted and slightly curved downwards at apex. Saccular apical process well sclerotized, shorter that cucullus apex, slightly broadened at apex and covered here with small spines. Valva base with a long costal process with a gradually enlargened club, also covered with small spines. Valva ventral margin with a light dilation covered with small spines. Juxta narrowly trapezoidal, with two apical spines on each side. Saccus short, broad. Aedeagus straight, with two apical processes. Vesica elongate, constricted at apex.

Diagnosis. By the male wing pattern and genitalia structure, the new species is similar to *M. nubeculoides* Holloway, 1982 from Malaysia and West Indonesia and *M. tortricoides* (Walker, 1862) from Borneo, Indochina and South China [Bucsek, 2012]. By the wing coloration, the new species differs from both related species by the yellowish (not grey) coloration of hindwings. The male genitalia exhibit much more remarkable differences: the new species lacks a long process originating from the ventral edge of the sacculus (such a process presented in both *M. tortricoides* and *M. nubeculoides*); only a dentate plate is present in the new species.

Дифференциальный диагноз. По рисунку крыльев и строению гениталий самцов новый вид близок к *M. nubeculoides* Holloway, 1982 из Малайзии и Западной Индонезии и *M. tortricoides* (Walker, 1862) из Борнео, Индокитая и Южного Китая. По расцветке крыльев новый вид можно отличить по желтоватой (не серой!) окраске задних крыльев. В гениталиях самцов у нового вида отсутствует длинный отросток, начинающийся от вентрального края саккулюса (развит у *M. tortricoides* и *M. nubeculoides*), и на его месте представлена только шиповидная площадка.

Denteilema Dubatolov, **gen.n.**

Plate III: 9; Fig. 6.

Type species: *Denteilema unicolora* Dubatolov, sp.n.

Description. Forewings elongate, with a nearly straight costal margin, unicolorous yellow, without pattern, with scattered androconial scales. Antennae flagellate. Male genitalia (Fig. 6): tegumen broad; uncus strong, hook-like; valve elongate, with distinct ventral process at base, and similar harpe-like process on inner surface of valve near the base; juxta small; saccus broadly triangular; aedeagus stout, straight, with an apical spur; there are no cornuti on vesica.

Diagnosis. By the male genitalia structure, the new genus is unlike to all other genera of the *Eilema* sensu lato generic group: no genus with such processes at the valve base (one on the ventral edge, another on the inner side) is known [Dubatolov, Zolotuhin, 2011]; presence of these processes might be considered as an autapomorphic character for the new genus.

Дифференциальный диагноз. По строению гениталий самца новый род совершенно не похож на другие роды группы *Eilema* sensu lato; присутствие вентрального отростка в основании вальвы и гарповидного отростка на внутренней стороне вальвы близ основания можно считать аутапоморфными признаками нового рода.

Denteilema unicolora Dubatolov, **sp.n.**

Plate III: 9; Fig. 6.

Material. Holotype, ♂, Vietnam, Ngoc Linh, Kon Tum Prov., 14°45'–15°15' N, 107°21'–108°20' E, III–IV.2006, Monastyrsky.

Description. Male. Forewing length 11.5 mm. Forewings brownish grey; androconial scales scattered through discal cell and beyond it. Hindwings unicolorly yellowish-grey.

Male genitalia (Fig. 6). Tegumen broad, bulging. Uncus strong, hook-like, curved downwards at middle. Valve elongate, slightly constricted and rounded apically; its ventral edge at base form a sclerotized triangular process directed downwards. Valve ventral edge with several small teeth, they are stronger on basal process. Harp-like process situated on inner surface of valve between costal and ventral margins at basal 1/4. Aedeagus stout, straight, with an apical spur directed upwards. Vesica short, globular, without cornuti or spiniculi areas.

Faunistic records

Brunia gibonica (Černý, 2009), **comb.n.**

Fig. 8.

Eilema gibonica Černý: Černý, Pinratana, 2009: 148–149, pl.30, fig.299a, b. Type locality: «SE Thailand, Tram, Lam Ngob, ban Noen-Ki-Lai, 156 m, 12°14' N, 102°24'35"E».

Material. Vietnam: 1♀, Dong Nai, Vinh Cuu Nat. Res., Hieu Liem, Chien Khu D, 11.26528° N, 106.98769° E, h=145 m, 20–22.VI.2011; 2♂♂, Dong Nai, Vinh Cuu Nat. Res., Ma Da, Rang Rang, 11.34704° N, 107.01208° E, h=78 m, 23–25.VI.2011; 1♂, Dong Nai, Vinh Cuu Nat. Res., Ma Da, Trung Uong Cuc Mien Nam (TWC), 11.37673° N, 107.06001° E, h=84 m, 04.VII.2011; 1♀, Dong Nai, Tan Phu, Nam Cat Tien, Da Ko,

11.46361° N, 107.46135° E, h=170 m, 08–10.VII.2011, leg. A. Solovyev, S. Pugaev, S. Nedoshivina.

Distribution. Thailand [Černý, Pinratana, 2009]; South Vietnam.

Remarks. The species was described without reference to the male genitalia. According to the male genital structure (Fig. 8) of externally similar specimens collected from Vietnam, it is typical member of the genus *Brunia* Moore, 1878 (type species: *Lithosia antica* Walker, 1854) with a narrow cucullus, broad sacculus with short apical process; short and stout aedeagus with a dentate plate at the apex, vesica with several strong but short spines on wide bases.

Brunia lacrima (Černý, 2009), **comb.n.**

Eilema lacrima Černý: Černý, Pinratana, 2009: 147–148, pl.30, fig.298. Type locality: «SE Thailand, Chanthaburi, Kaeng Hang Maew Dist., 10°4'41" N, 101°48'5" E».

Material. Vietnam: 1♀, Dong Nai, Tan Phu, Nam Cat Tien, Nui Tuong, 11.40479° N, 107.39160° E, h=121 m, 06.VII.2011; 2♀♀, Dong Nai, Tan Phu, Nam Cat Tien, Da Ko, 11.46361° N, 107.46135° E, h=170 m, 08–10.VII.2011, A. Solovyev, S. Pugaev, S. Nedoshivina.

Distribution. Thailand [Černý, Pinratana, 2009]; South Vietnam.

Remarks. The species was also described without reference to the male genitalia. Unfortunately, I could not obtain a male for dissecting. However, the species has the wing pattern similar to *Brunia nebulifera* (Hampson, 1900) [Holloway, 2001; Bucsek, 2012]. Thus, here I provisionally transfer *Eilema lacrima* Černý into the genus *Brunia* Moore.

Macotasa orientalis (Hampson, 1905)

Phæosia orientalis Hampson, 1905: 437 (male). Type locality: «Borneo, Kuching».

= *Ilema pentaspila* Hampson, 1907: 231 (female). Type locality: «Singapore».

Material. Vietnam: 2♀♀, Dong Nai, Vinh Cuu Nat. Res., Ma Da, Rang Rang, 11.34704° N, 107.01208° E, h=78 m, 23–25.VI.2011; 1♀, Dong Nai, Tan Phu, Nam Cat Tien, Da Ko, 11.46361° N, 107.46135° E, h=170 m, 08–10.VII.2011, A. Solovyev, S. Pugaev, S. Nedoshivina.

Distribution. Burma (Myanmar); China (Fujian, Yunnan [Fang, 2000]); Vietnam (a new record!); Thailand [Černý, Pinratana, 2009]; Singapore; Malacca [Bucsek, 2012]; Sumatra, Borneo.

Pseudoscaptia rothschildi (Draudt, 1912)

= *Scaptesyle bicolor* Rothschild, 1912: 241; non Walker, [1865]. Type locality: «Padang Rengas, Malay peninsula».

Scaptesyle rothschildi Draudt, 1912: 181, replacement name for *Scaptesyle bicolor* Rothschild, 1912.

Material. Vietnam: 2♂♂, Dong Nai, Vinh Cuu Nat. Res., Hieu Liem, Chien Khu D, 11.26528° N, 106.98769° E, h=145 m, 20–22.VI.2011, S. Nedoshivina, S. Pugaev, A. Solovyev.

Distribution. NE Himalayas; Vietnam (new record!); Thailand [Černý, Pinratana, 2009]; Malacca, Sumatra, Java, Borneo [Holloway, 2001].

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Вклейка III ❖ Plate III

V.V. Dubatolov. P.507–512. Plate III: 1–9. New species of Lithosiinae from Vietnam. 1 — *Dolgoma rectoides* sp.n., holotype, male, Kon Tum Prov., Ngoc Linh; 2–3 — *Dolgoma striata* sp.n., holotype, male (2) and paratype, female (3), Khanh Hoa Prov., Hon Ba; 4 — *Gandhara vietnamica* sp.n., holotype, male, Kon Tum Prov., Ngoc Linh; 5 — *Danielithosia zolotuhini* sp.n., holotype, male, Kon Tum Prov., Ngoc Linh; 6 — *Prabhasa monastyrskii* sp.n., holotype, male, Kon Tum Prov., Ngoc Linh; 7-8 — *Macotasa nedoshivinae* sp.n., holotype, male (7) and paratype, female (8), Dong Nai, Vinh Cuu National Reserve; 9 — *Denteilema unicolora* gen. et sp.n., holotype, male, Kon Tum Prov., Ngoc Linh. Scale bars — 1 cm.

В.В. Дубатолов. С.507–512. Вклейка III: 1–9. Новые виды Lithosiinae из Вьетнама. 1 — *Dolgoma rectoides* sp.n., голотип, самец, Kon Tum Prov., Ngoc Linh; 2–3 — *Dolgoma striata* sp.n., голотип, самец (2) и паратип, самка (3), Khanh Hoa Prov., Hon Ba; 4 — *Gandhara vietnamica* sp.n., голотип, самец, Kon Tum Prov., Ngoc Linh; 5 — *Danielithosia zolotuhini* sp.n., голотип, самец, Kon Tum Prov., Ngoc Linh; 6 — *Prabhasa monastyrskii* sp.n., голотип, самец, Kon Tum Prov., Ngoc Linh; 7-8 — *Macotasa nedoshivinae* sp.n., голотип, самец (7) и паратип, самка (8), Dong Nai, заповедник Vinh Cuu; 9 — *Denteilema unicolora* gen. et sp.n., голотип, самец, Kon Tum Prov., Ngoc Linh. Масштабные линейки — 1 см.

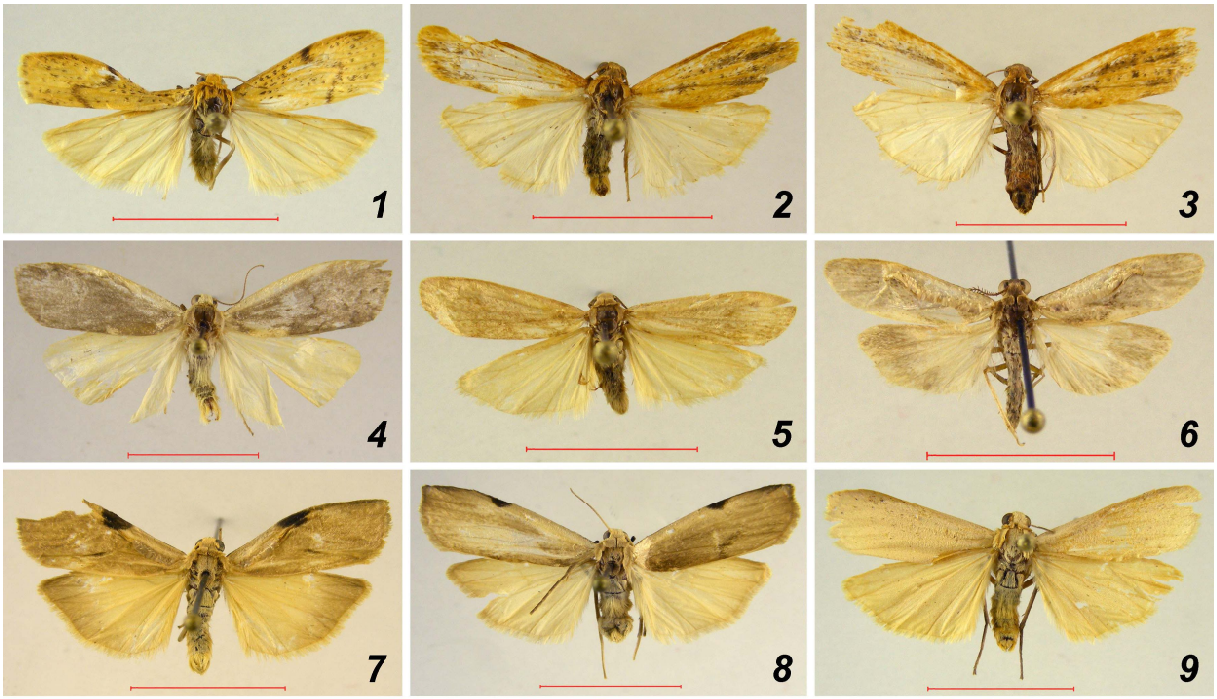
Г.В. Николаев, Б. Ван, Х. Жан. С.503–505. Вклейка III: 10. Отпечаток *Crassisorus fractus* sp.n., голотип NIGP 154227.

G.V. Nikolajev, B. Wang, H. Zhang. P.503–505. Plate III: 10. *Crassisorus fractus* sp.n., holotype NIGP 154227.

Вклейка IV ❖ Plate IV

R.V. Yakovlev. P.513–516. Plate IV: 1–7. *Chingizid* spp., общий вид (1–6) и типовое место (7): 1–2 — *Ch. gobiana* (Daniel, 1970), ♂, голотип (1) и ♀, аллотип (2); 3–4 — *Chingizid transaltaica* (Daniel, 1970), ♂, голотип (3) и ♀, аллотип (4); 5–7 — *Ch. kosachevi* sp.n.: ♂, голотип (5), ♀, паратип (6), долина р. Шураг-Гол (Shurag-Gol), июль 2005 г., фото Д.В. Рыжкова (7).

Р.В. Яковлев. С.513–516. Вклейка IV: 1–7. *Chingizid* spp., habitus (1–6) and typy locality (7): 1–2 — *Ch. gobiana* (Daniel, 1970), ♂, holotype (1) and ♀, allotype (2); 3–4 — *Chingizid transaltaica* (Daniel, 1970), ♂, holotype (3) and ♀, allotype (4); 5–7 — *Ch. kosachevi* sp.n.: ♂, holotype (5), ♀, paratype (6), Shurag-Gol valley, July 2005, photo by D.V. Ryzhkov (7).



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