

*Cretonotos fasciatus* (Candèze, 1927) (Lepidoptera, Arctiidae),  
a little known species from an Indochina  
sibling to *C. gangis* (Linnaeus, 1763),  
with a description of a new subspecies from Laos and Hong Kong

*Cretonotos fasciatus* (Candèze, 1927) (Lepidoptera, Arctiidae),  
малоизвестный вид из Индокитая, близнец *C. gangis* (Linnaeus,  
1763), с описанием нового подвида из Лаоса и Гонконга

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**Key words:** Arctiidae, tiger-moths, new subspecies, Indochina, *Cretonotos gangis* complex.

**Ключевые слова:** Arctiidae, медведицы, новый подвид, Индокитай, комплекс *Cretonotos gangis*.

**Abstract.** A new subspecies, *Cretonotos fasciatus pljustshi* Dubatolov, **ssp.n.**, from Laos and Hong Kong which is morphologically related to *C. fasciatus* (Candèze, 1927) from Cambodia, is described. The species is characterized by dentate male antennae, whitish hind-wings in males, but the new subspecies has better than the *C. fasciatus* expressed darker forewing colouration similar to the type of *C. gangis*. The closely related *C. gangis* – *C. interrupta* species complex is characterized by flagellate antennae and the darker colouration of the hind-wings and the ventral side of abdomen in males.

**Резюме.** Из Лаоса и Гонконга описан новый подвид *Cretonotos fasciatus pljustshi* Dubatolov, **ssp.n.**, морфологически близкий к *C. fasciatus* (Candèze, 1927) из Камбоджи. Этот вид характеризуется зубчатыми усиками, белыми задними крыльями самцов; новый подвид имеет более широкий тёмный рисунок передних крыльев, не отличающийся от такового *C. gangis* (L.). У близкого комплекса видов *C. gangis* – *C. interrupta* усики самцов всегда простые, а задние крылья самцов и брюшко снизу тёмные.

*Cretonotos gangis* (Linnaeus, 1763) appears to be a complex of closely related species with a distribution from South-Western Asia to Northern Australia [de Freina, 2007; Dubatolov, 2010]. However, a complete review of this complex remains impossible because of the unrecorded type locality of *Cretonotos interrupta* (Linnaeus, 1767). The first task of such review should be a dissection of the lectotype of *interrupta* designated by K. Mikkola and M. Honey [1993]. Nevertheless, there is one more related species from Indochina with quite different dentate antennae in males and reduce pattern of forewings — *C. fasciatus* (Candèze, 1927). In 2008 Dr. I. Pljustsh (Kiev, Ukraine)

sent me a number of tiger-moths collected by him in Laos. The material includes a *Cretonotos* species with dentate antennae in males but with a forewing pattern typical to *C. gangis* L. This species does not belong to the *C. gangis* species complex which have flagellate antennae. However, the male genitalia structure of the specimens from Laos does not differ significantly from those of the *C. fasciatus* type and appear to be its undescribed subspecies. Similar specimens with dentate male antennae from Hong Kong were found in Mr. P. Haynes' private collection. Description of the new subspecies is given below.

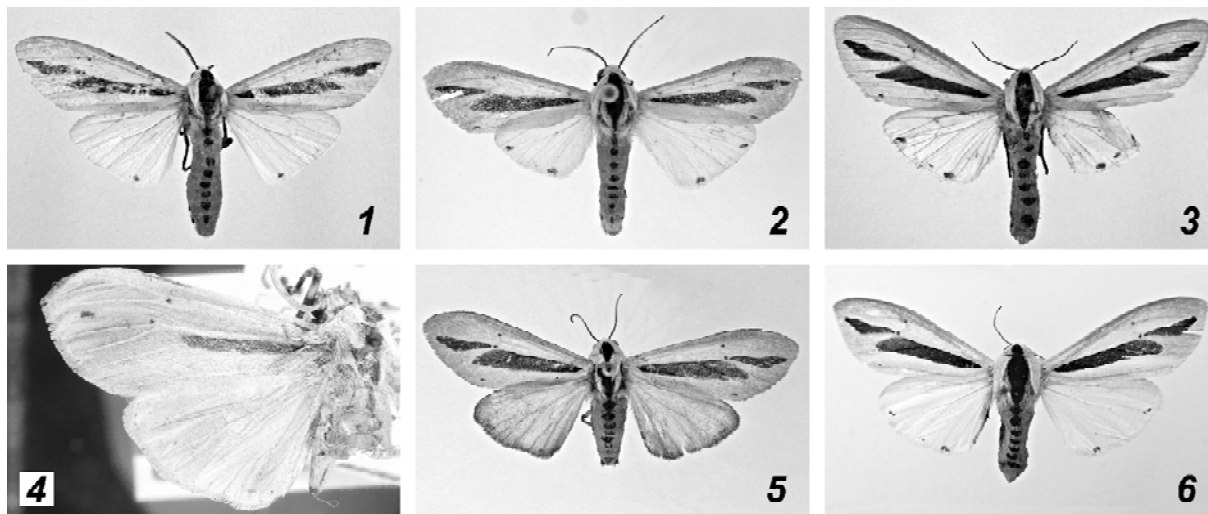
Abbreviations used: IP — I. Pljustsh private collection (Kiev, Ukraine); PGH — P.G. Haynes private collection (London, U.K.); SZMN — Siberian Zoological Museum of the Institute of Systematics and Ecology of Animals (Novosibirsk, Russia); BMNH — Natural History Museum (London, U.K.).

*Cretonotos fasciatus pljustshi* Dubatolov, **ssp.n.**

Figs 1–3, 7–11, 17.

**Material.** Holotype, ♂, Laos, Vangvieng, 400 m, 16.IV.1996, I. Pljustsh leg. Deposited in SZMN. Paratypes: 2♂♂, 1♀, the same label as the holotypus (SZMN); 7♂♂, 2♀♀, the same locality, 16–17.IV.1996, I. Pljustsh leg. (IP); 2♀♀, Laos, Louang Namtha circ., 20.IV.1996, I. Pljustsh leg. (IP); 3♂♂, Hong Kong, New Territories, Sai Kung Country Park, Pak Sha O, h-100 m, BMNH(E) #805639-805641, 3, 5, 19.VIII.1989, W.J. Tennent leg. (PGH, BMNH).

**Description.** Forewing length 17.5 (holotype) – 18.5 mm (♂♂), 19 mm (♀). Head covered with beige rough scales. Palpi short, porrect. Antennae dark, bipectinate, length of short branches at the middle part of antennae is nearly equal to the antennae diameter, while length of longer branches are 1.5 times antennae diameter. Thorax beige, with a wide blackish longitudinal stripe. Forewing pattern as in the sim-



Figs 1–6. *Cretonotos* moths. 1–3 — *C. fasciatus pljustshi* ssp.n., paratypes: ♂, Laos, Vangvieng (1); ♀, Laos, Vangvieng (2); ♂, Hong Kong (3); 4 — *C. fasciatus*, holotype, ♂, Cambodia; 5 — *C. gangis*, ♂, Indonesia, Java, Nongkodjadjar; 6 — *C. gangis*, ♀, Indonesia, West Sumatra, Mt. Sanggul.

Рис. 1–6. Бабочки рода *Cretonotos*. 1–3 — *C. fasciatus pljustshi* ssp.n., паратипы: ♂, Лаос, Вангвиенг (1); ♀, Лаос, Вангвиенг (2); ♂, Гонконг (3); 4 — *C. fasciatus*, голотип, ♂, Камбоджа; 5 — *C. gangis*, ♂, Индонезия, Ява, Нонгкоджаджар; 6 — *C. gangis*, ♀, Индонезия, Западная Суматра, гора Сангул.

ilar *C. gangis* species complex: wing ground colour beige, with wide blackish stripe from the wing base beyond the posterior vein of the cell towards the discal vein, with a triangular process between veins  $Cu_1$  and  $Cu_2$ . There is an elongate triangular spot directed from the posterior end of the discal vein to the external part of the vein  $M_1$ ; this spot has a very small hollow in the middle of the anterior margin. Two small black dots are frequently found at the anterior end of the discal vein and between bifurcation of veins  $M_1$  and  $R_{2+5}$ . One blackish dot in several specimens is visible in the submarginal part of the vein A. Hindwings of males whitish, without any grey suffusion, and with a fuscous blackish submarginal dot near the tornus; the female specimen has two additional submarginal dots in medial and beyond the cubital part of the wing. Wing underside is light, without dark suffusion, but with diffuse components of the upper pattern. Abdomen dorsally red, with a longitudinal row of wide oval black spots; underside is beige in the nominotypical population and dark greyish-brown in specimens from Hong Kong.

Male genitalia (Figs 7–11): uncus narrowly triangular; tegumen «collar» well developed. Valvae narrow, weakly curved, approximately 10 times narrower than length, and with a subapical spine on the ventral side at 1/5 of its length from the apex. Juxta also with very long apical process, approximately 2.5 times longer than the main part of juxta. Saccus triangular, more elongate than in the former species. Aedeagus strongly upturned at the apex, and slightly curved anteriorly. Vesica with 5 patches of strong spine-like cornuti (noticeably stronger than in the *C. gangis* complex), the dorsal patch is longitudinally enlarged forming a longer band than in *C. gangis* species complex; the lateral transversal cornuti band of *C. gangis* complex is widely disrupted into two small patches, the posterior patch located very close to a patch near the vesica base. The posterior patch is several times larger than the same in *C. gangis* species complex. Ventral side of vesica with a semisclerotized band. Coremata (Fig. 17) small if present; VIII sternite with a packet, but without noticeable hairs.

**Diagnosis.** The new subspecies is easily confused with the *C. gangis* (L.) species complex. The main distinguishing characters are: bidentate (not flagellate) antennae and white (not with grey suffusion) hindwings in males. In male genitalia, the structure of cornuti patches has the strongest taxonomical value and is similar to those of the *C. fasciatus* (Candèze) type. However, the dark forewing pattern of *C. f. fasciatus* is much reduced and expressed as a narrow stroke beyond the hind vein of the central cell and a small dash between veins  $M_1$  and  $M_2$ .

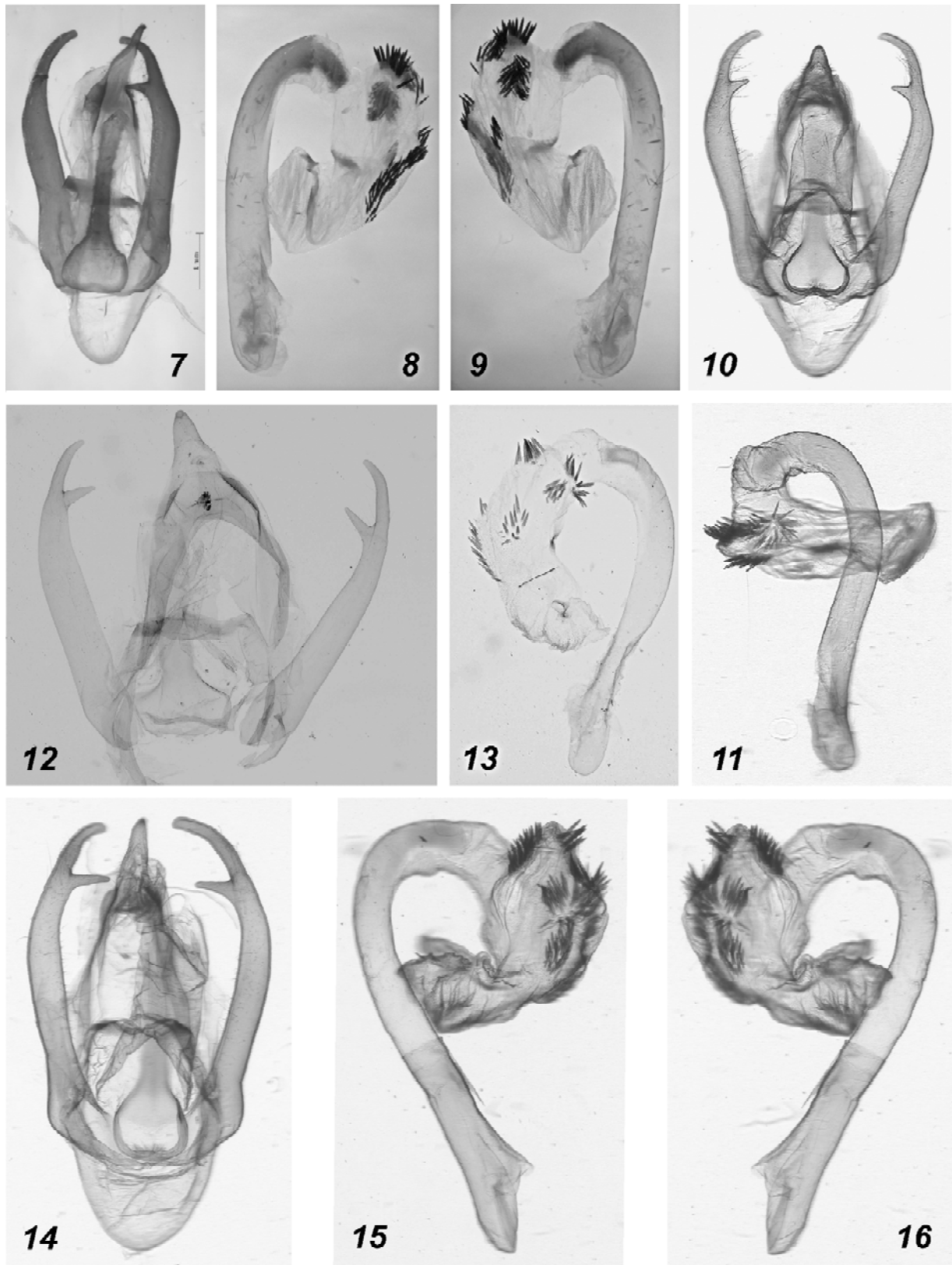
**Дифференциальный диагноз.** Новый подвид легко спутать с видами комплекса *C. gangis* (L.). Основной отличительный признак *C. fasciatus* (Candèze), в том числе нового подвида *C. f. pljustshi* ssp.n., двузубчатые усики и белые (без серого затемнения) задние крылья самцов. В строении гениталий самцов расположение и форма групп корнутусов на везике имеет наибольшее таксономическое значение, они у нового подвида сходны с таковым *C. fasciatus*. Тем не менее, тёмный рисунок на передних крыльях *C. f. fasciatus* сильно редуцирован до узкой полосы за задней жилкой центральной ячейки и маленького штриха между жилками  $M_1$  и  $M_2$ .

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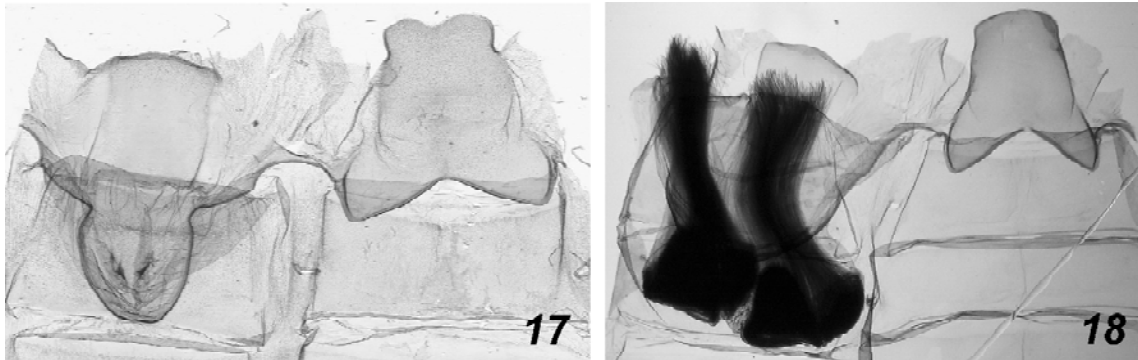
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Figs 7–16. *Cretonotos* male genitalia. 7–11 — *C. fasciatus pljustshi* ssp.n.: holotype, Laos, Vangvieng (7–9); paratype, Hong Kong (10–11); 12–13 — *C. fasciatus*, holotype, Cambodia; 14–16 — *C. gangis*, Indonesia, Java, Nongkodjadjar, BMNH, by courtesy of M. Honey and P. Haynes. General view without aedeagus (7, 10, 12, 14), aedeagus, right side (8, 15) and left side (9, 11, 13, 16).

Рис. 7–16. *Cretonotos*, гениталии самцов. 7–11 — *C. fasciatus pljustshi* ssp. n.: голотип, Лаос, Вангвиенг (7–9); паратип, Гонконг (10–11); 12–13 — *C. fasciatus*, голотип, Камбоджа; 14–16 — *C. gangis* L., Индонезия, Ява, Нонгкоджаджар. Вид сзади без эдегуса (7, 10, 12, 14), эдегус, правая сторона (8, 15) и левая сторона (9, 11, 13, 16).



Figs 17–18. *Cretonotos* male terminal abdominal segments. 17 — *C. fasciatus pljustshi* ssp.n., holotype, Laos, Vangvieng; 18 — *C. gangis*, Indonesia, Java, Nongkodjadjar, BMNH, by courtesy of M. Honey and P. Haynes.

Рис. 17–18. Вершинные склериты брюшка самцов. 17 — *C. fasciatus pljustshi* ssp.n., голотип, Лаос, Вангвиенг; 18 — *C. gangis*, Индонезия, Ява, Нонгкоджаджар.

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