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Description of new taxa of tiger moths from China, with some synonymic notes

(Lepidoptera, Arctiidae)

by

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Abstract: Four new species and one new subspecies from China are described. They are: *Spilarctia murzini* **spec. nov.** from Shaanxi, which belongs to the *S. punctata*-group; *Murzinarctia murzini* **gen.** et **spec. nov.** from Yunnan, by the wings pattern resembling *Spilarctia irregularis* (ROTHSCHILD, 1910) and *Andala unifascia* WALKER, 1855, but differing strongly by the ♂ genitalia structure; *Orontobia murzini* **spec. nov.** from Sichuan, differing from other *Orontobia* species by carmine-red hindwings and the ♂ genitalia structure; *Platarctia murzini* **spec. nov.** from Shaanxi and South Gansu differs from sibling *P. souliei* (OBERTHÜR, 1903) from Sichuan by the shape of subapical stripe and the transversal band on forewings not divided into two parts and also by the ♂ genitalia structure; *Eucharia ferstiva murzini* **subspec. nov.** is described from Yunnan by a single ♀ which is the darkest among all known subspecies.

New synonymys are established: *Orontobia secreta* (DRAUDT, 1931) **comb. nov.** = *Orontobia dalailama kansuensis* DE FREINA, 1997 **syn. nov.**; *Sinowatsonia mussoti* (OBERTHÜR, 1903) **comb. nov.** = *Sinowatsonia batangi* (DANIEL, 1943) **syn. nov.**; *Spilosoma mienshanicum* DANIEL, 1943 = *S. streltzovi* DUBATOLOV, 1996 b **syn. nov.**

According to the ♂ genitalia structure, the genus *Nebrarctia* WATSON, 1980, in addition to the type species *N. semiramis* (STAUDINGER, [1892]), should include also *N. guttata* (ERSCHOFF, 1874) **comb. nov.**, *N. transversa* (MOORE, 1879) **comb. nov.**, *N. wiltshirei* (DE TOULGOËT, 1962) **comb. nov.**, and *N. hunza* (DE FREINA, 1997) **comb. nov.**.

While studying the rich tiger moth collection of Prof. V. S. MURZIN (Moscow, Russia), several new taxa from China were revealed. Prof. MURZIN kindly presented the holotypes of these taxa, described below, to the collection of the Siberian Zoological Museum of the Institute of Animal Systematics and Ecology, Novosibirsk, Russia. (**Zusammenfassung** siehe Textende.)

Spilarctia (punctata) murzini spec. nov.

(colour plate 13, fig. 1)

Material: Holotype ♂, C. China, Shaanxi, Tai Bai Shan Mts, 1600 m, 33°35'N, 107°43'E, 20.VIII.-5.IX.1998, leg. V. MURZIN & V. SINIAEV.

Forewing length 16,5 mm. Antennae blackish, with long branches. Body and wings dark yellow. Forewings with three costal spots, subbasal and subapical triangular, middle one trapezoid. A small triangular black spot located at cell fore distal angle. There are two black spots located above anal vein, and four submarginal ones at veins Cu_1, M_3, M_1, R_5. Two middle spots crossed

by light veins. There is also a scarcely seen brownish diffuse line going from wing apex towards black spot at anal vein. There are less visible diffuse brownish darkening around discal vein, and a poorly visible a trace of angular diffuse dark band going between subbasal black spots from costa to vein A. Hindwings only slightly lighter, with a dark spot at fore part of discal vein, two large spots at tornal angle, and an oval submarginal spot between veins M_1 and M_2. To this spot, an another small diffuse spot is connected at the other side of vein M_2.

♂ genitalia (fig. 1): uncus triangular, narrowing to apex. Valvae finger-like, noticeably curved inwards, with two apical angles, dorsal one broad and rounded while ventral one narrower and triangular. Aedeagus simple, vesica also simple, with two sclerotized plates near base, proximal one large, triangular, connected with aedeagus while distal one small and diffuse.

The new species belongs to the *Spilarctia punctata*-group, which was revised by W. THOMAS (1993). According this review, this is the first known species of this group from China, and the third one from the continent. *S. ummera* SWINHOE, 1889 from Burma, Bassein, lacks black spots on the forewings except for few very small black submarginal spots below apex. Another species, *S. gopara* (MOORE, 1859) from South-East India (Darjeeling, Sikkim, West Bengal, Khasia Hills), has the hindwings densely covered with black, with a narrow yellow border, which is widest up to the discal vein, at apex. By the wing pattern, the most similar to the new species are *S. percellens* THOMAS, 1993 from Malaysia, and *S. kareli* THOMAS, 1993 from Philippines. The former has the valva of quite different structure, with long apical processes, while the latter is very similar by the male genitalia also. Nevertheless, in this species the valvae are straight while in the new species they are noticeably curved inwards. The distal sclerotized plate on the vesica in *S. kareli* THOMAS, 1993 is noticeably larger than that of the new species. Besides the quite distant ranges also indicate that these are good species.

Murzinarctia gen. nov.

Type species: *Murzinarctia* ***murzini*** **spec. nov.**

Antennae bipectinate, with moderately short branches, in ♂♂. Eyes large, oval, strongly convex, naked. Palpi porrect, with an apical unit slightly curved down, longer that dense long hairs on frons. Proboscis slightly longer than palpi. Fore tibia simple, narrow, with epiphysis reaching apical one-fourth of tibia length. Middle tibia with one apical pair of narrow spurs, hind one with two pairs of them, which are shorter than tibia diameter. Claws not strongly curved, without visible incision. On forewings, vein R_2 stalked with R_{3+5} (venation type C by SOTAVALTA, 1964). Forewing yellowish grey, with a median transversal band and traces of spot rows, all costal spots being darker. Hindwings whitish.

♂ genitalia (fig. 2): uncus broad, of a triangle shape. Valvae elongate, with a slightly convex-concave base and a long finger-like apical processus. Costal edge of valva with a short bent processus. Juxta very short. Saccus short, triangle. Aedeagus slightly sclerotized at apex, with a short globular vesica.

Murzinarctia ***murzini*** **spec. nov.**

(colour plate 13, fig. 2)

Material: Holotype ♂, China, NE Yunnan, Tiger Laping Gorge, Upper Chang Jiang (Jinsha

Jiang), 1900 m, VI.1998, leg. S. MURZIN. Paratype ♂, the same data.

Fore wing length 13 mm. Forewing pattern not well defined, forewings with a large costal spot near base and an opposide narrow stripe on hind margin. Medial band with a small enlargement at vein Cu_2 base. Postdiscal series of spots consists of two larger spots at costa and hind margin, and few small spots on veins M_2, M_3, Cu_1 and Cu_2. Submarginal spots better visible only at costa and hindwing margin, two spots, on vein Cu_2 and between veins M_1 and M_2, poorly visible. Hindwings white without any spots.

Systematic notes: Although the wing pattern of the new species resembles the type of some *Spilosoma-Spilarctia* species, like *Spilarctia irregularis* (ROTHSCHILD, 1910) (colour plate 13, fig. 3), and also of *Andala unifascia* WALKER, 1855 (colour plate 13, fig. 4), its ♂ genitalia differ significantly at a generic level. This is the second genus of Spilosomini with convex-concave valvae bearing an apical processus, such a type is more characteristic for the Arctiini s. str. genera. The North American *Pyrrharctia isabella* (J. E. SMITH, 1797) also has valvae of the same type (fig. 3), but with numerous teeth on their hind margin, and the juxta in the mentioned species is much larger. *S. irregularis* ROTHSCH. has the valva structure (fig. 4) typical for the *Spilarctia* species, with three processes are located near the valva apex. *Andala unifascia* WLK. has a broad elongate valva (fig. 5) with a broad triangular prominence on its ventral margin near the base. All other species that were treated within the genus *Andala* WLK. (DUBATOLOV, 1996b) have quite a different ♂ genital structure, with an elongate valva and one processus on its inner edge (figs. 6-10). But it is such genitalia structure which is characteristic for the genus *Nebrarctia* WATSON, 1980 (WATSON *et al.*, 1980). Therefore, those species should be transferred to *Nebrarctia*, which now includes: *N. guttata* (ERSCHOFF, 1874) **comb. nov.**, *N. transversa* (MOORE, 1879) **comb. nov.**, *N. wiltshirei* (DE TOULGOËT, 1962) **comb. nov.**, *N. hunza* (DE FREINA, 1997) **comb. nov.**, and the type species *N. semiramis* (STAUDINGER, 1891 [1892]) **comb. nov.**

Orontobia ***murzini*** **spec. nov.**

(colour plate 13, fig. 5)

Material: Holotype ♂, China, Sichuan SW, Xiancheng, 3000 m, 1.VIII.1996, S. MURZIN leg. Paratypes: 1 ♂, China, Sichuan SW, 40 km E. Xiancheng, 4700 m, 3.VIII.1996, leg. et coll. S. MURZIN; 1 ♂, China, Sichuan SW, Da Xue Shan. Ya, Kou pass, 4600 m, 3.VII.1996, leg. et coll. S. MURZIN; 2 ♂♂, China, N Sichuan, pass btw. Songpan & Nanping, Kungani pass, 3600 m, 10.VII.2005, A. GORODINSKI leg. et D. PETROV leg., coll. S. MURZIN.

Fore wing length 18 mm. Antennae double serrate. Palpi porrect. Eyes small, oval, naked, located on ocular sclerite which is covered with hairs. Body entirely covered with black hairs, abdomen top with red hairs on sides and apex. Forewings very dark brown, almost black, with a slightly yellowish stripe along costa narrowing towards wing apex. Hind wings black from base to discal area, outer wing part carmine-red, crossed with dark veins, with few elongate spots along outer margin and a dark fringe.

♂ genitalia (fig. 11): Uncus elongate, not as long as in other species of the genus (DE FREINA, 1997). Valvae narrow and elongate, apical processus long, with an apical club. Costal edge of valva with two small smooth prominences. Peniculi well developed, covered with small teeth. Saccus triangular. Aedeagus moderately small, with one highly sclerotized plate covered with

small teeth on the right side at vesica base. Vesica without visible cornuti.

Systematic notes: The genus was described by DE FREINA (1997), it includes: *O. dalailama* DE FREINA, 1997 from Tibet (the type species), *O. d. kansuensis* DE FREINA, 1997 from Gansu, *O. taglangla* DE FREINA, 1997 from the Indian Ladakh, *O. mooseri* DE FREINA, 1997 from East Tibet, and *O. coelestina* (PÜNGELER, 1904) from the Altyn-Dagh (Xinjiang/Qinghai). However, *O. dalailama kansuensis* DE FREINA has not any distinctions from *Oroncus secreta* DRAUDT, 1931 (colour plate 13, fig. 6), which was described from "N. Kansu" (North Gansu, China), so, both taxa were described from the same territory, they have the costal white stripe on the forewings of the same shape, and a continuous submarginal band, disrupted only once in median part of the hindwings. So, I consider *Orontobia secreta* (DRAUDT, 1931) **comb. nov.** = *Orontobia dalailama kansuensis* DE FREINA, 1997 **syn. nov.**, and the taxon *dalailama* DE FREINA should be considered as a subspecies *Orontobia secreta dalailama* DE FREINA, 1997 **com. nov.**

The new species strongly differs from other species of the genus by carmine-red hind wings, which are yellowish, whitish or almost dark in other known species (DE FREINA, 1997), and the only other species with a nice white costal stripe is *O. secreta* DRDT. But the latter species is characterized by a presence of a submarginal dark band on the hindwings located somewhat apart from the outer margin, while in the new species there are only small submarginal spots, parallel and very close to the outer margin. By the ♂ genitalia, *O. secreta* DRDT. and *O. mooseri* DE FREINA have apical processus of valva being bifurcated at apex, and the only know species with an apical club is *O. taglangla* DE FREINA. Nevertheless, in the latter species the peniculi lack teeth, and the aedeagus and vesica bear several patches of small teeth, moreover, this species is the darkest coloured in the genus, without a costal white stripe on the forewings.

Eucharia festiva ***murzini*** **subspec. nov.**

(colour plate 13, fig. 7)

Material: Holotype ♀, China, N Yunnan, env. Xiaguan, 2100 m, 28.VII.2002, S. MURZIN, I. SHOKHIN leg.

Forewing length 22 mm. Forewings elongate, almost black. Hindwings black with red base. Body black, with some red scales on patagiae; two rows of red spots present on each sides of abdomen tergites; these spots descrease in size from base to segment 6; apical segments almost black.

Notes on systematics. The new subspecies is the third one with almost dark ♀♀. Two were described earlier: *E. f. interposita* (O. BANG-HAAS, 1927) from Central Asian mountains and *E. f. arafati* (DE FREINA, 1997) from Syria; ♀♀ of both subspecies have two black bands on the red hindwings, a discal and submarginal one, while in the new subspecies, the red colouration is much reduced to a small spot at the base. Moreover, in two known subspecies with black forewings in ♀♀, the rows of red spots on the dorsal side of the abdomen are located more laterally than in the new subspecies. *E. f. murzini* **subspec. nov.** is the southernmost in the world. In China, the species was formerly known only from northern provinces: Xinjiang, Hebei (FANG, 2000) and from the border between Nei Mongol and Hebei (GRUM-GRSHIMAILO, 1900). Specimens from Xinjiang, according to the ♂ figure in FANG (2000: pl. VI, fig. 1), belong to *E. f. sartha* (STAUDINGER, 1886), while in Nei Mongol and Hebei another subspecies, *E. i. collaris* (GRUM-GRSHIMAILO,

[1900] 1899), occurs, with very light ♀♀ (FANG, 1985: pl. VII, fig. 103).

Platarctia **murzini spec. nov.**
(colour plate 13, fig. 8)

Material: Holotype ♂, Shaanxi, Tai Bai Shan, 1600 m, 33°35'N, 107°43'E, 20.VIII.-5.IX.1998, S. MURZIN & V. SINIAEV leg. Paratype ♀, South Gansu, env. Langmusi, 4100 m, 17.-18.VII.1997, S. MURZIN leg., in collection of V. S. MURZIN, Moscow, Russia.

Forewing length 24 mm. Antennae black, bipectinate, with moderately short branches. Head and thorax covered with rough brown and few red hairs. Tegulae outlined with yellow. Abdomen red dorsally with a row of brown spots. Forewings very dark brown with yellowish bands and stripes. There are two longitudinal stripes at base, the fore one is straight and connecting with a spot in the cell, the hind one is slightly arch-curved and directed behind the base of vein Cu_2. The holotype has two transversal spots in cell, while the paratype – three such spots, all except for the distal one sharply narrowing below. One more stripe is directed from distal part of hind margin to vein Cu_2. The full transverse band stretchs from costa along the external side of discal vein towards hind angle; this band has a swelling at middle, between Cu_1 and M_3. Subapical spot almost straight in the holotype, slightly S-curved in the paratype, its hind end curved towards swelling of transversal band. Hindwings brightly red, with a submarginal band broken between veins Cu_1 and M_3. Both specimens have crescent-shaped discal spot and a long stripe along vein A_2. Other spots differ in type specimens: the holotype has two small stripes at hind vein of cell, distal one being located at base of vein Cu_2, while the paratype has a large V-shaped spot in this place and a very small trace on hind vein of cell near wing base.

♂ genitalia (fig. 13) are typical for the genus (see: SOTAVALTA, 1965), uncus moderately long, peniculi very wide at base, strongly curved and sharply narrowing towards apex, covered with spines.

The new species by its appearance is very similar to *P. souliei* (OBERTHÜR, 1903) from Sichuan (colour plate 14, fig. 9-11), nicely figured by SOTAVALTA (1965), but the subapical stripe and transversal band are not divided into two parts. In the ♂ genitalia, the uncus of the new species is noticeably longer and the peniculi are curved and narrowing at the apex, while in *P. souliei* (OBTH.) (fig. 14) they are straight and widely rounded at the apex. With further accumulation of material, the taxonomy within this group is to be improved, and maybe more species can be discovered. Anyway, for correct nomenclature the existing names must be bound to type specimens. For this reason, hereby I designate the figured ♂ specimen (colour plate 14, fig. 9-10) as the lectotype of *Platarctia souliei* (OBERTHÜR, 1903), it is deposited in the British Museum of Natural History (London).

Synonymic notes

Sinowatsonia mussoti (OBERTHÜR, 1903) **comb. nov.**, based on a ♀ (colour plate 14, fig. 11) = *Sinowatsonia batangi* (DANIEL, 1943) **syn. nov.** (see DUBATOLOV, 1996a: 89, fig. 1a), based on ♂. *Spilosoma mienshanicum* DANIEL, 1943 = *S. streltzovi* DUBATOLOV, 1996b **syn. nov.** After studying the topotype material, and an additional ♂ from Heilongjiang (the first record from this province), I have not found any differences in the ♂ genitalia between forms with red (*mienshanicum*) and yellow (*streltzovi*) abdomens (figs. 12-14, colour plate 14, figs. 15, 16).

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Zusammenfassung: Aus China werden vier neue Arten und eine neue Unterart beschrieben. Es sind diese: *Spilarctia murzini* **spec. nov.** von Shaanxi, die zur *S. punctata*-Gruppe gehört; *Murzinarctia murzini* **gen.** et **spec. nov.** von Yunnan, die aufgrund der Flügelmuster *Spilarctia irregularis* (ROTHSCHILD, 1910) und *Andala unifascia* WALKER, 1855 ähnelt, sich jedoch deutlich durch die ♂-Genitalstrukturen unterscheidet; *Orontobia murzini* **spec. nov.** von Sichuan, die sich von den anderen *Orontobia*-Arten durch die karminroten Hinterflügel und durch das ♂-Genital unterscheiden läßt; *Platarctia murzini* **spec. nov.** von Shaanxi und Süd-Gansu unterscheidet sich von der „sibbling species" *P. souliei* (OBERTHÜR, 1903) aus Sichuan durch die Form des subapikalen Streifens und dem transversalen Band des Vorderflügels, das nicht getrennt ist wie auch durch das ♂-Genital; *Eucharia ferstiva murzini* **subspec. nov.** wird nach einem ♀ aus Yunnan beschrieben, das das dukelste unter allen bisher bekannten Unterarten ist. Die Holotypen werden in der Sammlung des „Siberian Zoological Museum of the Institute of Animal Systematics and Ecology, Novosibirsk, Russia" aufbewahrt.

Neue Synonyma werden aufgestellt: *Orontobia secreta* (DRAUDT, 1931) **comb. nov.** = *Orontobia dalailama kansuensis* DE FREINA, 1997 **syn. nov.**; *Sinowatsonia mussoti* (OBERTHÜR, 1903) **comb. nov.** = *Sinowatsonia batangi* (DANIEL, 1943) **syn. nov.**; *Spilosoma mienshanicum* DANIEL, 1943 = *S. streltzovi* DUBATOLOV, 1996b **syn. nov.**

Aufgrund der Genitalstrukturen des ♂ sollten in die Gattung *Nebrarctia* WATSON, 1980, neben der Typusart *N. semiramis* (STAUDINGER, [1892]), des weiteren die Arten *N. guttata* (ERSCHOFF, 1874) **comb. nov.**, *N. transversa* (MOORE, 1879) **comb. nov.**, *N. wiltshirei* (DE TOULGOËT, 1962) **comb. nov.** und *N. hunza* (DE FREINA, 1997) **comb. nov.** gestellt werden.

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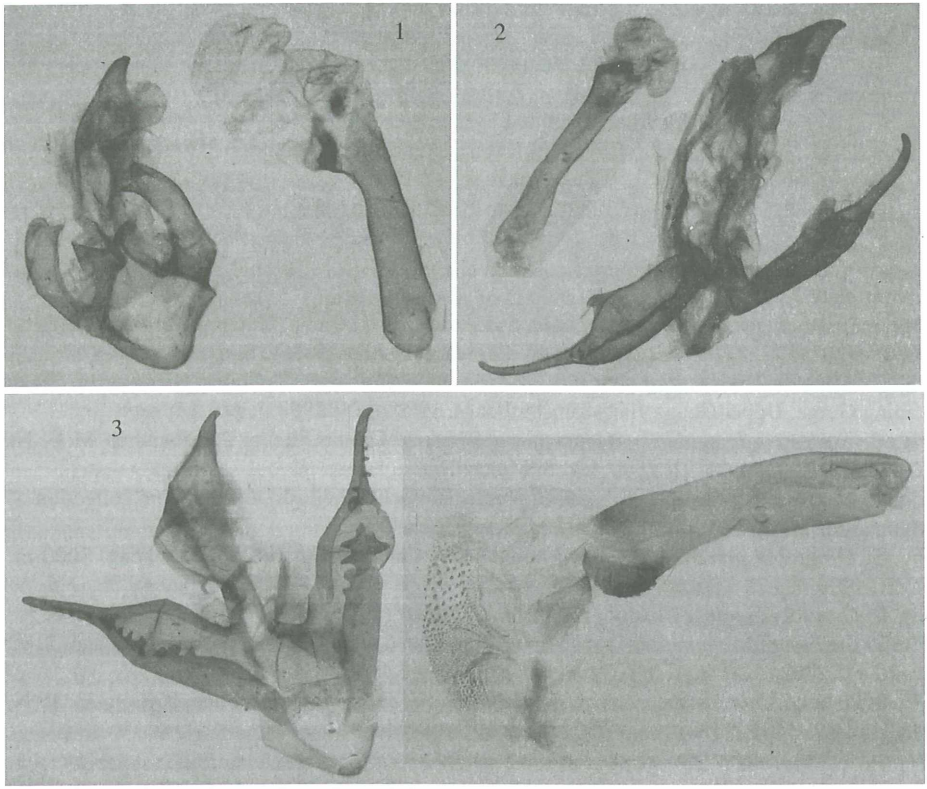
Colour plate 13 (p. 603)
Fig. 1: *Spilarctia (punctata) murzini* **spec. nov.**, holotype ♂, China, Shaanxi, Tai Bai Shan Mts, 1600 m, 33°35'N, 107°43'E, 20.VIII-5.IX.1998, leg. V. MURZIN & V. SINIAEV.
Fig. 2: *Murzinarctia murzini* **gen. nov. & spec. nov.**, holotype ♂, China, NE Yunnan, Tiger Laping Gorge, Upper Chang Jiang (Jinsha Jiang), 1900 m, VI 1998, leg. S. MURZIN.
Fig. 3: *Spilarctia irregularis* (ROTHSCHILD, 1910), ♂, China, Shaanxi, Taibaishan Mts., N. Haozhenzi, 1600 m, 30.VII.1999, leg. S. MURZIN.
Fig. 4: *Andala unifascia* Walker, 1855, ♂, [India, Himachal Pradesh], Simla (from collection of Manchester Museum of the University of Manchester, UK).
Fig. 5: *Orontobia murzini* **spec. nov.**, holotype ♂, China, Sichuan SW, Xiancheng, 3000 m, 1.VIII.1996, leg. S. MURZIN
Fig. 6: *Orontobia secreta* DRAUDT, 1931, from: DRAUDT (1931).
Fig. 7: *Eucharia festiva murzini* **subsp. nov.**, holotype ♀, China, N Yunnan, env. Xiaguan, 2100 m, 28.VII 2002, S. MURZIN & I. SHOKHIN leg.
Fig. 8: *Platarctia murzini* **spec. nov.**, holotype ♂, China, Shaanxi, Tai Bai Shan, 1600 m, 33°35'N, 107°43'E, 20.VIII.-5.IX.1998, V. MURZIN & V. SINIAEV leg.

Colour plate14 (p. 605)
Fig. 9: *Platarctia souliei* (OBERTHÜR, 1903), lectotype ♂ [China, Sichuan], Ta-tsien-Lou, 1899, ex OBERTHÜR coll. (BMNH).
Fig. 10: *Platarctia souliei* (OBERTHÜR, 1903), labels of the lectotype ♂ from BMNH.
Fig. 11: *Platarctia souliei* (OBERTHÜR, 1903), ♂, [China, Sichuan], Ta-tsien-Lou; specimen with genitalia studied (Fig. 13).
Fig. 12: *Sinowatsonia mussoti* (OBERTHÜR, 1903), holotype ♀, from BMNH.
Fig. 13: *Sinowatsonia mussoti* (OBERTHÜR, 1903), labels of the holotype from BMNH.
Fig. 14: *Spilosoma mienshanicum* Daniel, 1943, ♂, China, Shaanxi, Tai Bai Shan Mts., 1600 m, 33°35'N, 107°43'E, 20.VIII-5.IX.1998, leg. V. MURZIN & V. SINIAEV.
Fig. 15: *Spilosoma mienshanicum* DANIEL, 1943, ♂, China, Heilongjiang, Ertsendyantszy [the former Russian rail way station SE from Acheng, SE from Harbin], 5.VI.1911, EMEL'YANOV leg. (ZIN).
Fig. 16: *Spilosoma mienshanicum streltzovi* DUBATOLOV, 1996, holotype ♂, Russia, Amur Province, Blagoveshchensk, by light, 6.VI.1990, A. N. STRELTZOV leg.



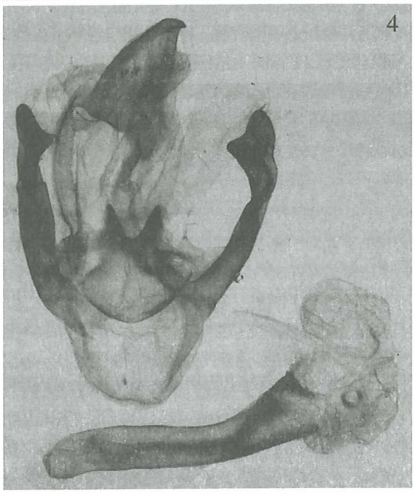
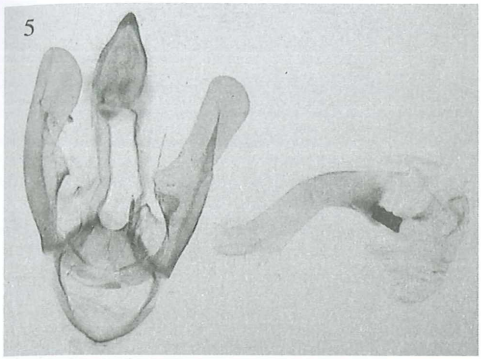
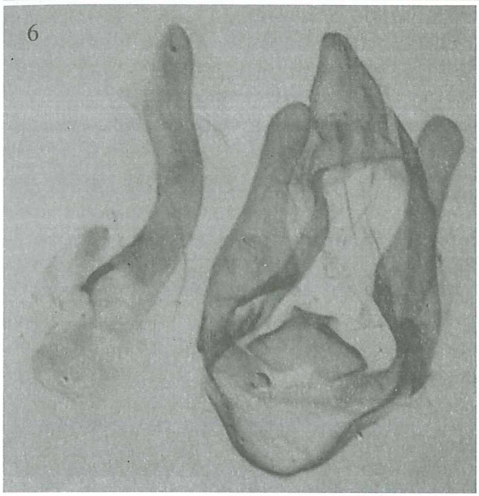
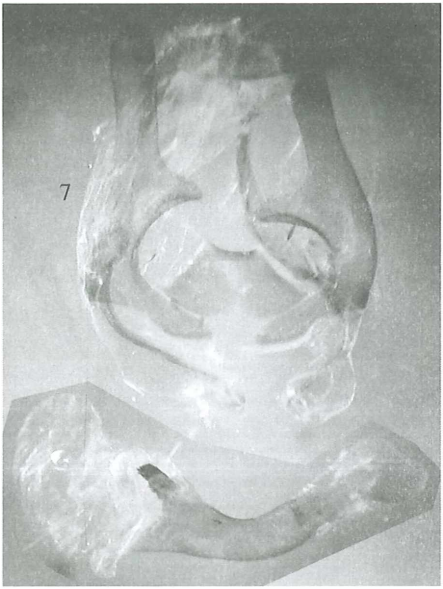


Fig. 1: ♂ genitalia of *Spilarctia (punctata) murzini* spec. nov., holotype.
Fig. 2: ♂ genitalia of *Murzinarctia murzini* gen. nov. & spec. nov., holotype.
Fig. 3: ♂ genitalia of *Pyrrharctia isabella* (J. E. Smith, 1797), USA, Maryland, Prince George's County, Bowie, 13.VIII.1972, D. E. Bowman leg.
Fig. 4: ♂ genitalia of *Spilarctia irregularis* (Rothschild, 1910), China, Shaanxi, Taibaishan Mts., N. Haozhenzi, 1600 m, 30.VII.1999, leg. S. Murzin.







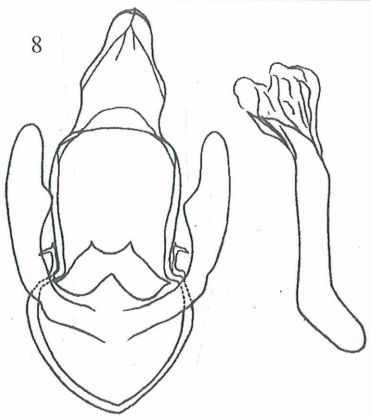
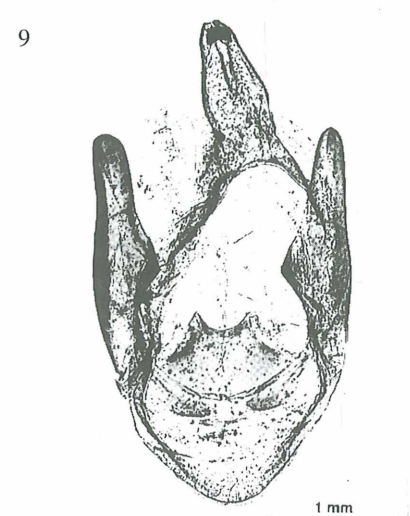


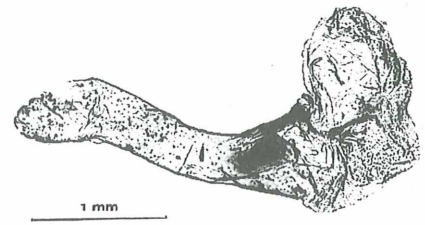
Fig. 5: ♂ genitalia of *Andala unifascia* WALKER, 1855, [India, Himachal Pradesh], Simla (from collection of Manchester Museum of the University of Manchester, UK).

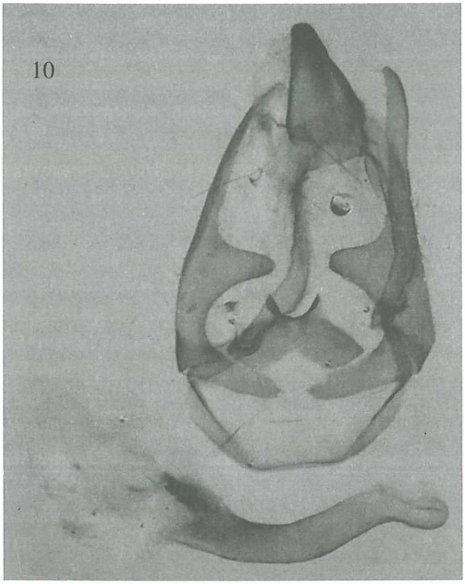
Fig. 6: ♂ genitalia of *Nebrarctia guttata* (ERSCHOFF, 1874), Tadzhikistan, Hissar Range, Kondara Gorge, 7.V.1980, FORTUSHENKO leg.

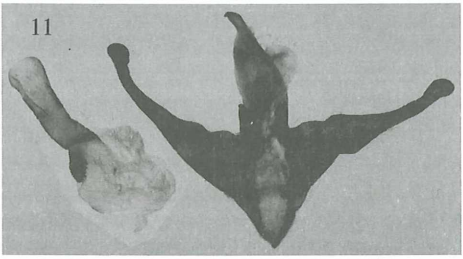
Fig. 7: ♂ genitalia of *Nebractia transversa* (MOORE, 1879), W-Pakistan, Swat, N v.Kalam, Gabral-Tal, 2100 m, 6.-9.VII. 1969, G. EBERT, from the collection of Hungarian Natural History Museum.

Fig. 8: ♂genitalia of *Nebractia wiltshirei* (DE TOULDGOËT, 1962), from: DE TOULDGOËT (1962).









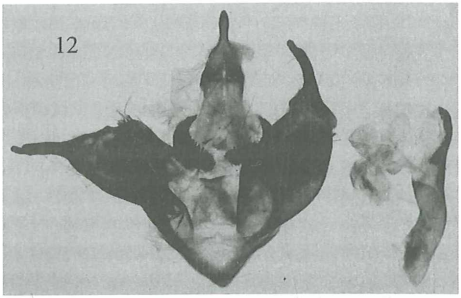
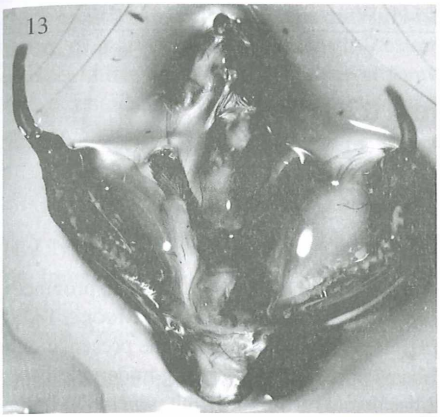
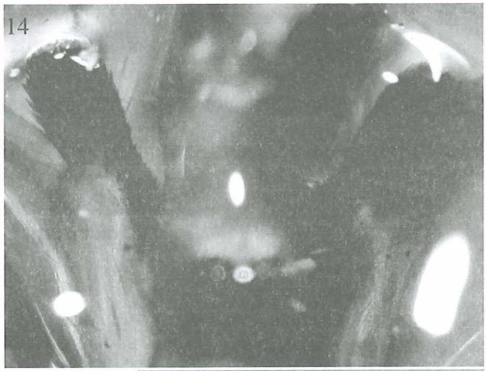
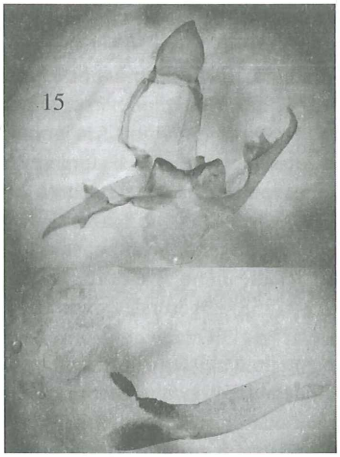
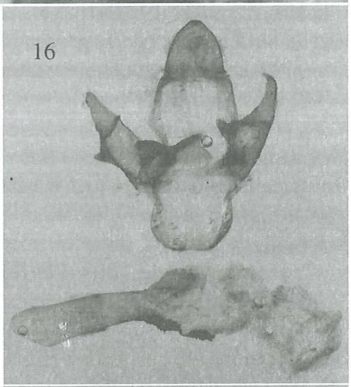


Fig. 9: ♂ genitalia of *Nebractia hunza* (DE FREINA, 1997), from: DE FREINA (1997).
Fig. 10: ♂ genitalia of *N. semiramis* (STAUDINGER, 1891 [1892]), Iran, Elburs, Sporthotel Dijin, 2800 m, 20.VI.1974, D. MÜTING.
Fig. 11: ♂ genitalia of *Orontobia murzini* spec. nov., holotype.
Fig. 12: ♂ genitalia of *Platarctia murzini* spec. nov., holotype.









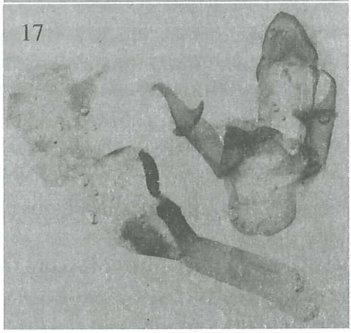


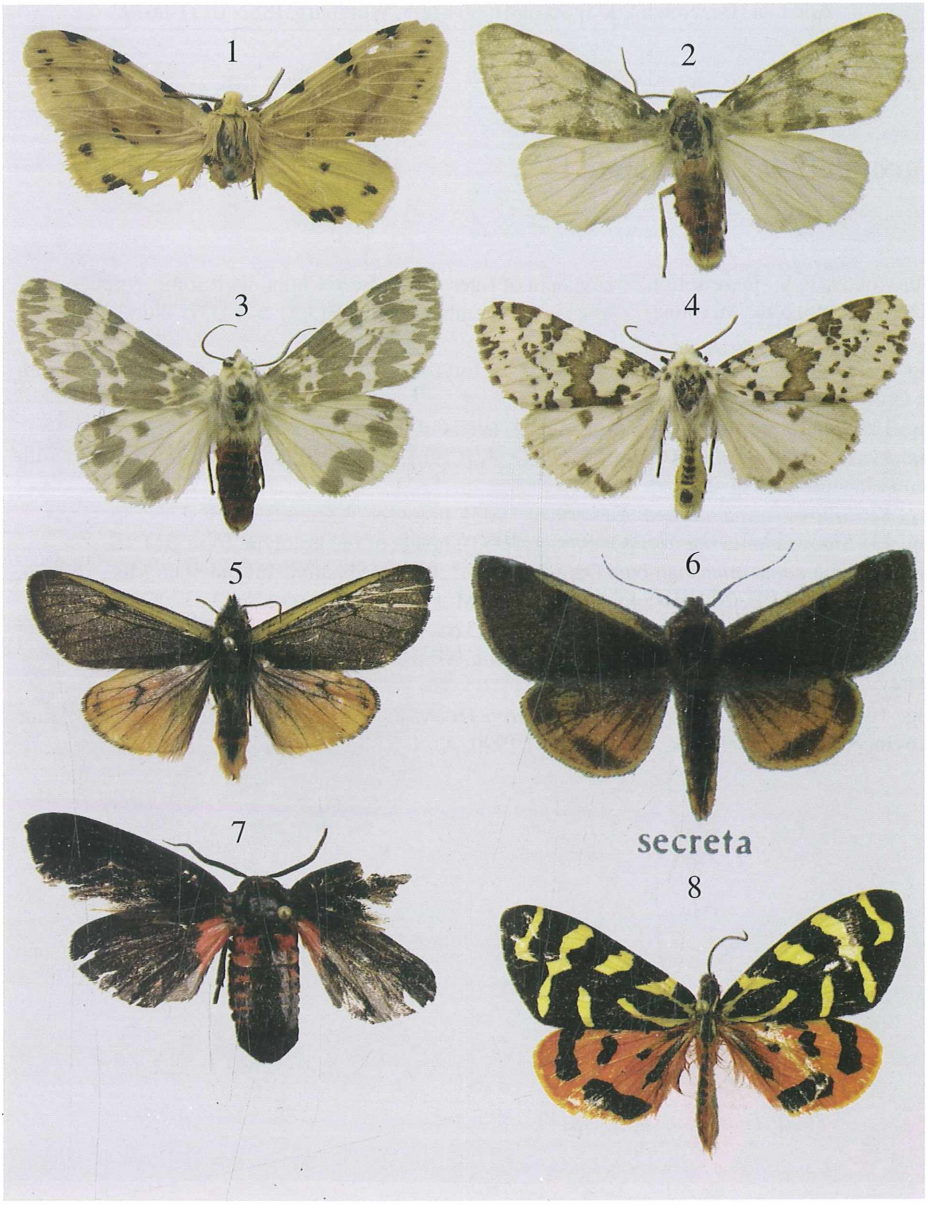
Fig. 13: ♂ genitalia of *Platarctia souliei* (OBERTHÜR, 1903), Ta-tsien-Lou, from BMNH collection.
Fig. 14: Peniculi structure of *Platarctia souliei* (OBERTHÜR, 1903), Ta-tsien-Lou, from BMNH collection.
Fig. 15: ♂ genitalia of *Spilosoma mienshanicum* DANIEL, 1943, China, Shaanxi, Tai Bai Shan Mts., 1600 m, 33°35'N, 107°43'E, 20.VIII.-5.IX.1998, leg. V. MURZIN & V. SINIAEV.
Fig. 16: ♂ genitalia of *Spilosoma mienshanicum* DANIEL, 1943, China, Heilongjiang, Ertsendyantszy [the former Russian rail way station SE from Acheng, SE from Harbin], 5.VI. 1911, Emel'yanov leg. (ZIN).
Fig. 17: ♂ genitalia of *Spilosoma mienshanicum streltzovi* DUBATOLOV, 1996, Russia, Amur Province, Blagoveshchensk vic., 6 km N from Belogor'e settlement, tourist camp "Mukhinka", by light, 29.VI.1993, A. N. STRELTZOV leg.

Farbtafel 13/ Colour plate 13

DUBATOLOV, V. V.: Description of new taxa of tiger moths from China, with some synonymic notes (Lepidoptera, Arctiidae). - Atalanta (Dezember 2005) **36** (3/4): 526-537, Würzburg.

Fig. 1: *Spilarctia (punctata) murzini* **spec. nov.**, holotype ♂, China, Shaanxi, Tai Bai Shan Mts, 1600 m, 33°35'N, 107°43'E, 20.VIII-5.IX.1998, leg. V. MURZIN & V. SINIAEV.
Fig. 2: *Murzinarctia murzini* **gen. nov. & spec. nov.**, holotype ♂, China, NE Yunnan, Tiger Laping Gorge, Upper Chang Jiang (Jinsha Jiang), 1900 m, VI 1998, leg. S. MURZIN.
Fig. 3: *Spilarctia irregularis* (ROTHSCHILD, 1910), ♂, China, Shaanxi, Taibaishan Mts., N. Haozhenzi, 1600 m, 30.VII.1999, leg. S. MURZIN.
Fig. 4: *Andala unifascia* Walker, 1855, ♂, [India, Himachal Pradesh], Simla (from collection of Manchester Museum of the University of Manchester, UK).
Fig. 5: *Orontobia murzini* spec. nov., holotype ♂, China, Sichuan SW, Xiancheng, 3000 m, 1.VIII.1996, leg. S. MURZIN
Fig. 6: *Orontobia secreta* DRAUDT, 1931, from: DRAUDT (1931).
Fig. 7: *Eucharia festiva murzini* **subsp. nov.**, holotype ♀, China, N Yunnan, env. Xiaguan, 2100 m, 28.VII 2002, S. MURZIN & I. SHOKHIN leg.
Fig. 8: *Platarctia murzini* **spec. nov.**, holotype ♂, China, Shaanxi, Tai Bai Shan, 1600 m, 33°35'N, 107°43'E, 20.VIII.-5.IX.1998, V MURZIN & V. SINIAEV leg.

Farbtafel 13/ Colour plate 13



Farbtafel 14/ Colour plate 14

DUBATOLOV, V. V.: Description of new taxa of tiger moths from China, with some synonymic notes (Lepidoptera, Arctiidae). - Atalanta (Dezember 2005) **36** (3/4): 526-537, Würzburg.

Fig. 9: *Platarctia souliei* (OBERTHÜR, 1903), lectotype ♂ [China, Sichuan], Ta-tsien-Lou, 1899, ex OBERTHÜR coll. (BMNH).
Fig. 10: *Platarctia souliei* (OBERTHÜR, 1903), labels of the lectotype ♂ from BMNH.
Fig. 11: *Platarctia souliei* (OBERTHÜR, 1903), ♂, [China, Sichuan], Ta-tsien-Lou; specimen with genitalia studied (Fig. 13).
Fig. 12: *Sinowatsonia mussoti* (OBERTHÜR, 1903), holotype ♀, from BMNH.
Fig. 13: *Sinowatsonia mussoti* (OBERTHÜR, 1903), labels of the holotype from BMNH.
Fig. 14: *Spilosoma mienshanicum* Daniel, 1943, ♂, China, Shaanxi, Tai Bai Shan Mts., 1600 m, 33°35'N, 107°43'E, 20.VIII-5.IX.1998, leg. V. MURZIN & V. SINIAEV.
Fig. 15: *Spilosoma mienshanicum* DANIEL, 1943, ♂, China, Heilongjiang, Ertsendyantszy [the former Russian rail way station SE from Acheng, SE from Harbin], 5.VI.1911, EMEL'YANOV leg. (ZIN).
Fig. 16: *Spilosoma mienshanicum streltzovi* DUBATOLOV, 1996, holotype ♂, Russia, Amur Province, Blagoveshchensk, by light, 6.VI.1990, A. N. STRELTZOV leg.

Farbtafel 14/ Colour plate 14