

Taxonomic and distributional remarks on some Palaearctic *Cydia* of the *succedana*-group with descriptions of two new species (Tortricidae)

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Abstract. Two new species, *Cydia transcaucasica* sp. n. and *Cydia suffuscana* sp. n., and a new subspecies, *Cydia centralasiae elegantana* ssp. n. are described and illustrated. We propose the synonymy of *Grapholitha succedana major* Caradja, 1916 with *Laspeyresia pamira* Obraztsov, 1943; the valid name of the taxon is *Cydia major* (Caradja, 1916). *Laspeyresia pamira centralasiae* Obraztsov, 1949 is a distinct species of the *succedana*-group, and its valid name is *Cydia centralasiae* (Obraztsov, 1949) stat. nov. = *Cydia intexta* (Kuznetsov, 1962), syn. nov.

Introduction

The *succedana*-group is one of the most difficult species complexes within *Cydia* in regards to correct species-level identifications. The status of some described taxa is unclear, with only subtle differences in facies and genitalia among some of the species. Nearly twenty species of the *succedana*-group are recorded from the Palaearctic, most of which occur in the Mediterranean area (Caradja 1916; Kennel 1921; Obraztsov 1943, 1949, 1959; Kuznetsov 1962; Danilevsky & Kuznetsov 1968; Sauter 1968; Căpușe 1970; Diakonoff 1976; Gibeaux 1983; Burmann & Pröse 1988; Pröse 1988; Aarvik & Karsholt 1993; Komai 1999; Razowski 2003; Brown 2005).

A single specimen of the *succedana*-group with unusual colouration and wing pattern was collected on April 24, 2007 during a field trip to SW Bulgaria. We suspected that it represented an undescribed species, but additional material was needed before we could be certain. We collected three additional specimens from the same locality in 2008 and a longer series in 2010. An examination of their genitalia provided evidence that they belong to a new species, a description of which is given below. The specimens showed similarity with some Centralasiatic and Transcaucasian taxa from the *succedana*-group, which led us to study the types and other material of these taxa from the collections of the Zoological Institute of the Russian Academy of Sciences, the Zoological Museum of the Taras Shevchenko National University, and the Museum of Natural History “Grigore Antipa”. As a result, we conclude that: 1) *Laspeyresia pamira* Obraztsov, 1943 is conspecific with *Grapholitha succedana major* Caradja, 1916 and the valid name of this taxon is *Cydia major* (Caradja, 1916); 2) the Transcaucasian specimen of *Laspeyresia pamira* Obraztsov, 1943 sensu Danilevsky & Kuznetsov (1968:

501, fig. 362b) is a new species; 3) *Laspeyresia pamira centralasiae* Obraztsov, 1949 is a distinct species, and the valid name of this taxon is *Cydia centralasiae* (Obraztsov, 1949) stat. nov. = *Cydia intexta* (Kuznetsov, 1962), syn. nov.; and 4) 18 specimens of *Laspeyresia pamira* from Zailiyskiy Alatau, Issyk *sensu* Danilevsky & Kuznetsov (1968: 502) belong to a new subspecies, *Cydia centralasiae elegantana* ssp. n.

Methods

Material from Bulgaria was collected with an aerial entomological net during afternoon when the moths were active and at light traps using UV fluorescent tubes. Genitalia dissections were made using standard procedures (Robinson 1976). For vesica eversion, the technique described by Zlatkov (2011) was applied.

Abbreviations

- MNHGA National Museum of Natural History “Grigore Antipa” (Bucharest, Romania)
 NMNHS National Museum of Natural History (Sofia, Bulgaria)
 ZISP Zoological Institute of the Russian Academy of Sciences (St. Petersburg, Russia)
 ZMKU Zoological Museum of the Taras Shevchenko National University (Kiev, Ukraine)

Cydia major (Caradja, 1916), stat. rev.

= *Cydia pamira* (Obraztsov, 1943), syn. nov.

Material. Lectotype ♂, with three labels: ‘Alai Geb. | 1905, Korb’; ‘Hololectotypus | Grapholitha succedana | major Car. (Rbl.), ♂’; ‘Lectotype | Grapholitha | succedana | var. major | Car., ♂, des. | Dr. A. Popescu-Gorj’, MNHGA. – Paralectotypes: ♀, with three labels: ‘Alai Geb. | 1905, Korb’; ‘Allolectotypus | Grapholitha succedana | major Car. (Rbl.), ♀’; ‘România | Allolectotype | Grapholitha | succedana | var. major | Car., ♀, des. | Dr. A. Popescu-Gorj’, MNHGA. ♂, with two labels: ‘Alai Geb. | 1905, Korb’; ‘România | Paralectotype | Grapholitha | succedana | var. major | Car., ♂, des. | Dr. A. Popescu-Gorj’, MNHGA. ♀, with four labels: ‘Shugnan (Pamir oc.) | mts ad fl. Shach-dara | (prope Chorog. supra pag. | Chabost) | 2800–3000 m, 25.vi.1937 | L. Sheljuzhko et | N. Pavlitzkaja leg. | Mus. Zool. | Univers. Kijev’; ‘cotypus’; ‘pamira Obr. | ♀, N. Obraztsov det’; ‘Lectotype | Laspeyresia pamira Obr. | des. B. Zlatkov & Yu. Budashkin’, ZISP. ♂, with five labels: ‘Shugnan (Pamir oc.) | mts ad fl. Shach-dara | (prope Chorog. supra pag. | Chabost) | 2800–3000 m, 29.vi.1937 | L. Sheljuzhko et | N. Pavlitzkaja leg. | Mus. Zool. | Univers. Kijev’; ‘cotypus’; ‘pamira Obr. | ♂, N. Obraztsov det’; ‘figurat. in: | Mitt. Münch. Ent. Ges. | XXXIII, 1943, t. IX, f. 5’; ‘Paralectotype | Laspeyresia pamira Obr. | des. B. Zlatkov & Yu. Budashkin’, ZMKU. ♀, with five labels: ‘Shugnan (Pamir oc.) | mts ad fl. Shach-dara | (prope Chorog. supra pag. | Chabost) | 2800–3000 m, 26.vi.1937 | L. Sheljuzhko et | N. Pavlitzkaja leg. | Mus. Zool. | Univers. Kijev’; ‘cotypus’; ‘pamira Obr. | ♀, N. Obraztsov det’; ‘figurat. in: | Mitt. Münch. Ent. Ges. | XXXIII, 1943, t. IX, f. 6’; ‘Paralectotype | Laspeyresia pamira Obr. | des. B. Zlatkov & Yu. Budashkin’, ZMKU. ♂, with four labels: ‘Shugnan (Pamir oc.) | mts ad fl. Shach-dara (prope Chorog. supra pag. | Chabost) | 2800–3000 m, 19.vi.1937 | L. Sheljuzhko et | N. Pavlitzkaja leg. | Mus. Zool. | Univers. Kijev’; ‘cotypus’; ‘pamira Obr. | ♂, N. Obraztsov det’; ‘figurat. in: | Mitt. Münch. Ent. Ges. | XXXIII, 1943, p. 106, f. 14 | (genitalia)’; ‘Paralectotype | Laspeyresia pamira Obr. | des. B. Zlatkov & Yu. Budashkin’, ZMKU. ♂, with three labels: ‘2100–2600 m | Chatkal’sk. gorno- | lesnoy zap. Uzbek. | 9.vi.963, Sugonjaev’ – in Russian; ‘ostepnjon. ju. | sklon s kustarn. | i archjoi’ – in Russian; ‘Laspeyresia | pamira Obr. [V. I. Kuznetsov hand]’, ZISP.

Taxonomic, morphological, and distributional remarks. The original description of *major* Caradja, 1916 is: “G[rapholitha] succedana var. major Ral. <sic> i. l. ist eine



Figs 1–9. Type specimens and labels. 1. *Grapholitha succedana major* Caradja, 1916, ♂ (lectotype, Kyrgyzstan: Alai Mts.). 2. *Laspeyresia pamira* Obraztsov, 1943, ♂ (paralectotype, Tajikistan: Western Pamir). 3. *Cydia transcaucasica* sp. n., ♂ (holotype, Azerbaijan: Germachatah). 4. *Cydia suffuscana* sp. n., ♂ (holotype, SW Bulgaria: Kresna Gorge). 5. *Cydia suffuscana* sp. n., ♀ (paratype, SW Bulgaria: Kresna Gorge). 6. The habitat of *Cydia suffuscana* sp. n. in Kresna Gorge. 7. *Laspeyresia pamira centralasiae* Obraztsov, 1949, ♂ (lectotype, Eastern Uzbekistan: Tshimgan). 8. *Laspeyresia intexta* Kuznetsov, 1962, imago, ♂ (holotype, Western Kazakhstan). 9. *Cydia centralasiae elegantana* ssp. n., ♂ (holotype, Eastern Kazakhstan: Zailijskij Alatau). a, imago; b, labels.

schöne, bedeutend grössere Form, mit sehr breitem Dorsalfleck und sehr stark weiss durchsetzten Vfln. 2 ♂♂, 1 ♀ vom Alaigebirge.” (Caradja 1916: 68). The original description of *Laspeyresia pamira* Obraztsov, 1943 is based on five specimens (3 ♂♂, 2 ♀♀) from Western Pamir (Shugnan) (Obraztsov 1943: 105). An examination of all type material reveals that these two taxa are conspecific (Figs 1, 2). This species is the largest representative of the *succedana*-group (forewing length 8.7–11.5 mm). The most diagnostic character of the male genitalia is the process of the phallus which is very large, 0.3–0.4 the length of the distal part of the phallus (Fig. 10). The shape of the valva and its structures are also diagnostic, especially the angle of the sacculus (without a distinct tooth), the relatively deep ventral incision of the valva, and the small cucullus. However, the inferior angle of the cucullus may bear a short tooth, or this

structure may be absent (individual variation). The female genitalia of this species are distinguished by a long, relatively narrow and undivided postvaginal plate (poststrial part of sterigma) (Fig. 15).

The identities of these two taxa were established by Obraztsov (1959); he proposed *C. pamira* (Obraztsov, 1943) as the valid name for them because he considered *C. major* (Caradja, 1916) as already occupied and unavailable. However, *major* (Caradja, 1916) was not previously used in this genus by other authors. Consequently, we consider the name *C. major* (Caradja, 1916) the oldest one for these taxa, and therefore this name has the priority. We establish *Cydia pamira* (Obraztsov, 1943), syn. nov. as the new synonym of *Cydia major* (Caradja, 1916), stat. rev. An examination of museum specimens revealed that *C. major* (Caradja, 1916) is limited to Kyrgyzstan (Alai Mts.), Uzbekistan (Chatkal Mts.), and Tajikistan (Pamir: Shugnan).

***Cydia transcaucasica* Budashkin & Zlatkov, sp. n.**

Material. Holotype ♂, 'Germachatah Na- | hichevan. ASSR | 22.vi.937, Rjabov' in Russian, ZISP.

Description. Adult (Fig. 3). *Head:* Vertex, frons, and antennae covered with pale-greyish scales; labial palpi pale-greyish with terminal segment darker. *Thorax:* Covered with pale-greyish scales; forewing length 8.5 mm; forewing narrow, apically angled; upperside of the wing with basal field almost grey with several indistinct lighter transverse lines; dorsal patch very large, apically extended to the wing apex, with indistinct boundaries, whitish in colour, having two or three grey, indistinct dividing lines present only near the anal edge of the wing; main colour of external wing field dark grey; numerous (approximately nine) pairs of white costal strigulae present on costal edge from the basal part to the apex, the distal three or four strigulae more distinct; five short subcostal metallic lines with whitish-grey lustre start from the fifth to the ninth pair of costal strigulae; the first of these lines connected with the internal line of the speculum, the third and the fifth almost reach the external line of speculum; lines of the speculum have the same colour; the external line of speculum divided into two sections the inferior of which shorter than the superior one; four or five small black lines (or rows of large dots) present in the speculum; three small blackish spots located between dorsal patch and internal line of speculum; relatively indistinct creamy-whitish subapical (postapical strigula) and subterminal markings present; cilia paler than the main wing colour; hindwing brownish-grey; cilia brownish-grey with darker basal line. *Abdomen:* Male genitalia (Fig. 11) with relatively broad valva, costa almost straight; ventral incision relatively shallow with round angles; sacculus angle obtuse, lacking a tooth; cucullus almost as wide as basal part of valva; inferior angle of cucullus rounded, lacking tooth; distal half of sacculus, neck of valva and inferior edge of cucullus covered with short scale-like setae; cucullus densely covered with long hair-like setae; phallus straight in distal part, bearing short, smooth process on right side, about 0.2 times length of distal part of phallus; vesica with some small cornuti.

Female. Unknown.

Diagnosis. Externally, *C. transcaucasica* sp. n. is easily distinguished by its relatively large wingspan, light colouration, and very large whitish dorsal patch. The male genitalia

lia are most similar to *C. albipicta* (Sauter, 1968), but valva broader; *C. transcaucasica* sp. n. have a short and smooth process of the phallus, which is lacking in *C. albipicta*. Sexual dimorphism is unknown (the species is known from male only).

Habitat. Unknown.

Distribution. Known from the type locality only: Transcaucasia, Azerbaijan, Nakhi-chivan, G. ermachata.

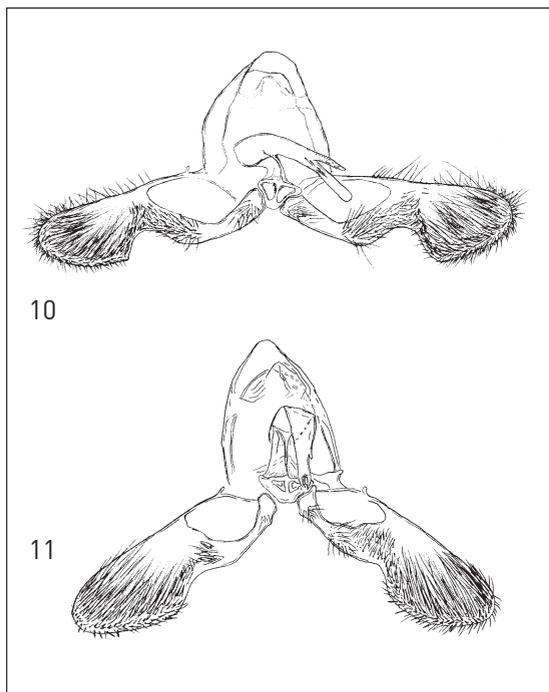
Life history. The holotype was collected on 22.vi.1937.

Etymology. The name is derived from the type locality in Transcaucasia.

Cydia suffuscana Zlatkov & Budashkin, sp. n.

Material. Holotype ♂, with two labels: ‘SW Bulgaria, Struma Valley | Kresna Gorge | 280 m N 41°47’42” E 23°09’27” | 06.05.2010, flying 14–15 h | leg. B. Zlatkov & O. Sivilov’, ‘HOLOTYPUS | *Cydia suffuscana* | det. B. Zlatkov & Yu. Budashkin 2010’ [red label]; two plastic containers with genitalia and a plastic slide with abdominal sclerites are attached beneath the specimen, NMNHS. – Paratypes: ♂, with three labels: ‘SW Bulgaria, Strouma Valley | Kresna Gorge near Kresna Inn | 260 m N 41°47’41” E 23°09’39” | 24.04.2007, 16–21 h’, ‘BC SB Lep 0079’, ‘PARATYPUS | *Cydia suffuscana* | det. B. Zlatkov & Yu. Budashkin 2010 [red label]’, coll. B. Zlatkov. 1 ♂, 1 ♀ each with two labels: ‘SW Bulgaria, Strouma Valley | Kresna Gorge “The Old Way” | 300 m N 41°47’20” E 23°09’06” | 04.05.2008 by net | leg. B. Zlatkov & O. Sivilov’, ‘PARATYPUS | *Cydia suffuscana* | det. B. Zlatkov & Yu. Budashkin 2010 [red label]’, coll. Yu. Budashkin. 1 ♀ with three labels: ‘SW Bulgaria, Strouma Valley | Kresna Gorge “The Old Way” | 300 m N 41°47’20” E 23°09’06” | 04.05.2008 by net | leg. B. Zlatkov & O. Sivilov’, ‘BC SB Lep 0080’, ‘PARATYPUS | *Cydia suffuscana* | det. B. Zlatkov & Yu. Budashkin 2010 [red label]’, coll. B. Zlatkov. 4 ♂♂, 2 ♀♀ each with two labels: ‘SW Bulgaria, Struma Valley | Kresna Gorge | 280 m N 41°47’42” E 23°09’27” | 06.05.2010, flying 14–15 h | leg. B. Zlatkov & O. Sivilov’, ‘PARATYPUS | *Cydia suffuscana* | det. B. Zlatkov & Yu. Budashkin 2010 [red label]’, 2 ♂♂ coll. B. Zlatkov, 2 ♂♂, 2 ♀♀ coll. Yu. Budashkin. 1 ♀ with two labels: ‘SW Bulgaria, Struma Valley | Kresna Gorge | 280 m N 41°47’53” E 23°09’26” | 06.05.2010, net | leg. B. Zlatkov & O. Sivilov’, ‘PARATYPUS | *Cydia suffuscana* | det. B. Zlatkov & Yu. Budashkin 2010 [red label]’, coll. B. Zlatkov. 4 ♂♂, 1 ♀, each with two labels: ‘SW Bulgaria, Struma Valley | Kresna Gorge | 280 m N 41°47’42” E 23°09’27” | 06.05.2010, in light trap | leg. B. Zlatkov & O. Sivilov’, ‘PARATYPUS | *Cydia suffuscana* | det. B. Zlatkov & Yu. Budashkin 2010 [red label]’, NMNHS.

Description. Adult (Figs 4, 5). *Head:* Scales around the compound eyes and labial palpi light grey with terminal joint darker; the remaining part of head covered with grey-brown scales; antennae dark brown, almost black. *Thorax:* Patagia and tegula dark-brown, almost black; forewing length 6.8–7.1 mm in males, 7.2–7.5 mm in females; forewing relatively wide and rounded, apically more angled in males and rounder and wider in females; basal field almost black, with 2–3 indistinct lighter transverse lines; dorsal patch distinct, with rough boundaries, white with light creamy hue; two or three grey-brown transverse lines divided by darker intermediate lines starting from two pairs of grey costal strigulae and ending at the dorsal patch; distal five pairs of costal strigulae with the same colour as dorsal patch; the last with a dark-grey dividing line, present only near the anal edge of the wing; main colouration of external wing field dark-brown, consisting of brown scales with ochreous tips; two subcostal metallic lines with bluish lustre extending from fifth and seventh costal strigulae, not connected to concolorous lines of speculum; external line of speculum divided into two sections, inferior of which almost half as long as superior; speculum with four or five black lines, scales between lines light ochreous with brown bases; two oblong black spots, sometimes adjoining at their superior ends, located between dorsal patch and internal line of speculum; creamy-white or yellowish postapical strigula present, sometimes divided

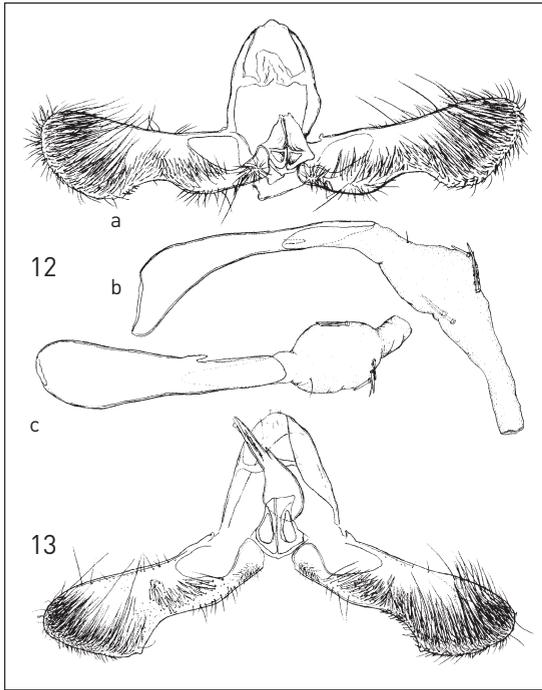


Figs 10–11. Male genitalia of representatives of *succedana*-group. **10.** *Laspeyresia pamira* Obraztsov, 1943, male genitalia (paralectotype, Tajikistan: Western Pamir). **11.** *Cydia transcaucasica* sp. n., male genitalia (holotype, Azerbaijan: Germachata). After Danilevsky & Kuznetzov (1968), Fig. 362 b, left valva added after the genitalia slide.

into two spots; two other concolorous markings sometimes present in termen alongside inferior ends of sections of external speculum line; cilia slightly paler than the main wing colour; hind-wing dark-brown with paler base; cilia brownish-grey with darker basal line. *Abdomen:* Dark-brown, almost black. Male genitalia (Fig. 12). Costa almost straight, slightly concave; inferior edge with shallow incision with round angles; sacculus angle obtuse, lacking tooth; width of valva in basal area approximately three-quarters width at cucullus; cucullus relatively large; inferior angle of cucullus rounded, either without tooth or with two or three minute teeth; one of paratypes with distinct tooth on each valva (Fig. 13); distal half of sacculus, neck of valvae, and inferior edge of cucullus covered with short scale-like setae and dense covering of long hair-like setae; phallus 0.61 mm in length, straight in distal part, bearing short smooth process ca. 0.25 times as long as distal part of

phallus, distal third of phallus membranous ventrally; everted vesica of the holotype (Figs 12b, c) ca. 0.35 mm in length, with cylindrical proximal part and bulbous distal part; gonopore apically located; one small seta located subdorsally on the border between the two parts of vesica; bulbous part bearing two groups of (fixed?) cornuti, larger group consisting of 5 dorsolaterally located (on the left side), smaller group consisting of two almost flat cornuti longer than those of larger group located ventrolaterally (on the right side); all cornuti oriented anteriorly. Female genitalia (Fig. 14) with genital plate (anteostial part of sterigma) with slightly convex anterior edge with triangular incisions, convergent lateral edges, and deeply incised posterior edge; incision of posterior edge round, about 2/3 as long as plate; entire surface of genital plate covered with numerous pore-like structures; plate well sclerotised except for band around ostium; postvaginal plate (postostial part of sterigma) as long as genital plate, twice as long as wide; plate narrowed in postmedial area, then widened, with rough posterior edge; ductus bursae with sclerotised plate (cingulum) on ventral face and right side, reaching ductus seminalis; end of ductus bursae with an asymmetrical zone of numerous sclerotised spines – right part longer and closer to ductus seminalis; signa equal in size, relatively short.

Diagnosis. Externally, *C. suffuscana* sp. n. is easily distinguished by its relatively large wingspan, wide wings, dark colouration, and distinctly outlined white dorsal patch.



Figs 12–13. Male genitalia of *Cydia suffuscana* sp. n. 12. Holotype (SW Bulgaria: Kresna Gorge); a, genitalia with phallus removed; b, c, phallus with vesica everted, enlarged; b, lateral view; c, dorsal view. 13. Paratype (SW Bulgaria: Kresna Gorge).

In the male genitalia, the new species is similar to *C. major* (especially the form of the valva and the size of the cucullus), but *C. suffuscana* sp. n. has a much smaller lateral process of the phallus and a shallower ventral incision of the valva. In the female genitalia, the sterigma in both species is also similar, but the genital plate is more sclerotised in *C. suffuscana* sp. n. and differs in the shape of the postostial part of the sterigma. The colouration of *C. suffuscana* sp. n. readily differentiates it from all other similar species of the *succedana* group. Sexual dimorphism is almost absent.

Habitat (Fig. 6). All specimens were collected in a small area of the Kresna Gorge in southwestern Bulgaria. In general, the gorge is dry and rocky, but the specimens were collected in a relatively humid, shady gully on a steep, rocky slope at 300 m altitude. The moths were collected at late afternoon flying around rocks. A few

specimens were collected in a light trap, i.e., they also are active at night. The dominant plants are *Tilia* sp. and *Lunaria* sp., with *Jasminum fruticans* L., *Coronilla emerus* L., *Pistacia terebinthus* L., and *Quercus pubescens* Willd. as minor components. A single female was collected from a similar gully 300 m to the north.

Distribution. Known only from the type locality.

Life history. Host plants unknown. Moths were collected from late April through early May.

Etymology. The specific name comes from the Latin word *suffuscus* (=brownish, dark) because of the main colour of the moth.

Cydia centralasiae (Obraztsov, 1949), stat. n., bona sp.

= *Cydia intexta* (Kuznetsov, 1962), syn. nov.

Material. Holotype ♂, with four labels: 'Tian-Shan oc. | ms. Bolshoj Tshimgan | (prope Tshimgan) | 2800, 10.vii.1934 | L. Sheljuzhko et | N. Pavlitzkaja leg. | Coll. L. | Sheljuzhko'; 'monotypus'; 'tshimgana Obr. | ♂, N. Obraztsov det. | praep. genit. N T. 1124'; 'Holotype | Laspeyresia pamira | centralasiae Obr. | des. B. Zlatkov & Yu. Budashkin' (ZMKU). Paratype ♀, with six labels: 'Tian-Shan oc. | jug. Karzhantau | prope Kzyl-topoch | 23.vi.1940 | V. Obuchova leg. | Mus. Zool. Univers. Kijev.'; 'Karzhantau | na tipchak. | stepi pod Kzyl topoch | 23.vi.1940, Obuchova' – in Russian; 'autotypus'; 'Laspeyresia | pamira tshimgana Obr.'; '♀, tshimgana Obr. | N. Obraztsov det.'; 'Paratype | Laspeyresia pamira | centralasiae Obr. | des. B. Zlatkov & Yu. Budashkin', ZMKU. Other materials: ♂, with two labels: 'Zapadno-

Kazahstanskaja obl. | Kamenskij r-n | okolo vysoty 251 | 24.V.1949, na svet | M. F. Martynova' – in Russian; 'Holotypus | *Laspeyresia intexta* Kuzn. | V. Kuznetsov det.', ZISP. ♂, with two labels: 'Turkmenskaja SSR | Ashhabadskaja obl., okr. Kara-Kala | Igdezhdik i sev. sklon g. Sjut | 400–900 m, 25.iv.1953, V.I. Kuznetsov' – in Russian; 'Paratypus | *Laspeyresia intexta* Kuzn. | V. Kuznetsov det.', ZISP. 3 ♂♂, 'Ukraine, zapovednik | "Kamennyje Mogily" | 5, 10,14.06.1995, na svet | leg. A. Zhakov' – in Russian, ZMKU. ♂, 'Crimea, cap Kazantip | lum. | 10.05.1996, leg. Yu. Budashkin', Karadag Nature Reserve collection. 5 ♂♂, 'SW Bulgaria, Strouma Valley | karst formation near Ilindentsi | Village, UTM: FM81 | 475 m N41°39'01" E023°15'05" | 20.05.2008 at light | leg. B. Zlatkov', coll. B. Zlatkov. 1 ♀, 'BG, Strouma valley | Roupite place near Petrich, | Kozhuh hill, 100 m | N41°27.867' E23°15.425' | 13.05.2006, 19–22 h | leg. B. Zlatkov', coll. B. Zlatkov. 1 ♀, 'SW Bulgaria, Strouma Valley | Roupite place near Petrich – | volcanic hill of Kozhuh | 200 m N41°27.72' E023°15'50" | 15.05.2007', coll. B. Zlatkov. 3 ♂♂, 2 ♀♀, 'SW Bulgaria, Strouma Valley | Roupite place near Petrich – | volcanic hill of Kozhuh | 200 m N41°27'39" E23°15'24" | 19.05.2008 at light | leg. B. Zlatkov', coll. B. Zlatkov.

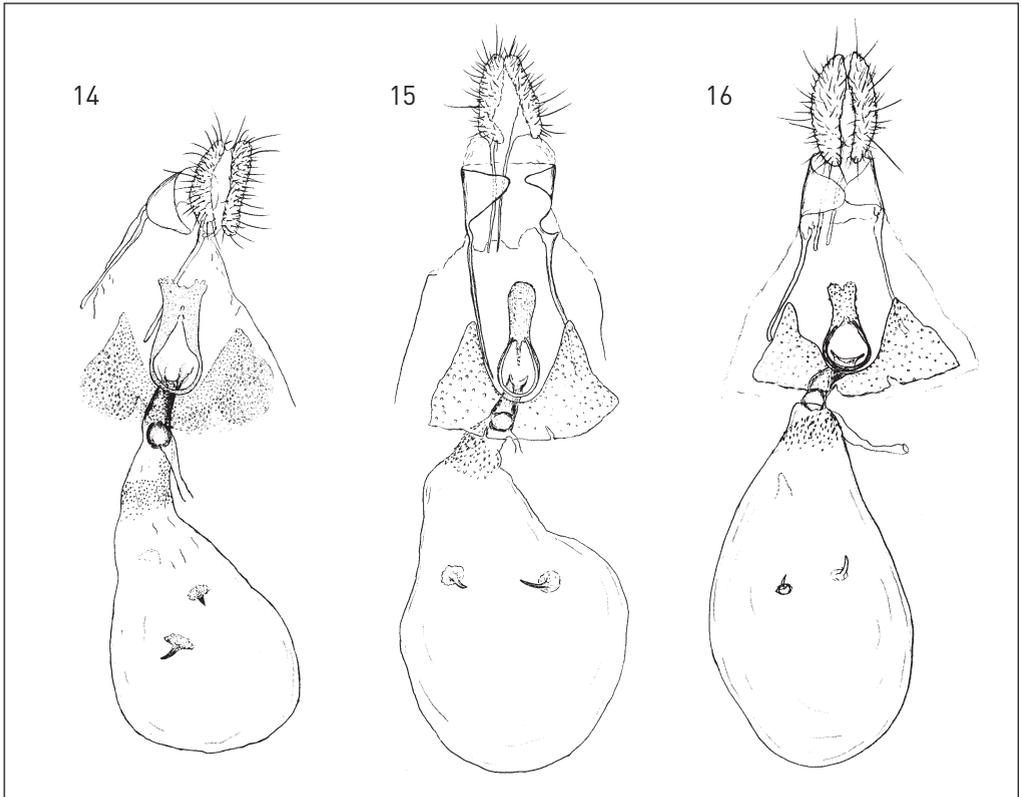
Morphological and taxonomic remarks. The taxon *centralasiae* Obraztsov, 1949 was described as a subspecies of *Laspeyresia pamira* (Obraztsov, 1943) from the Western Tian-Shan mountains (Eastern Uzbekistan) based on two specimens (the male holotype and a female paratype) (Obraztsov 1949). The genitalia slide of the holotype is missing. The taxon *intexta* Kuznetsov, 1962 was described from 14 males from Western Kazakhstan (type locality), Southern Ural, Turkmenistan, and Austria. Razowski (2003) described the female of *C. intexta* from Turkmenistan. After studying the above-cited material and publications, we conclude that these two taxa are conspecific. This species has a forewing length of 6.5–7.5 mm and has typical *succedana*-group forewing colouration (with a moderate whitish dorsal patch) (Figs 7, 8). A specific character in the male genitalia (Fig. 17) is the small lateral process of the phallus, situated on the right side near the middle. The process is ca. 0.17–0.25 times the length of the distal part of the phallus. The ventral incision of the valva is very deep, the sacculus angle lacks a tooth, and the cucullus is comparatively large. A short tooth may be present or absent at the inferior angle of the cucullus (individual variation). The everted vesica pointed ventrolaterally, with widened middle section bearing a compact group of four fixed socketed cornuti subdorsally located and a single subventral cornutus. In the female genitalia, the postvaginal plate (postostial part of sterigma) is relatively short, wide, and undivided (Fig. 16).

Distribution. Spain, France, Italy, Switzerland, Austria, Czech Republic, Slovakia, Bulgaria, Ukraine, Russia (Middle Volga reg., Volgo-Don reg., S. Ural), Turkmenistan, Western Kazakhstan (Zlatkov & Budashkin 2010), Eastern Uzbekistan, Eastern Kazakhstan (distinct ssp. n. – see below).

Cydia centralasiae elegantana Budashkin & Zlatkov, ssp. n.

Material. Holotype ♂, 'Issyk | Zailijskij Alatau | "prilavki" | 26.V.957, Falkovitsh' – in Russian (ZISP). – Paratypes: 11 ♂, 'Issyk 1000–1100 m | Zailijskij Alatau | "prilavki" | 26–28.V.957, Falkovitsh' – in Russian, ZISP.

Description. Adult (Fig. 9). *Head:* Covered with greyish scales; labial palpi pale grey with darker terminal segment; antennae with greyish scales. *Thorax:* Greyish; forewing length 6.5–7.0 mm; forewing very narrow, angled apically; basal field greyish with several indistinct paler transverse lines; dorsal patch relatively narrow, barely extending to apex, with distinct boundaries and whitish colour; dorsal patch with two or



Figs 14–16. Female genitalia of representatives of *succedana*-group. **14.** *Cydia suffuscana* sp. n., female genitalia (paratype from Fig. 5). **15.** *Grapholitha succedana major* Caradja, 1916, female genitalia (paratype, Kyrgyzstan: Alaigebirge). **16.** *Cydia centralasiae* (Obraztsov, 1949), stat. n., bona sp., female genitalia (SW Bulgaria: Kozhuh hill).

three indistinct grey dividing lines near anal edge of wing; main colouration of external wing field dark-grey; numerous (approximately nine) pairs of white costal strigulae on costa from base to apex, four to five distally located strigulae more distinct; five to six short subcostal metallic lines with lead-grey lustre from fifth to ninth pairs of costal strigulae; first of lines connected with internal line of speculum, third and fifth lines almost reaching external line of speculum; speculum lines concolorous; external line of speculum divided into two sections, inferior section shorter than superior; four to seven comparatively large black lines (or relatively large spots) in speculum; seven to nine relatively large blackish spots between dorsal patch and internal line of speculum; distinct, creamy-whitish subapical and subterminal markings present; cilia paler than main wing colour; hindwing greyish with darker distal part; cilia greyish, with darker basal line. *Abdomen:* Male genitalia with valva comparatively short, wide; costa slightly concave; ventral incision deep; sacculus angle lacking tooth; cucullus larger than basal part of valva; short tooth present or absent at inferior angle of cucullus (individual variation); distal half of sacculus, neck of valvae, and inferior edge of cucullus covered with short scale-like and long hair-like setae; phallus straight in distal part, bearing short

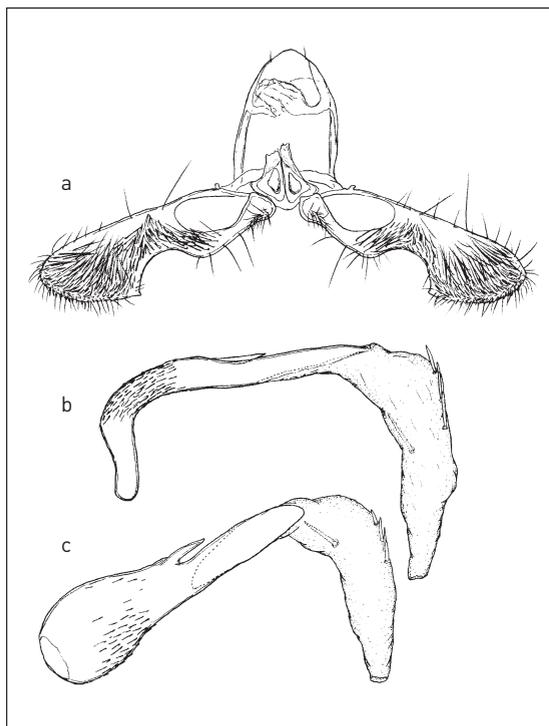


Fig. 17. Male genitalia of *Cydia centralasiae* (Obraztsov, 1949), stat. n., bona sp. (SW Bulgaria: Kozhuh hill); **a**, genitalia with phallus removed; **b**, **c**, phallus with vesica everted, enlarged; **b**, lateral view; **c**, dorsal view.

Remarks. According to Danilevsky & Kuznetsov (1968: 502), M. I. Falkovitsh collected 18 specimens of this taxon in 1957; however, we could find only 12 of the specimens in ZISP.

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smooth process on right side; process ca. 0.17–0.25 as long as distal part of phallus; some small cornuti present in vesica.

Female. Unknown.

Diagnosis. *C. centralasiae elegantana* ssp. n. can be distinguished from the nominate subspecies by its narrower and more contrasting forewing and its paler hindwing. The male genitalia are nearly identical to those of *C. centralasiae centralasiae* (Obraztsov, 1949). Sexual dimorphism is unknown (known from male only).

Habitat. Type series was collected at 1000–1100 m.

Distribution. Known from the type locality only: Eastern Kazakhstan, Zailiyskij Alatau, Issyk.

Life history. The type series was collected 26–28.v.1957.

Etymology. The subspecific name comes from relatively narrow and finely contrasted forewings (from Latin: *elegans* = elegant, fine, handsome).

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