

Materiały do znajomości *Crambidae* (Lepidoptera).  
Część XXIII. Nowe gatunki z grupy rodzajowej  
*Crambus* F.

Studies on the *Crambidae* (Lepidoptera). Part XXIII.  
New species of the generic group *Crambus* F.

napisał

STANISŁAW BŁESZYŃSKI

**1. *Crambus whalleyi* n. sp.**

(Plate I, fig. 1)

The new species is described from a single male specimen taken in Sao Paulo, Brazil. It is one of the three paratypes of *Crambus aureorufus* Hamps. The latter species, judging from the type designated by H a m p s o n and another paratype, is a species closely related to North American *C. satrapellus* (Zck. & Germ.). Despite the great external similarity of *C. aureorufus* Hamps. and *C. whalleyi* n. sp., they are perfectly distinct by their male genital armatures.

The maximal width of the forewing 3 mm., the length of the forewing 9,5 mm., wingspan 30,5 mm. Antenna brownish, distinctly serrated from below. Labial palpus brownish. Frons rounded, not protruding the eye. Frons and vertex whitish. Thorax, collar and patagium golden brown. Costa of the forewing faintly arched, alar apex distinctly acuminate, termen oblique and faintly concave below the apex. The colour and the pattern of the forewing rather similar to those of *C. aureorufus* Hamps. and *C. satrapellus* (Zck. & Germ.). Ground colour yellow ochreous. A broad silvery longitudinal stripe from wing base to termen. This stripe is broader

than in *C. aureorufus* Hamps. and closed to costa on its two-fifths from base. Besides, the dorsal tooth of the stripe is a little smaller in the new species than in *C. aureorufus* Hamps. and much smaller than in *C. satrapellus* (Zck. & Germ.). The silvery ovate spot above the terminal part of the stripe present in the latter species, lacking in the new one. Submarginal line steely, distinctly, angled, broken by the silvery basal stripe. Submarginal dots distinct. The space surrounding those dots with a scattering of brown scales. Termen distinctly bordered with dark brown. Fringes glossy, uniformly whitish. Hindwing slightly glossy, white, with a faint yellowish hue in the costal area; fringes concolorous with the ground. Under surface of the forewing glossy brownish, that of the hindwing white, distinctly darkened below the costa.

Despite great external similarity of the both species, they are perfectly distinct from each other by their male genital armatures. In the new species uncus visibly shorter than gnathos, broadened and rounded apically. Gnathos slender, nearly straight, faintly narrowed and rounded apically. Tegumen fairly narrow. Valva of a very characteristic structure: pars basalis (costal-basal process) in the shape of a short broad finger pointing obliquely posteriorly, hairs distinct of medium length; sacculus large, rounded terminally, tipped with heavily sclerotized strong thorn which protrudes costa; the hairs on the sacculus short, terminal thorn lacks there; cucullus small, rounded, lightly sclerotized, provided with numerous hairs of medium length. Saccus very long and narrow. Vinculum broad, nearly square. Aedeagus rather straight, faintly narrowed in about one-third of its terminal part, a little longer than the genital armature; a narrow area stronger sclerotized than the remainder of aedeagus in its middle; one cornutus of medium size, tapering posteriorly and the another very small nearer the end of aedeagus.

This species is named for Mr. Paul E. S. Whalley of the British Museum (Nat. Hist.) in London.

The holotype bears the label: „S. Paulo, S. E. Brazil“. Gen. Slide Nr. 855/Błesz.; coll. of the British Museum (Nat. Hist.), London.

## 2. *Xanthocrambus watsoni* n. sp.

(Plate I, fig. 2; plate III, fig. 10)

This new species is very closely related to European *Xanthocrambus delicatellus* (Zell.). I believe all data regarding the occurrence of the latter species in North Africa are wrong and should be referred to the former one.

*X. watsoni* n. sp. is very similar externally to *X. delicatellus* (Zell.) it is, however, perfectly distinct from it by its male genital armature, as well as by the female genitalia.

Antenna yellowish, in the male distinctly serrated, in the female flatly serrated. Labial and maxillar palpus white. Frons rounded, white. Vertex, thorax, collar and patagium snow-white. The maximal width of the forewing from 3,1 to 4,6 mm., the length from 9 mm. to 12,5 mm., wingspan from 18 mm. to 26 mm. Forewing rather glossy, uniformly straw yellow. No trace of transversal lines occurring usually in *X. delicatellus* (Zell.). Three distinct dark terminal dots at tip of veins 3-4. A poor scattering of dark scales on the wing. Fringes glossy, rather concolorous with the ground. Male genital armature very distinct from that in *X. delicatellus* (Zell.). Pars basalis consisting of two processes: the basal one oblique, rounded, the second one strongly curved, finger-like, rounded terminally. Both processes lack the hair. In *X. delicatellus* (Zell.) pars basalis longer than in the new species and the division into two processes is not distinct (fig. 3). In *X. watsoni* n. sp. sacculus long, tipped with a strong pointed thorn. This thorn is situated distinctly nearer the tip of valva than the end of pars basalis, whilst in the second species the end of pars basalis is nearer the tip of valva than the end of sacculus. Saccus broader than in *X. delicatellus* (Zell.). Uncus rather narrower than in *X. delicatellus* (Zell.). Gnathos and tegumen rather similar as in the latter species. Vinculum large, broad. Aedeagus fairly similar as in *X. delicatellus* (Zell.), longer than the whole genital armature, straight. One long, large, curved cornutus, a group of several minute cornuti and five tapering, nearly straight, rather large cornuti. Female genitalia (fig. 8) very distinct from those of *X. delicatellus*

(Zell.). Introitus vaginae and ductus bursae rather lightly sclerotized while in *X. delicatellus* (Zell.) they are strongly sclerotized. Ductus bursae in the new species very broad, distinctly tapering anteriorly; a conspicuous broadening just a little before the bursa copulatrix. The longitudinal ribbing of the ductus bursae distinct. Gonapophyses anteriores distinctly broader than in *X. delicatellus* (Zell.). Bursa copulatrix rather small, transparent; no signum and ribbing.

This species is named for Mr. Watson of the British Museum (Nat. Hist.) in London.

Holotype: male labelled „Maroc, Timhadit, Harold Powell, Août 1920“, „*Crambus saxonellus* var.“, „Vu par P. Chrétien, en novembre 1921, pour le Vol. XIX Étud. Lépidopt. Comp.“, „Paravacini Coll. B. M. 1937-1938“. Genit. Slide Nr. 934/Błesz. Coll. British Museum (Nat. Hist.), London.

Allotype: female labelled „Les Pins, Prov. Oran, 1-4. Sept. 1918 (M. Rotrou)“, „Rothschild Bequest B. M. 1939-I“. Genit. Slide Nr. 934/Błesz. Coll. British Museum (Nat. Hist.), London.

Paratypes: five females labelled: „Sebdou, Prov. Oran, 5-7. Sept. 1918 (P. Rotrou)“, „Rothschild Bequest B. M. 1939-I“; „Les Pins, Prov. Oran, 26-31. Aug. and 1-4. Sept. 1918“, „Rothschild Bequest B. M. 1939-I“; „Sidi-bel-Abbès, Prov. Oran, 10. Sept. 1917 (M. Rotrou)“, „Rothschild Bequest B. M. 1939-I“; „Algérie Zebch. près Sebdou, Septembre 1907, H. Powell“, „Paravacini Coll. B. M. 1937-1938“. Coll. British Museum (Nat. Hist.), London, and author.

### 3. *Mesocrambus tamsi* n. sp.

(Plate II, fig. 4; plate III, fig. 8)

This species comes very near externally *Mesocrambus candiellus* (H.-S.) it is, however, perfectly distinct from it by the male genital armature, as well as by the female genitalia.

Antenna yellowish. Labial palpus dirty yellow externally. Maxillar palpus dirty yellow proximally, white distally. Frons white, rounded, rather distinctly protruding the eye. Vertex, collar and thorax white. Patagium white proximally, yellowish

distally. The maximal width of the forewing from 3 mm. to 4,7 mm., the length from 10,5 mm. to 14,7 mm., wingspan from 22,5 mm. to 30 mm. The colour and the pattern of the wings rather indistinguishable from those of *M. candiellus* (H.-S.). Forewing grey brown with two longitudinal white stripes similar as in *M. candiellus* (H.-S.). Two transversal lines gently marked. Fringes white, darkened at their ends, dark basal stripe present. Hindwing greyish, lightened whitish basally, fringes white, their basal stripe darkened grey below the alar apex. Male genital armature very distinct from that in *M. candiellus* (H.-S.). Uncus about as long as the gnathos, both similar as in *M. candiellus* (H.-S.). Tegumen narrower basally than in the latter species. Vinculum distinctly elongate, tapering anteriorly. Pars basalis distinct, strongly sclerotized, much shorter than in *M. candiellus* (H.-S.), in the form of a long sheet rounded terminally. Sacculus forms a lateral strong process. It is strongly curved, tapering in a pointed tip. Ventral part of sacculus densely haired. Cucullus narrow, rounded terminally, hairs of its ventral edge much shorter than those on the dorsal one. Aedeagus much shorter than the genital armature, slender, slightly bent. No cornuti. Juxta a narrow ring. Male genital armature of *M. candiellus* (H.-S.) as is shown in the fig. 5.

Male genital armature of the new species has been figured by Müller-Rutz<sup>1</sup> and cited as belonging to „*Crambus ? candiellus* HS.“. Besides, this author figured the male genital armature of the typical *M. candiellus* (H.-S.). The latter specimen has been taken in Algeria and the former one in Syria. The new species is described from several specimens from Algeria and Morocco and one male taken in Akbès, Syria; however, I have examined one specimen of *M. candiellus* (H.-S.) from Syria too. *M. candiellus* (H.-S.) seems to be rather rare in North Africa, as I have not found any specimen of it from that region. The only data of the occurrence of *M. tamsi* n. sp. in Algeria is that of Müller-Rutz. The two species occur together in the Near East, as Müller-Rutz's and my investigations show.

<sup>1</sup> Mitt. Schweiz. Entom. Ges., 15, 1931, pl. I, fig. 22.

The new species is named for Mr. W. H. T. Tams of the British Museum (Nat. Hist.), London.

Holotype, male, is labelled: "Morocco, Tangier, 150, July 19, 1934, Querci", „Rothschild Bequest B. M. 1939-I", coll. British Museum (Nat. Hist.), London.

Allotype, female, is labelled: "Morocco, Tangier, 150, July 19, 1934, Querci", "Rothschild Bequest B. M. 1939-I", coll. British Museum (Nat. Hist.), London.

Paratypes: ten males and females labelled: "Sidi-bel-Abbès Prov. Oran, 12. IX. 1917 (M. Rotrou), "Rothschild Bequest B. M. 1939-I"; "Morocco, Tangier, 150, July 19, 1934, Querci", "Rothschild Bequest 1939-I"; "Sebdou, Prov. Oran, 29-31. July 1918 (P. Rotrou)", "Rothschild Bequest B. M. 1939-I"; "Les Pins, Prov. Oran, 9 Aug. 1918 (M. Rotrou)", "Rothschild Bequest B. M. 1939-I"; "Guelt-es-Stel, Centr. Algeria, Oct. 1. 1913 (V. Faroult)", "Rothschild Bequest B. M. 1939-I"; "Sidi Ferruch, near Alger, 19. VII. 1911", "Rothschild Bequest B. M. 1939-I"; "Prov. d'Oran, Aflou, Juin 1911, Harold Powell", "Paravacini Coll. B. M. 1937-383"; "Sud Oranais, Aflou, Harold Powell, Juin 1911", "Paravacini Coll. B. M. 1937-383"; "Zoudj-el-Beghal, E. Morocco, July 4. 1914 (V. Faroult)", "Rothschild Bequest B. M. 1939-I"; "Syrie Akbès 1896", "Paravacini Coll. B. M. 1937-383"; "Candiellus?", "Paravacini Coll. B. M. 1937-383". Coll. British Museum (Nat. Hist.), London and author's coll; two male paratypes from North Africa, coll. Muséum d'Histoire Naturelle, Paris.

#### 4. *Calamotropha bradleyi* n. sp.

(Plate III, fig. 6)

The new species is described from a single male specimen determined as "*Crambus hierichunticus* Z." in the main collection of *Crambidae* in the British Museum (Nat. Hist.).

Ocelli absent. Proboscium slightly developed. Antenna dirty yellowish, distinctly serrated from below. Labial palpus brown exteriorly, whitish interiorly. Maxillar palpus brown, whitish terminally. Frons dirty creamy, conical with a corneous

point. Vertex dirty creamy with a longitudinal medial dark line. Thorax and tegulae brown. Patagia brown, lightened medially. The maximal width of the forewing 4,3 mm., the length 13 mm., wingspan 26,5 mm. Forewing slightly expanding posteriorly. Costa nearly straight, alar apex slightly acuminate, termen nearly straight, very gently oblique, tornus broadly rounded. Ground colour of the forewing nearly dull, brown. A rather distinct medial dark dot and a faint trace of the submarginal line. Terminal dots rather distinct from alar apex to the tornus. Fringes light with a dark dividing line. Hindwing very slightly glossy, dirty creamy, darkened with grey in the apical area. Fringes paler than the ground. Under surface of the forewing uniformly brown, rather glossy, that of the hindwing paler, glossy. Male genital armature of a very characteristic structure, does not resemble that of any other species of the genus *Calamotropha* Zell. Uncus as long as the gnathos, deeply bifurcated, the points strongly acuminate. Hairs typical for *Calamotropha* Zell., not numerous, long, situated at the base of uncus. Gnathos very narrow, broadened terminally in a club-shaped strong thickening. Tegumen of a medium width. Vinculum elongate. Pars basalis in the form of a broad strong sheet tapering posteriorly. Hair present. Cucullus very narrow, lightly sclerotized, hairs of a medium length. Saccus fully developed, similarly as in other species of the genus *Calamotropha* Zell. Aedeagus a little longer than the whole genital armature, straight, of evenly wide throughout. Several fairly small, tapering posteriorly cornuti.

This species is named for Mr. J. D. Bradley of the British Museum (Nat. Hist.), London.

Holotype: male labelled "C. Colony Table II. 1901. 1901-142", South Africa. Genital Slide Nr. 959/Blesz., coll. British Museum (Nat. Hist.), London.

### 5. *Calamotropha azumai* n. sp.

(Plate III, fig. 7)

This species is described from a single female specimen taken in Nishinomiya, Japan. I received it from Prof. Masao Azuma of Nishinomiya and name it for him.



Ocelli absent. Proboscium reduced. Antenna white and brown ringed, flatly serrated from below. Labial palpus about three times as long as the eye diameter, white. Maxillar palpus white. Frons white, distinctly conical, rounded. Vertex, thorax, tegula and patagium snow white. Frenulum trifurcate as in other species of the genus *Calamotropha* Zell. The maximal width of the forewing 4,3 mm., the length 12 mm., wingspan 26 mm. Costa visibly arched, alar apex faintly acuminate, termen very gently bent, oblique. Ground colour of the forewing white, without any trace of the pattern. Terminal dots absent. Fringes glossy, white. Hindwing white, glossy. Termen bordered with brown below the apex. Fringes concolorous with the ground. Under surface of the forewing darkened with brown below the costa and in the apical area, that of the hindwing concolorous with the upper one. Female genitalia very characteristic. Ostium bursae provided with two tufts of spines situated on its edges. Introitus vaginae strongly sclerotized, elongated, strongly narrowed at its commence. Ductus bursae very long, narrow, lightly sclerotized, posterior part curved, longitudinally ribbed, provided with numerous minute spines. Bursa copulatrix transparent with very faint ribbed sculpture. Signum in the form of a long strongly sclerotized, minutely spined plate. It is tapering in pointed tips at its both ends.

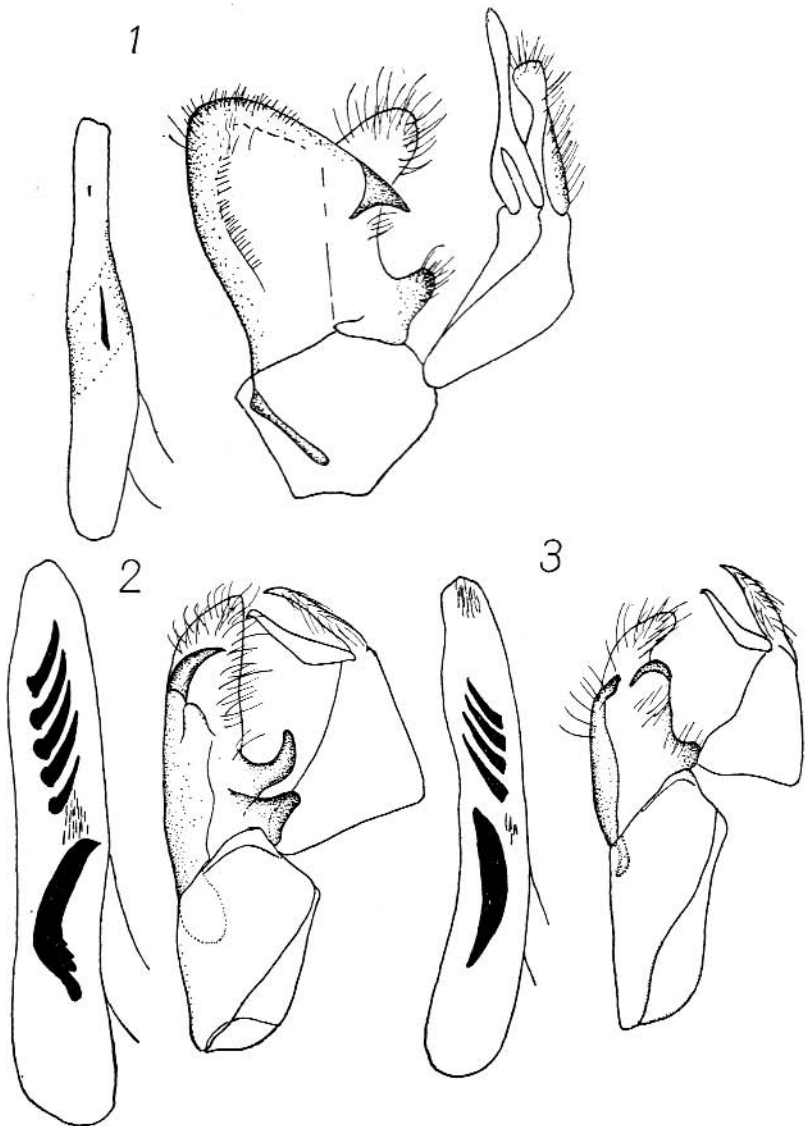
Holotype: female labelled: "Koroen. Nishinomiya, 26. VI. 50, M. A z u m a", author's coll.

## STRESZCZENIE

Autor opisuje pięć nowych gatunków z grupy rodzajowej *Crambus* F. Jedyny samiec *Crambus whalleyi* n. sp., pochodzący z Brazylii (Sao Paulo), jest jednym z paratypów *C. aureorufus* Hamps., gatunku blisko spokrewnionego z północno-amerykańskim *C. satrapellus* (Zck. & Germ.); nowy gatunek odbiega bardzo daleko pod względem budowy aparatu kopulacyjnego od obu wymienionych gatunków. *Xanthocrambus watsoni* n. sp. jest gatunkiem bardzo blisko spokrewnionym z europejskim *X. delicatellus* (Zell.); zewnętrznie nie odbiega od



tego ostatniego gatunku, różni się jednak od niego bardzo wyraźnie budową aparatu kopulacyjnego. Nowy gatunek zamieszkuje Afrykę Północną. *Mesocrambus tamsi n. sp.*, opisany na podstawie materiału pochodzącego z Afryki Północnej i Syrii, jest zewnętrznie bardzo podobny do *M. candiellus* (H.-S.), jednak różni się od niego bardzo silnie pod względem budowy aparatu kopulacyjnego. *Calamotropha bradleyi n. sp.* została opisana na podstawie jednego samca z południowej Afryki (C. Colony). Gatunek ten odznacza się bardzo charakterystyczną budową aparatu kopulacyjnego i odbiega pod tym względem znacznie od innych gatunków rodzaju *Calamotropha* Zell. *Calamotropha azumai n. sp.* została opisana na podstawie jednej samicy z Japonii; gatunek odznacza się bardzo charakterystycznym kształtem aparatu kopulacyjnego, nie spotykanym u innych gatunków tego rodzaju.



## Male genital armatures

Fig. 1. *Crambus whalleyi* n. sp. Holotype.

Fig. 2. *Xanthocrambus watsoni* s. sp. Holotype.

Fig. 3. *Xanthocrambus delicatellus* (Zell.).



## Male genital armatures

Fig. 4. *Mesocrambus tamsi* n. sp. Paratype.

Fig. 5. *Mesocrambus candiellus* (H.-S.).

Fig. 6. *Calamotropha bradleyi* n. sp. Holotype.

## Female genitalia

Fig. 7. *Calamotropha azumai* n. sp. Holotype.Fig. 8. *Mesocrambus tamsi* n. sp. Paratype.Fig. 9. *Xanthocrambus delicatellus* (Zell.).Fig. 10. *Xanthocrambus watsoni* n. sp. Allotype.