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# **A review of the genus *Lecithocera* Herrich-Schäffer, 1853 in the Philippines, with descriptions of seven new species (Lepidoptera: Lecithoceridae)**

K.-T. Park & W. Mey

## **Abstract**

Fifteen species of the genus *Lecithocera* Herrich-Schäffer, 1853 including seven new species (*L. leytensis* Park & Mey, sp. n., *L. insulana* Park & Mey, sp. n., *L. lunulata* Park & Mey, sp. n., *L. distigmata* Park & Mey, sp. n., *L. strigana* Park & Mey, sp. n., *L. luzonica* Park & Mey, sp. n., and *L. stenocaltalexis* Park & Mey, sp. n.), one newly recorded species from the Philippines (*L. castanoma* Wu, 1997), and seven previously known species, are recognized in the Philippines. Of the previously known species, *L. megalopis* Meyrick, 1916, *L. improvisa* Diakonoff, 1967 and *L. leucomastis* Diakonoff, 1967 were not found again and are treated here only briefly. Images of adults and male genitalia of the new and newly known species are provided, and available taxonomic data for the species are given.

**Una revisión del género *Lecithocera* Herrich-Schäffer, 1853 en las Filipinas, con descripción de siete nuevas especies (Lepidoptera: Lecithoceridae)**

## **Resumen**

En las Filipinas se registran quince nuevas especies del género *Lecithocera* Herrich-Schäffer, 1853, incluyendo siete nuevas especies (*L. leytensis* Park & Mey, sp. n., *L. insulana* Park & Mey, sp. n., *L. lunulata* Park & Mey, sp. n., *L. distigmata* Park & Mey, sp. n., *L. strigana* Park & Mey, sp. n., *L. luzonica* Park & Mey, sp. n., y *L. stenocaltalexis* Park & Mey, sp. n.), un nuevo registro (*L. castanoma* Wu, 1997) y siete especies previamente conocidas. De las especies previamente conocidas, *L. megalopis* Meyrick, 1916, *L. improvisa* Diakonoff, 1967 y *L. leucomastis* Diakonoff, 1967 no fueron encontradas otra vez y aquí son tratadas brevemente. Se presentan las fotografías de los adultos y las genitales de los machos de las nuevas especies y se dan los datos taxonómicos de las especies disponibles.

## **Introduction**

The genus *Lecithocera* Herrich-Schäffer, 1853 is the most diverse genus of the family Lecithoceridae, comprising more than 300 species described in the world. Of these, 49 species have been described by the author and his co-authors since 1998 (PARK, 2012b; 2014). The genus is highly diverse all over the world, except in the Neotropical Region. Little has been published on the larval feeding habits of the family. Some Australian species feed on *Eucalyptus* leaf litter (COMMON, 1996) and *Lecithocera thiodora* (Meyrick, 1914) was reared from dead leaves of broad leaved trees in Japan (KOMAI *et al.*, 2011).

For the genus *Lecithocera* occurring in the Philippines, MEYRICK (1910, 1916, 1923, 1929)

described six species: *L. cassiterota* Meyrick, 1923, *L. megalopsis* Meyrick, 1916, *L. fausta* Meyrick, 1910, *L. ochrocapna* Meyrick, 1923, *L. recurvata* Meyrick, 1923, and *L. goniometra* Meyrick, 1929. Among them, *L. cassiterota* was previously transferred to *Chrysonasma* PARK (2008a), and *L. ochrocapna* and *L. recurvata* to *Torodora* by PARK (2008b). DIAKONOFF (1967) described 12 species of *Lecithocera*, but three of them (*L. activate* Diakonoff, 1967, *L. niphotricha* Diakonoff, 1967, and *L. phanerostoma* Diakonoff, 1967) were also transferred to *Torodora* Meyrick, 1894 by PARK (2008b). PARK (2008b) suggested that a further three species (*L. acribostola* Diakonoff, 1967, *L. decorosa* Diakonoff, 1967 and *L. strenua* Diakonoff, 1967) described by DIAKONOFF (1967) should be considered for transfer from *Lecithocera* to other genera, due to the different shape of the forewings with sharply produced apex (in *L. acribostola* and *L. decorosa*) and differing male genital character (in *L. strenua*). The other two species, *L. sophronopa* Diakonoff, 1967 and *L. telosperma* Diakonoff, 1967 are retained in the genus, with some uncertainties because of different venation and wing pattern. These five species are not included in this review

Consequently, seven species, *L. fausta* Meyrick, 1910, *L. goniometra* Meyrick, 1929, *L. megalopsis* Meyrick, 1916, *L. docilis* Diakonoff, 1967, *L. luteola* Diakonoff, 1967, *L. leucomastis* Diakonoff, 1967, and *L. improvisa* Diakonoff, 1967 are known so far as members of the genus in the Philippines, and seven additional species of the genus are described in this paper as new to science. However, the number of species occurring in the Philippines seems to be much larger and we are still far from having a thorough knowledge of the real dimension of the fauna living in this archipelago.

## Materials and methods

Specimens examined in this study are the material loaned from the Museum für Naturkunde, Humboldt-Universität, Berlin (MfN), collected by W. Mey and his colleagues in Luzon, Samar and Leyte in 1995, 1997 and 2001. For seven new species, full descriptions of external and genital characters with diagnosis, distribution, and remarks are given. Also, diagnoses and the re-description of male genitalia are provided for a newly reported species from the Philippines. For the four previously known species found in this study, general taxonomic information including bibliographies, the type locality (TL), diagnosis, sources of figures of genitalia, distribution, and remarks, are communicated. The other three species, which are not dealt with in this study, are only listed. The preparation of genitalia slides followed standards described in PARK (2012a) and the colour standard for the description of adults followed KOENERUP & WANSCHER (1978). Types of the new species are preserved in the Museum für Naturkunde Humboldt-Universität, Berlin (MfN), Germany.

## Systematic accounts

Genus *Lecithocera* Herrich-Schäffer, 1853

Type-species: *Carcina luticornella* Zeller, 1839. TL: Europe.

Diagnosis: The genus is characterized by the hind wing venation with  $M_3$  and  $CuA_1$  stalked or often coincident (Fig. 9); the abdominal tergites without spines, the 2nd segment of the labial palpus normally thickened, the 3rd segment slender with acute apex; the abdomen without spinous zones on tergites, and with well-modified structure on the segment VII-VIII, usually bearing long coremata. In the male genitalia, a well-developed costal bar connecting tegumen and costal margin of valve is present, uncus reduced

## Description of new species

*Lecithocera leytensis* Park & Mey, sp. n. (Figures 1, 10, 10a-c)

Holotype: ♂, Leyte, Lake Danao, 650 m, 14~17-IV-1997, coll. Mey & Speidel, gen. slide no.

CIS-6228/Park. Paratypes: 1 ♂, same data as the holotype, gen. slide. no. CIS-5029/Park, -6229/Park; 1 ♂, S-Leyte, Libas, Bagnong River, 20-IV-1997, coll. Mey & Speidel, gen. slide no. CIS-6227/Park; 1 ♂, Quezon, Infanta, Magsaysay, 90 m, 9~10-IV-1997, coll. Mey & Speidel, gen. slide no. CIS-6230/Park; 1 ♂, Luzon, Naga, Mt. Isarog, 22-III-2000, coll. Mey & Ebert.

Diagnosis: The species resembles *L. mepsina* Park, 2006, which was described from Thailand, in external and male genital character, but it is larger. In the male genitalia, the cucullus is broadened posteriorly, whereas it is nearly parallel sided in *L. mepsina*; the aedeagus has a batch of short spines near base, two long rods, and a pickax-shaped, heavily sclerotized plate beyond middle.

Description: Male (Figure 1). Wingspan, 14.0-15.0 mm. Head pale yellow, mixed with brownish scales dorsally. Scape of antenna elongate, light yellow dorsally, brownish ventrally; flagellum pale orange, paler toward apex, slightly thickened in basal 1/3, with inconspicuous annulations. Second segment of labial palpus thickened, light orange, speckled with brownish scales on outer surface, with yellowish white apex, paler on inner surface, with short rough scales antero-ventrally; 3rd segment slender, shorter than 2nd. Tegumen and thorax pale yellow. Hind tibia slender, pale yellow dorsally, dark brown ventrally. Forewing narrow, elongate; ground colour pale yellow, blackish scales irregularly scattered below costa in basal half; costa slightly arched near basal 1/5 and beyond 3/4, nearly straight medially, with black subbasal streak in basal 1/5; a pair of dark-brown discal stigmata well developed at middle and at end of cell; apex more or less acute; termen slightly falcate beyond apex, slightly sinuate medially; with 5-6 blackish dots along margin; fringe concolorous; venation with  $R_1$  arising near middle of cell; distance between  $R_1$  and  $R_2$  more than twice that between  $R_2$  and  $R_3$ ;  $R_3$  stalked with  $R_{4+5}$  beyond middle;  $R_4$  and  $R_5$  stalked;  $R_5$  to termen;  $M_2$  nearly parallel to  $M_1$ ;  $M_3$  free;  $CuA_1$  and  $CuA_2$  short-stalked. Hindwing grayish yellow;  $Rs$  and  $M_1$  shortly stalked;  $M_2$  present;  $M_3$  and  $CuA_1$  coincident; apex acute; termen sinuate; cell closed with weak cross vein. Female unknown.

Male genitalia (Figures 10, 10a-b): Basal lobes of uncus directed outwardly with a gently concave caudal margin. Gnathos rather short, bent with narrow apical part. Costal bar heavily sclerotized, with median angle. Valva broad basally; cucullus elongate, as long as basal part of valva, with a bundle of long setae at basal corner, densely setose submesially; costal margin gently concave; ventral margin convex beyond middle; apex rounded. Caudal margin of juxta deeply concave in V-shape; latero-caudal apices clavate. Aedeagus broad at basal third, with a pair of short apical spines; cornuti consisting of a batch of short spines near base, two weakly sclerotized rods medially, and with a pickax-shaped, heavily sclerotized plate beyond middle. Abdominal segment VII-VIII shown in Figure 10c.

Distribution: Philippines.

Etymology: The species is named after the island of "Leyte".

***Lecithocera insulana* Park & Mey, sp. n.** (Figure. 2, 11, 11a-b)

Holotype: ♂, Mindanao, Mangagoy, SW Lingig, 28-V-1996, coll. Mey, gen. slide no. CIS-5230/Park.

Diagnosis: The new species closely resembles the preceding new species in external characters, but it is much larger. The male genitalia are also very similar to *L. leytenis* Park & Mey, sp. n., but can be distinguished by the following traits: cucullus more slender, shorter; length of cucullus (from lower corner to apex) shorter than the basal part of valva (from the lower base of valva to the lower corner of cucullus) with the ratio of 1: 1.2, whereas in *L. leytenis*, they are nearly equal; aedeagus more stout, with a patch of minute spinules beyond middle, cornuti consisting of a heavily sclerotized arched rod connected to a short fishhook-shaped plate, and other various shorter sclerites; a batch of dense short spines absent near base.

Description: Male (Figure 2). Wingspan, 20.0 mm. Head pale yellow dorsally, partly de-scaled. Scape of antenna elongate, pale yellow; flagellum pale orange, with inconspicuous annulations. Second segment of labial palpus thickened, light orange, speckled with brownish scales on outer surface, with

yellowish white apex, paler on inner surface; 3rd segment slender, shorter than 2nd segment, pale yellow dorsally, dark brown ventrally. Tegumen and thorax pale yellow. Forewing broader toward distal end; ground color pale yellow, costa slightly arched near basal 1/4, beyond 3/4, nearly straight medially, with black subbasal streak in basal 1/5; a pair of dark-brown discal stigmata well presented: smaller one at middle and larger elliptical one at end of cell; apex more or less obtuse; termen sinuate, with brownish scales along margin; fringe orange white, unicolorous; venation with  $R_1$  arising from near middle of cell; distance between  $R_1$  and  $R_2$  about 1.5 times of that between  $R_2$  and  $R_3$ ;  $R_3$  stalked with  $R_{4+5}$  at basal 1/3;  $R_4$  and  $R_5$  stalked beyond 3/4;  $R_5$  to termen;  $M_2$  nearly parallel to  $M_1$ ;  $M_3$  free;  $CuA_1$  and  $CuA_2$  stalked for about 1/4. Hindwing orange white, densely scattered with brownish scales;  $Rs$  and  $M_1$  short-stalked;  $M_3$  close to  $M_3+CuA_1$  at base;  $M_3$  and  $CuA_1$  coincident; apex acute; termen sinuate; cell closed with weak cross vein. Female unknown.

Male genitalia (Figures 11, 11a): Basal lobes of uncus directed outwardly with V-shaped caudal margin. Gnathos rather short, bent with narrow apical part. Costal bar heavily sclerotized, with median angle. Valva broad basally; cucullus elongate, shorter than basal part of valva, with a bundle of long setae at basal corner, costa concave; ventral margin gently convex beyond middle, densely setose along ventral margin; apex rounded. Caudal margin of juxta deeply concave. Aedeagus stout, gently bent, with a pair of short apical spines; cornuti consisting of a heavily sclerotized arched rod connected to a short fishhook-shaped plate and other various shorter sclerites.

Etymology: The specific epithet is derived from the Latin, *insula*, island

Distribution: Philippines (Mindanao).

***Lecithocera luzonica* Park & Mey, sp. n.** (Figs. 3, 12, 12a)

Holotype: ♂, Luzon, Benguet, 19~21-XI-1997, Adunot River, coll. Mey, Ebert & Nuss, gen. slide no. CIS- 6239/Park.

Diagnosis: The new species closely resembles *L. stenocaltalexis* Park & Mey, sp. n. in the forewing pattern, but the male genitalia differ from the latter by the valva having a large basal part and short cucullus in the new species (*L. luzonica* Park & Mey).

Description: Male (Figure 3). Wingspan, 10.0-10.5 mm. Head yellowish white dorsally. Scape of antenna elongate, yellowish white on all sides; flagellum shiny yellowish white, without distinct annulations on each segment. Second segment of labial palpus thickened, slightly thicker toward apex, brownish orange speckled with dark brown scales on outer surface, with yellowish white scales at apex, yellowish white on inner surface; 3rd segment slender, shorter than 2nd segment, yellowish dorsally except blackish apical part, blackish ventrally. Tegumen and thorax yellowish white. Hind tibia yellowish white, speckled with dark brown scales on outer surface, yellowish white on inner surface. Forewing broader posteriorly; ground color yellowish white, dark brown scales irregularly scattered, more dense in distal part; costa slightly arched near basal 1/4 and beyond 3/4, nearly straight medially, with black subbasal streak along margin in basal 1/5; a pair of dark-brown discal stigmata; a small one at middle, larger rounded one at lower corner of cell; apex obtuse; termen slightly oblique; fringe pale orange gray. Hindwing yellowish white; apex more or less obtuse.

Male genitalia (Figures 12, 12a): Basal lobes of uncus semiovalate, with dense setae along caudal margin. Gnathos slender, relatively short, bent preapically. Costal bar nearly straight, with a small median angle beyond half. Valva broad basally; basal part occupying 2/3 of all; cucullus less than 2/3 of basal part, with a bundle of setae at basal corner, short bristles along ventral margin, sparsely setose in lower half; costal margin slightly concave before middle; apex rounded, with long hairs. Vinculum broad, with rounded apex. Aedeagus longer than valva, bent at basal 1/4; cornuti consisting of a batch of numerous spinules, 1/3 the length of aedeagus, two heavily sclerotized, differently sized, asymmetrical rods, and two short conic spines in distal part.

Distribution: Philippines (Luzon).

Etymology: The species name is derived from the type locality, Luzon, the main island of the Philippines.

***Lecithocera lunulata* Park & Mey, sp. n.** (Figs. 4, 13, 13a-b)

Holotype: ♂, Palawan, Mt. St. Paul, Babuyan-River, Cayasan, 5~6-IV-1995, coll. W. Mey, gen. slide no. CIS- 6236/Park. Paratypes: 2 ♂♂, same data as the holotype.

Diagnosis: This new species is similar to *L. palingensis* Park, 1999, which was described from Taiwan, but it is much smaller, with apex of the forewing not blunt, and cucullus of the male genitalia with more gently concave costa. The male genitalia are also similar to those of *L. fascinatrix* Meyrick, 1935 known from Taiwan, but it is readily distinguished by the forewing without dark brown fascia along termen inwardly and non falcate beyond apex.

Description: Male (Figure 4). Wingspan, 11.5-12.0 mm. Head pale brownish orange dorsally, with pale yellow erect scales laterally. Scape of antenna pale yellow all around; flagellum shiny pale yellow, without distinct annulations on each segment. Second segment of labial palpus thickened, ventral margin slightly arched, pale grayish orange on outer surface, with pale yellow on inner surface; 3rd segment shorter, about 3/4 as long as 2nd segment, less slender than its allies. Tegumen densely clothed with black scales; thorax pale yellow. Hind tibia with shiny yellowish white hairs dorsally, pale yellow speckled with dark brown scales on outer surface, pale yellow on inner surface. Forewing broader toward distal end; ground color pale yellow, dark brown scales irregularly scattered throughout upper surface; costa slightly arched near basal 1/4 and beyond 3/4, nearly straight medially, with black subbasal streak below costa in basal 1/4; a pair of nearly similar size, elliptical dark-brown discal stigmata well developed, at middle and end of cell; apex obtuse; termen slightly convex outwardly; fringe pale orange gray in basal half, paler beyond; venation with  $R_1$  arising before middle of cell; distance between  $R_1$  and  $R_2$  more than 1.5 times of that between  $R_2$  and  $R_3$ ;  $R_3$  stalked with  $R_{4+5}$  at 1/3;  $R_4$  and  $R_5$  stalked near 2/3;  $R_5$  to apex;  $M_2$  nearly parallel to  $M_1$ ;  $M_2$  close to  $M_3+CuA_1$  at base;  $M_3$  and  $CuA_1$  coincident. Hindwing yellowish white; apex more or less acute. Female unknown.

Male genitalia (Figs. 13, 13a-b): Basal lobes of uncus elliptical, close together. Gnathos relatively short. Costal bar connecting tegumen and valva broad, not angled medially. Cucullus elongate, slender, longer than basal part of valva, nearly parallel sided, with gently concave costal margin, ventral margin gently arched; apex more or less acute. Sacculus broadly developed. Aedeagus as long as valva, with a pair of apical spines, cornuti consisting of a crescent shaped sclerite posteriorly, a broadly rolled plate medially, and a large patch of dense spinules, longer than 1/2 of aedeagus.

Distribution: Philippines (Palawan).

Etymology: The species name is derived from Latin, *lunula* (= crescent), referring to the crescent shaped ventral margin of the valva in the male genitalia.

***Lecithocera distigmata* Park & Mey, sp. n.** (Figs. 5, 14, 14a)

Holotype: ♂, Mindanao 1050 m, Mt. Agtuuganon, 28-V~7-VI-1996, coll. Mey, gen. slide. no. CIS-5223/Park. Paratypes: 3 ♂♂, same data as the holotype; 1 ♂, Leyte lake, Danao, 650 m, 14~17-IV-1997, coll. Mey & Speidel, gen. slide. no. CIS-5040/Park.

Diagnosis: The new species resembles *L. leytensis* Park & Mey, sp. n. and *L. insulana*, in external character, but it can be distinguished from these by a black spot before apex on costa, and by the male genitalia with the extremely broad basal part of valva and the very specialized, characteristic cornuti in the aedeagus.

Description: Male (Fig. 5). Wingspan, 12.5-13.0 mm. Head yellowish white dorsally. Scape of antenna elongate, yellowish white all around; flagellum shiny, yellowish white, without annulations on each segment. Second segment of labial palpus thickened, pale grayish yellow on outer surface, with yellowish white apex, paler on inner surface; 3rd segment slender, as long as 2nd segment, yellow white dorsally, except dark brown apical 1/4, dark brown ventrally. Tegumen and thorax pale yellow. Forewing broader distally; ground color pale yellow, costa slightly arched near basal 1/4, then nearly straight, with short black basal streak anteriorly, a small blackish spot before apex; a pair of dark-brown discal stigmata well presented: a smaller one at middle and a larger elliptical one at end of cell; apex

more or less obtuse; termen oblique, with blackish spot medially; fringe concolorous; venation with  $R_1$  arising before middle of cell; distance between  $R_1$  and  $R_2$  about 1.5 times of that between  $R_2$  and  $R_3$ ;  $R_3$  stalked with  $R_{4+5}$  at 2/5;  $R_4$  and  $R_5$  stalked beyond 2/3;  $M_2$  nearly parallel to  $M_1$ ;  $M_3$  free;  $CuA_1$  and  $CuA_2$  stalked for 1/3 of  $CuA_2$ . Hindwing grayish white, densely covered with brownish scales;  $R_s$  and  $M_1$  short-stalked;  $M_2$  present; and  $CuA_1$  coincident; termen sinuate before middle; cell closed with weak cross vein. Female unknown.

Male genitalia (Figures 14, 14a): Basal lobes of uncus short, elliptical, with rounded apex. Gnathos relatively short, apical spine gently bent. Costal bar connecting tegumen and valva heavily sclerotized, band-shaped, strongly arched medially, not angled medially. Valva with extremely broad basal part, deeply concave beyond costal bar; cucullus elongate, as long as basal part, with gently arched ventral margin, densely setose on surface, especially in lower half; apex obtuse. Juxta deeply concave on caudal margin. Aedeagus large, stout as long as valva; cornuti consisting of 3-4 sclerotized rods of different length and 8-10 short conic spines beyond middle.

Distribution: Philippines (Mindanao, Leyte)

Etymology: The species name is derived from Greek,  $\delta\omicron\varsigma$  (= two) and  $\sigma\pi\eta\mu\alpha$  (= spot), referring to the well-developed discal stigmata

***Lecithocera stenocaltalexis* Park & Mey, sp. n.** (Figures 6, 15, 15a-b)

Holotype: ♂, Negros, Patag NR, 750 m 20~25-V-1996, coll. W. Mey, gen. slide no. CIS-6244/Park. Paratype: 1 ♂, same data as the holotype.

Diagnosis: The new species is characterized by having a long hairpencil near base on inner margin of the hindwing. It is superficially close to *L. ambona* Wu & Liu, 1993, which is known in Sichuan and Central China, but it is much smaller, and the cucullus of the male genitalia is broad basally and sharply acute apically.

Description: Male (Fig. 6). Wingspan, 11.0 mm. Head orange white dorsally. Scape of antenna elongate, orange white dorso-anterior surface, blackish on ventral surface; flagellum shiny orange white, no distinct annulations in basal half and weakly presented beyond. Second segment of labial palpus thickened, brownish orange on outer surface, orange white on inner surface; 3rd segment thicker, compared to that of its allies, shorter than 2nd segment. Tegumen clothed with dark brown scales dorsally, blackish anteriorly. Thorax orange white, scattered with brownish yellow scales. Forewing ground color orange white, irregularly scattered with dark brown scales, especially more in distal half; a pair of dark-brown rounded discal stigmata well presented: one at middle quadrate and the other in the lower corner of cell, elongated vertically; apex more or less obtuse; termen more or less falcate beyond apex; fringe concolorous, with brownish median band. Hindwing brownish gray, with a long hairpencil near base on inner margin; apex acute; termen slightly concave. Female unknown.

Male genitalia (Figs. 15, 15a-b): Gnathos relatively short, gently bent. Tegumen with digitate lobes anteriorly. Costal bar band-shaped, gently arched at basal 1/3, not angled medially, smoothly connected to costal margin of valva. Valva broad at base; basal part occupying about half of all; cucullus narrowed toward apex, width at base about 1/2 of basal part, densely setose; costa slightly convex before middle, then slightly concave; apex more or less acute, with long, hairs; sacculus short, about 1/6 of valva. Vinculum broad, with rounded apex. Aedeagus stout, about 2/3 length of valva, with a pair of preapical spines; cornuti consisting of a pair of strongly bent bars beyond middle, with a sac containing minute spinules, about 3/4 length of aedeagus.

Distribution: Philippines (Negros).

Etymology: The species name is derived from Greek,  $\sigma\tau\epsilon\nu\omicron\varsigma$  (= narrow) and  $\kappa\alpha\tau\alpha\lambda\epsilon\sigma\iota\varsigma$  (= end, termination), referring to the caudally narrowed valva.

***Lecithocera strigana* Park & Mey, sp. n.** (Figs. 7, 9, 16, 16a-b)

Holotype: ♂, Luzon, Bataan, Dinalupihan, 11-XI-1998, coll. Mey & Speidel, gen. slide no. CIS-



6241/Park. Paratypes: 1 ♀, Luzon, Zambales, Mts. Coto, 150 m, 9~10-XI-1998, coll. Mey & Speidel, gen. slide no. CIS-6515/Park; 2 ♂♂, Luzon, Zambales, Mts. Coto, 110 m, 5~6-V-1999, coll. Mey & Ebert, wing prep. no. CIS-6514/Park; 1 ♀, Luzon, Zambales, Mts. Coto, 250 m, 6~7-V-1999, coll. Mey & Ebert; 2 ♂♂, Luzon, Zambales, Mts. Pili, 150 m, 5~7-XI-1998, coll. Mey & Speidel.

**Diagnosis:** The new species is characterized by the forewing pattern and venation, having a long blackish transversal streak connecting two rounded discal stigmata, about 1/3 length of wing, or often extended to termen; a blackish slightly oblique plical streak below it; and CuA<sub>2</sub> absent on the forewing. The male genitalia more or less resemble those of *L. sigillata* Gozmány, 1978 which is known from Chekiang, S. China and *L. rubigona* Park, 2006 which is known from Thailand, but the new species differs from them by the shape of the forewings with its characteristic pattern.

**Description:** Male (Figure 7). Wingspan, 9.0-9.5 mm. Head yellowish white laterally, with a grayish brown median line dorsally. Scape of antenna yellowish white dorsally, brownish ventrally, not ciliate; flagellum yellowish white, with conspicuous brownish annulations. Second segment of labial palpus long, thickened, densely covered with dark brown scales on outer surface, yellowish white with several brownish patches beyond half on inner surface; 3rd segment slender, shorter than 2nd, yellowish white dorsally, dark brown ventrally. Tegumen and thorax yellowish white with brownish scales irregularly scattered. Forewing lanceolate with acute apex; ground color yellowish white; brownish scales irregularly scattered, more dense toward apex; a thick, blackish transversal streak, connecting the two discal stigmata, about 1/3 length of wing, often extended to termen; a shorter, narrower blackish plical streak presented below cell, from basal 1/6 to 2/5 of wing; costa nearly straight, with blackish streak along margin basally; short blackish streak at 1/4 of inner margin; apex more or less acute; termen slightly concave medially; fringe pale brownish with dark brown median line; venation (Fig. 9) with R<sub>1</sub> arising before middle of cell; distance between R<sub>1</sub> and R<sub>2</sub> about twice of that between R<sub>2</sub> and R<sub>3</sub>; R<sub>3</sub> and R<sub>4</sub> stalked before middle; R<sub>4</sub> to costa before apex; R<sub>5</sub> absent; M<sub>2</sub> and M<sub>3</sub> nearly parallel; CuA<sub>2</sub> absent. Hindwing grayish white, shiny, narrowed toward apex from middle; apex sharply produced; termen very oblique; fringe yellowish white; Rs and M<sub>1</sub> stalked beyond half; M<sub>3</sub> and CuA<sub>1</sub> coincident (Fig. 9).

**Male genitalia** (Figs. 16, 16a-b): Basal lobes of uncus directed outwardly, with V-shaped caudal margin. Gnathos bent preapically with acute apex. Costal bar band-shaped, angled medially. Valva broad at base, basal part occupying less than half of all; cucullus narrowed toward apex, twisted beyond middle, width at base less than 1/2 of basal part, setose on surface; apex more or less clavate, with long hairs; costa slightly concave beyond middle; sacculus weakly developed. Aedeagus slender, bent at 1/3, about 2/3 length of valva, with a long sac containing minute spinues.

**Female genitalia** (Fig. 18): Abdominal sternite VIII slightly emarginate medially; abdominal tergite VIII with small triangular processes laterally on anterior margin laterally. Antrum large, cup-shaped, ductus bursae membranous, wrinkled, twisted beyond middle, about 3 times of antrum in length. Corpus bursae ovate; signum large, forming transversal plate with nearly straight, heavily sclerotized, serrated upper margin and arched lower margin, width more than 2/3 of corpus bursae.

**Distribution:** Philippines (Luzon).

**Etymology:** The species name is derived from Latin, *striga* (= streak), referring to the dark fuscous streak on the forewing.

### Newly recorded species from the Philippines

*Lecithocera castanoma* Wu, 1997 (Figures 8, 17, 17a)

*Lecithocera castanoma* Wu, 1997: 125. TL: Guangdong, S. China.

**Diagnosis:** Wingspan, 12.0 mm. The new species is superficially similar to the preceding new species, *L. leytensis* sp. n., but it is distinguished by the forewing clothed with browner scales, without a dark brown marginal line along termen and the cucullus of the male genitalia is broader, with costal margin convex medially.

**Male genitalia** (Figs. 16, 16a-b): See also also WU (1997, pl. 10, fig. 4). Similar to those of *L.*



*nepalica* Gozmány, 1973 but can be distinguished from the latter by having longer cucullus with the dorsal margin of valva convex medially and round anterior margin of saccus.

Material examined: 3 ♂♂, Leyte, Lake Danao, 650 m, 14~17-IV-1997, coll. Mey & Speidel, gen. slide no. CIS-5038/Park; 1 ♂, Luzon, Naga, Mt. Isarog, 22-III-2000, coll. Mey Evert, gen. slide no. CIS-6231/Park; 2 ♂♂, Leyte, Lake Danao, 650 m, 14~17-IV-1997, coll. Mey & Speidel, gen. slide no. CIS-6233/Park.

Distribution: Philippines (Luzon, Leyte), China (Guangdong).

*Lecithocera fausta* Meyrick, 1910

*Lecithocera fausta* Meyrick, 1910: 449; Meyrick, 1925: 239; Clarke, 1965: 131; Diakonoff, 1967: 138. TL: Luzon, Philippines.

Diagnosis: Wingspan, 13.0 mm. The species is similar to *L. luteola* Diakonoff, 1967 but can be distinguished by the larger size, a transverse dark-brown suffusion between the second stigma and the hind margin, the absent plical stigma, and six dark dots along the termen. Judging from the male genitalia, this species belongs to the *L. pelomorpha* species group, with broad, short cucullus with a rounded caudal margin, but differ from them by having a less angulated costal bar.

Male genitalia: DIAKONOFF (1967, Figs. 168-169, 197-198, 617).

Material examined: 2 ♂♂, Luzon, Mountain Province, Barlig, 1650 m, 14~15-XI-1997, coll. Mey, Ebert, Nuss, gen. slide no. CIS-6237/Park, -6259/Park.

Distribution: Philippines (Luzon).

*Lecithocera goniometra* Meyrick, 1929

*Lecithocera goniometra* Meyrick, 1910: 522; Clarke, 1965(5): 132; Diakonoff, 1967: 140. TL: Los Banos, Philippines.

Diagnosis: Wingspan, 15 mm. Similar to the preceding species with distinct discal stigmata and plical blackish dot, but the series of blackish dots on margin towards apex and along termen is not developed or is very weak, whereas in *L. fausta* the blackish dots are well presented.

Male genitalia: See Clarke (1965, Pl. 66, Figures 4, 4a-b); Diakonoff (1967, Figures 170-171, 192, 614).

Material examined: 1 ♂, Luzon, Mt. Banahaw, Kinabuhayan, 17~19-III-2000, coll. Mey & Richter, gen. slide no. CIS-6202/Park.

Distribution: Philippines (Luzon).

*Lecithocera luteola* Diakonoff, 1967

*Lecithocera luteola* Diakonoff, 1967: 145. TL: Luzon, Philippines.

Diagnosis: Wingspan, 11mm. This species can be distinguished by the smaller size, with smaller first discal stigma and the plical dot present beneath the second discal stigma; also by the male genitalia with narrowed, elongated cucullus.

Male genitalia: See DIAKONOFF (1967, Figures 184, 185).

Material examined: 1 ♂, Panay, Antique, Culasi San Vicente, 11-IV-1995, coll. Mey, gen. slide no. CIS-5289/Park; 2 ♂♂, Panay, Iloilo San Bernadino, 400 m, 12-IV-1995, coll. Mey, gen. slide no. CIS-6235/Park.

Distribution: Philippines (Luzon).

Remarks: This species was described based on a single male.

*Lecithocera docilis* Diakonoff, 1967

*Lecithocera docilis* Diakonoff, 1967: 144. TL: Mt. Makiling, Luzon, Philippines.

Diagnosis: Wingspan, 14 mm. The species is similar to *L. fausta* Meyrick, but the second discal stigma is smaller, the dark brown suffusion between the second stigma and the hind margin is absent, and dark dots along the termen are also absent. The male genitalia are similar to those of *L. luteola* Diakonoff, but the cucullus is broader and strongly upturned.

Male genitalia: See DIAKONOFF (1967, Figures 172, 173).

Material examined: 1 ♂, Luzon, Santa Fe, Bold Mt. 1,150 m, 11~13-XI-1997, coll. Mey & Ebert, Nuss, gen. prep. no. CIS-5034/Park.

Distribution: Philippines (Luzon).

### Species not treated in this study

*Lecithocera megalopis* Meyrick, 1916

*Lecithocera megalopis* Meyrick, 1916: 575; Meyrick, 1925: 239; Diakonoff, 1967: 138, Fig. 608. TL: Luzon, Philippines.

This species is characterized by large blackish stigmata on the forewing and can be distinguished from the newly described species by these larger stigmata. Diakonoff (1967) examined a female specimen (abdomen missing) deposited in the Natural History Museum, London, and provided a photo of the type

*Lecithocera improvisa* Diakonoff, 1967

*Lecithocera improbisa* Diakonoff, 1967: 146, Fig. 620. TL: Mindanao, Philippines.

This species can be distinguished from *L. luteola* Diakonoff, and *L. docilis* Diakonoff by the presence of a large, blackish plical dot before the first discal stigma and by the sharply produced apex of the hindwing.

*Lecithocera leucomastis* Diakonoff, 1967

*Lecithocera leucomantis* Diakonoff, 1967: 145, Fig. 160. TL: Luzon, Philippines.

This species can be distinguished from all newly described species in this study by the dark fuscous forewing ground color. The species is known from the female holotype only.

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