

Notes on *Oospila sporadata* (Warren, 1906) and *O. stagonata* (Felder & Rogenhofer, 1875) from French Guiana and Ecuador (Lepidoptera: Geometridae)

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Abstract

Oospila curvimargo Herbulot, 1991 is formally reinstated from synonymy with *O. sporadata* (Warren, 1906), and *Oospila arycanda* (Druce, 1892) is reinstated from synonymy with *O. stagonata* (Felder & Rogenhofer, 1875) based on differences in their genitalia. Four new species are separated from *Oospila stagonata* based on differences in their male and female genitalia: *Oospila elegia* Lindt & Viidalepp, sp. n., *Oospila furcata* Lindt & Viidalepp, sp. n., *Oospila truncata* Lindt & Viidalepp, sp. n. and *Oospila rogata* Lindt & Viidalepp, sp. n. The adults and their male and female genitalia are illustrated.

KEY WORDS: Lepidoptera, Geometridae, taxonomy, morphology, *Oospila*, new species, French Guiana, Ecuador.

**Notas sobre *Oospila sporadata* (Warren, 1906) y *O. stagonata* (Felder & Rogenhofer, 1875)
de la Guayana Francesa y Ecuador
(Lepidoptera: Geometridae)**

Resumen

Oospila curvimargo Herbulot, 1991 es oficialmente restituido de la sinonimia con *O. sporadata* (Warren, 1906) y *Oospila arycanda* (Druce, 1892) es restituido de la sinonimia con *O. stagonata* (Felder & Rogenhofer, 1875) basado sobre la diferencia en su genitalia. Cuatro nuevas especies se separan de *Oospila stagonata* basándose en las diferencias de la genitalia del macho y de la hembra: *Oospila elegia* Lindt & Viidalepp, sp. n., *Oospila furcata* Lindt & Viidalepp, sp. n., *Oospila truncata* Lindt & Viidalepp, sp. n. and *Oospila rogata* Lindt & Viidalepp, sp. n. Se ilustran los adultos y la genitalia del macho y de la hembra.

PALABRAS CLAVE: Lepidoptera, Geometridae, *Oospila*, nueva especie, taxonomía, morfología, Guayana Francesa, Ecuador.

Introduction

Multi-coloured species of the Neotropical moth genus *Oospila* Warren, 1897 are often paid attention by lepidopterists and nature photographers. The moths are attractive, having light-brown blotches on dark-green wings. The genus was last revised by COOK & SCOBLE (1995) who described seventy-four species-level taxa. However, cryptic species are frequently overlooked in large-scale works (VODĀ *et al.*, 2014). VIIDALEPP (2002), LÉVÊQUE & VIIDALEPP (2015), LINDT & VIIDALEPP (2015) and LINDT, HAUSMANN & VIIDALEPP (2018) have described twelve additional species.

The present study is aimed at reinvestigating relationships between the species with light- green-coloured wings with irregular white speckling: *Oospila sporadata* (Warren, 1906), *O. stagonata* (Felder & Rogenhofer, 1875) and the similar *Oospila athena* (Druce, 1892). PROUT (1932) grouped these species and *Oospila nivetacta* (Warren, 1906) into the genus *Progonodes* Warren, 1897, relying on wing pattern, slightly angulate hindwings and short palpi of adults. Prout combined *Progonodes holochroa* Prout, 1912 (from Panama) and *P. arycanda* (Druce, 1892) (from Costa Rica) as subspecies with the Colombian *Racheospila stagonata*. He retained *Racheospila sporadata* in *Oospila* Warren. *Progonodes* was synonymized with *Oospila* by COOK & SCOBLE (1995) and the latter genus was divided into thirteen species groups. *Oospila sporadata* was included in the *Oospila athena* species group and *Oospila stagonata* was combined with *Oospila atopochlora* Prout, 1933 and allied species. The groups were characterized by their external characteristics but sometimes by genitalic structures (the *quinquemaculata* group, the *thalassina* group and some others).

Material and methods

The present study was stimulated by attempts to identify moths accumulated in the collection of the Estonian Museum of Natural History (TAMZ, Tallinn) and in the insect collection of the Institute of Zoology and Botany, Estonia (IZBE), which is deposited at the Estonian University of Life Sciences (Tartu). The main material for this study was collected between 1999 and 2013 and prepared for investigation by Aare Lindt. Additional materials were collected by T. Kesküla, K. Sarv, V. Soon, I. Renge, V. Viidalepp, J. Viidalepp (in the IZBE collection) and by A. Selin (Tallinn). We have integrated external morphological data, male and female genitalia characteristics, spatial distribution data and wing facies data in this study. The identification of male genitalic characters by brushing scales off the last sternite is easy, but identification of female genitalic characters requires dissection. Genital slides of males and females were treated using established procedures (Hardwick 1950), embedded in Euparal and photographed in ventral view. The genitalia slide numbers are added to illustrations to allow their comparison with related materials. The type specimens are registered in the PlutoF database.

Results

Oospila curvimargo (Herbulot, 1991) (Figs 1, 3, 5)

Progonodes curvimargo Herbulot, 1991. *Lambillionea*, **91**(2): 110

Type locality: Limon-Mendes rue 17 km, ECUADOR and Letitia, COLOMBIA

Oospila curvimargo (Herbulot). Synonymized with *O. sporadata* (Warren) by COOK & SCOBLE, 1995: 35.

Material: French Guiana, Kaw Mts., 300 m, 1 ♂, (slide 7944) (V. Soon); Kaw Road, 2 ♂♂, 05-I-2005, 04° 32' 54" N, 52° 10' 22" W, V. Soon leg.; Kaw Road, 2 ♂♂, 09-I-2005, 04° 33' 2,1" N, 52° 12' 43,2" W, V. Soon leg. (slide 7701); Kaw Road, 2 ♂♂, 02-II-2005, V. ja J. Viidalepp leg.; Kaw Road, 1 ♀, 29-I-2005, A. Selin leg. (slide 535); Kaw Mts., Camp Caiman, 1 ♂, 07-II-2008, I. Renge leg. (gen. 522).

Diagnosis: Wing markings as in *Oospila sporadata* (see figs 1 and 2), usually differing in the forewing distal margin which is slightly convex (almost straight in *O. sporadata* males). Differentiation from other "green-and-white mottled" species of the *O. stagonata* complex. Frons pure green, but for species in the *O. stagonata* complex green below, brown above. Separation from *O. sporadata* based on male genitalia: the tegumen is longer than the vinculum, the socii bases close together, the harpe flat and rectangular. Probably the nearest species, *O. lunicincta* (Warren, 1909), which is distributed from Brazil to Bolivia and Peru, has light green ground colour of the wings with delicate brownish submarginal blotches with light grey edging. Male genitalia of *O. lunicincta* lack the distal process of the sacculus.

Description: Wingspan 27-33 mm in males (Fig. 1), 36-39 mm in females. The anellar complex is fused and with a long process towards the saccus. The latter is slightly indented medially. The last

sternite of the male abdomen has flat, parallel-sided, dentate-edged distal processes. Female genitalia (Fig. 5) have a ball-shaped ostium and a slender, curved signum. Female genitalia: Ductus bursae shorter than corpus bursae.

Discussion: Both species, *O. sporadata* and *O. curvimargo*, have a similar wing pattern, irregular green and whitish mottling, and male genitalia with the valva split apically, and *O. curvimargo* having an almost rectangular harpe, *O. sporadata* more triangular, heavily sclerotized, subapical harpe (Fig. 3). *O. sporadata* has been described from French Guiana (WARREN, 1906: 496). It is illustrated by COOK & SCOBLE (1995: Figs 36, 111, 166) without reference to the genitalia slide of the holotype specimen (COOK & SCOBLE, 1995: 35). Our series from the Kaw Mts. in French Guiana fits with the original description and illustration of *O. curvimargo*, which was described from the eastern foothills of the Andes in Ecuador. It is possible that both species inhabit French Guiana allopatrically. Restored from synonymy with *Oospila sporadata* Warren.

Oospila sporadata (Warren, 1906) (Figs 2, 4, 6)

Progonodes sporadata Warren, 1906. *Proc. U. S. Mus.*, **30**: 426

Type locality: St. Jean, Maroni River, FRENCH GUIANA.

Oospila sporadata (Warren): PROUT, 1933: 59; COOK & SCOBLE, 1995: 35; LEVEQUE, 2015: 237.

Material: Ecuador, Pastaza prov., Arajuno 720 m, 2 ♂♂, 29-IV-2007, 01° 17' 26" S, 77° 42' 28" W, A. Lindt leg. (slide 7701); Pastaza prov., Arajuno, 640 m, 2 ♂♂, 30-IV-2007, 01° 16' 18" S, 77° 42' 21" W, A. Lindt leg. (slide 257); Pastaza prov., Arajuno 540 m, 2 ♂♂, 08-II-2008, 01° 9' 49" S, 77° 40' 41" W, A. Lindt leg.; Pastaza prov., Arajuno, 540 m, 2 ♂♂, 09-II-2008, 01° 17' 26" S, 77° 39' 28" W, A. Lindt (slides 7944, 532).

Diagnosis: Wings mottled green and white, no larger pure white or green areas as are characteristic for *Oospila athena* (Druce), discal spots absent. Differentiated from similar species in the *O. stagonata* (Felder & Rogenhofer) species complex by many features of the genitalic structures, e.g. in the shape of the last abdominal sternite of the male (which has smooth-edged triangular projections on the posterior edge in *O. sporadata*, while they are long, distally sclerotised, broad, finely serrate and cut obliquely in *O. curvimargo*). The bases of the socii are farther apart in *O. sporadata* compared to those of *O. curvimargo*, and the harpe gets more slender towards its tip in *O. sporadata*, whereas the harpe is a rectangular plate in *O. curvimargo*.

Description: Wing markings as in the preceding species, the distal margin of forewing usually straight in males (Fig. 2). The frons and the vertex green, dorsum of the thorax white, wings white, with green mottling in males and pale green mottling in females. Male genitalia (Fig. 4): Valva bifurcate at tip, harpe near the valve apex, slender, tapering, heavily sclerotized, dentate edged; the sacculus distally produced stick-shaped, sclerotised dark. The last male abdominal sternite has a pair of smooth edged tapering distal processes. Female genitalia (Fig. 6): The ostium is large, ball shaped, the ductus bursae short, the signum slender, curved, bicornute.

Discussion: *O. sporadata* was described from French Guiana. We have some specimens from Arajuno, in the Pastaza province of Ecuador on the eastern slope of the Andes, that fit original description and the characters listed by Cook & Scoble (1995: 35), but all specimens collected from French Guiana in our collections fit with the characterisation of *O. curvimargo* by HERBULOT (1991).

Oospila stagonata (Felder & Rogenhofer, 1875)

Racheospila stagonata Felder & Rogenhofer, 1875. *Reise Novara, Zool., Lep. Het.*, (9) 2(2): pl. 127, fig. 25

Type locality: Bogota, COLOMBIA

Progonodes stagonata (Felder & Rogenhofer): PROUT, 1932: 60

Oospila stagonata (Felder & Rogenhofer): COOK & SCOBLE, 1995: 69

Type species of the genus *Progonodes* Warren, 1897.

Discussion: The name *Racheospila stagonata* Felder & Rogenhofer, 1875 is based on a figure of a

moth from Bogota, Colombia (from promontories of the Andes about 2600 m above sea level). The colour of the frons of this species is not mentioned in the original description, nor by WARREN (1906, the description of the genus *Progonodes* Warren), nor by Druce (description of *Racheospila arycanda* Druce which was synonymized later with *O. stagonata*), by PROUT (1932) (redescriptions of the genus *Progonodes*). COOK & SCOBLE (1995) have examined both types and described the colour of the frons of *O. stagonata* as brown. COOK & SCOBLE (1995), after examining the genitalia characters of the primary type specimens of *O. stagonata* and *O. arycanda*, figured the aedeagus of this species as a cylindrical one, without any ventral or lateral process, and the last sternite as having long, smooth, parallel-sided posterior processes. The valvae are well sclerotized, slender, distally two-tipped.

We describe below four allopatric Ecuadorian species which are similar to *O. stagonata* and *O. sporadata* in their wing pattern but have a green frons with a brown line above, and one or two external processes on the aedeagus (Table 1). These species inhabit tropical mountain forests at elevations of about 1500-2000 m. They are deceptively similar to each other, with males mottled darker green and with, females paler green. The forewings have variable discal spots that are either dark or weakly marked. There are two white discal spots on the hindwings which are weakly angulate at vein M3. Both species, *O. sporadata* and *O. curvimargo*, have a similar wing pattern, irregular green and whitish mottling, and male genitalia with the valva split apically, and *O. curvimargo* having an almost rectangular harpe, *O. sporadata* more triangular, heavily sclerotized, subapical harpe (Fig. 3). Female genitalia have the ductus bursae as long as the corpus bursae in contrast with the shorter ductus bursae in *O. sporadata*.

Table 1.– Morphological characteristics within the *Oospila stagonata* species group.

Character/species	<i>O. stagonata</i>	<i>O. elegia</i>	<i>O. furcata</i>	<i>O. truncata</i>	<i>O. rogata</i>
frons colour	brown	green, brown	green, brown	green, brown	green, brown
sexual dimorphism	N/A	N/A	dimorphic	dimorphic	dimorphic
sternite A8 appearance	smooth	smooth, rounded	smooth, conical	truncate	pointed
sternite A8 saw-toothed	no	no	no	no	yes
aedeagus process	none	one spur	two spurs	one spur	tough/flat process
sternite A8 incision	broad	broad rounded	roundish	tapering	roundish

***Oospila elegia* Viidalepp & Lindt, sp. n.** (Figs 7, 15, 16)

Material: Holotype ♂, ECUADOR, Napo prov., Baeza 1700 m, 17-V-2007, 00° 27' 09" S, 77° 51' 17" W, A. Lindt leg. (slide 7996) (ID: IZBE0122235). Paratypes, ECUADOR, Napo prov., Bermejo, 2007 m, 1 ♂, 18-V-2007, 00° 31' 24" S, 77°54'07" W, I. Renge leg. Peru, Oxapampa, 2300 m, 1 ♂, 14-17-II-2003, 10° 27' 08" S, 75° 17' 04" W, A. Lindt leg. (slide 7212) (ID: TAMZ0175919). The holotype is deposited in the IZBE collection (Tartu) and the paratype in the Estonian Museum of Natural History (Tallinn) and in the private collection of A. Lindt.

Diagnosis: Male genitalia with valvae slender, two-tipped distally; aedeagus with one prominent ventral spur. Sternite A8 with two broad, parallel-sided, and apically rounded lobes posteriorly, the space between lobes roundish, as broad as the lobes are.

For differences from the other new species described below, see the diagnoses for respective species.

Description: Wingspan 36-39 mm. Wing markings (Fig. 7) green with black discal spot on forewing and two white discal spots on hindwing. Sexual dimorphism in wing pattern absent, both males and females green coloured, hindwing distal margin angulate at vein M3. Male genitalia (Figs 15, 16), valva slender, two-tipped, saccular inner surface roughly setose. Aedeagus with ventral spine- or leaf-like external process. Saccus slender, rounded and thicker laterally. Female genitalia unknown.

Distribution: The moths were collected in montane rainforests on the eastern slopes of the Andes at 1800-1900 m above sea level in northern Ecuador.

Remark: We conclude that the specimens from Ecuador and Peru are not conspecific with *Oospila stagonata* (Felder & Rogenhofer, 1875): The colour of frons and vertex is diagnosed for *O. stagonata* as brown (COOK & SCOBLE, 1965: 69) but it is green with a brown line above, below the interantennal fillet in all specimens studied. Furthermore, the sexual difference in wing colour and the presence of the aedeagus process are not mentioned (male genitalia of both primary types studied) by Cook & Scoble

Derivatio nominis: "*Elegia*" is a latin term in poetry; as a taxon name this is a word in a feminine case.

***Oospila furcata* Viidalepp & Lindt, sp. n. (Figs 9, 10, 17, 18, 23)**

Material: Holotype ♂, ECUADOR, Morona Santiago prov., Gualaquiza 1580 m, 23-IV-2007, 03° 17' 58" S, 78° 33' 59" W, A. Lindt leg. (ID: IZBE0120571). Paratypes: ECUADOR, Morona Santiago prov., Gualaquiza 1580 m, 2 ♂♂, 23-IV-2007, 03° 17' 58" S, 78° 33' 59" W, A. Lindt leg.; (slide 551) (ID: TAMZ0225553); Morona Santiago prov., Plan de Milagro, 2080 m, 2 ♀♀ 24-IV-2007, 03° 00' 25" S, 78° 30' 11" W, A. Lindt leg. (slide 552); Napo prov., Sarayacu, 1900 m, 1 ♂, 2 ♀♀, 20-V-2007, 00° 38' 51" S, 77° 48' 00" W, A. Lindt leg. (slide 8184) (ID: IZBE 0120525).

The holotype is deposited in the collection of IZBE (Tartu), the paratypes in the Estonian Museum of Natural History, in the IZBE collection (Tartu) and in the private collection of A. Lindt.

Diagnosis: Wings of males are predominantly green, those of females green with dense white speckling at the periphery but deeper green in the centre. Male genitalia (Figs 17, 18): Aedeagus with two - ventral and lateral - external processes (only one process in *O. truncata* sp. n. and *O. rogata* sp. n. described below). The male eighth sternite broadly excised at its distal edge, the distal processes strongly tapering to rounded tips and characteristically elbowed towards each other in middle. The signum in the bursa copulatrix of the female is broad, leaf-shaped, and laterally bicornute.

Description: Wingspan 29 mm in males, 34 mm in female (Figs 9, 10). Frons green with a brown line above, the interantennal fillet and vertex green with some white scales. Forewing with a small black discal spot, hindwing with two white discal spots. The marginal line is brown, interrupted by yellow spots at vein ends, the fringe is beige with slight brown chequering at vein ends. Male genitalia as described in the diagnosis (Figs 17, 18): The processes of the aedeagus may be thorn-shaped or flat with serrate edges (sometimes looking like thorns in side view). Female genitalia (Fig. 23): The ostium is cup-shaped, edged by two thick parallel sclerites; the antevaginal plate is straight-edged and has angulate corners. The signum is bicornute, leaf-shaped.

Distribution: This species inhabits montane tropical forests in Ecuador on the eastern slopes of the Andes and was collected in Morona Santiago province and in Napo province.

Derivatio nominis: There are two external thorns on the aedeagus of this species positioned in a fork configuration (lad. furca), a diagnostic characteristic for this new species.

***Oospila truncata* Viidalepp & Lindt, sp. n. (Figs 11, 12, 19, 20, 24)**

Material: Holotype ♂, ECUADOR, Pichincha prov., Santa Rosa, 1820 m, 13-IV-2007, 00° 00' 50" S, 78° 41' 47" W, A. Lindt leg. (slide 256) (ID: TAMZ0175916). Paratypes: ECUADOR, Pichincha prov., Santa Rosa, 1820 m, 2 ♂♂, 2 ♀♀, 14-IV-2007, 00° 00' 50" S, 78° 41' 47" W, A. Lindt leg. (slide 8171) (ID: IZBE0120620, IZBE01210581); Pichincha prov., Santa Rosa. 1800 m, 8 ♂♂, 14 ♀♀, 13-IV-2007, 00° 00' 27" S, 78° 40' 46" W, A. Lindt leg. (slide 530) (ID IZBE0120624, IZBE0120619, IZBE01210566); Pichincha prov., Santa Rosa, 1940 m, 1 ♂, 3 ♀♀, 12-IV-2007, 00° 02' 14" S, 78° 42' 07" W, A. Lindt leg.; Pichincha prov., Mindoloma Bird Lodge, 1830 m, 1 ♂, 11-12-V-2007, 00° 00' 43" S, 78° 44' 29" W, A. Lindt leg.; Pichincha prov., Mindo 1838 m, 3 ♀♀, 11-IV-2007, 00° 00' 43" S, 78° 44' 29" W, A. Lindt leg.

The holotype is deposited in the collection of the Estonian Museum of Natural History (Tallinn), the paratypes are in the Estonian Museum of Natural History, in the IZBE insect collection (Tartu) and in the private collection of A. Lindt.

Diagnosis: Moths are sexually dimorphic as described above. Frons broader than in the above species. The marginal line is brown on both wings, the fringe yellowish, chequered brown at vein ends. Aedeagus with one long spur. The eighth sternite of male with posterior processes shorter than in *O. furcata*, sclerotised black and cut straight at apices, the incision between processes usually slender. Female genitalia: Ostium edged by slanting, spinose folds (with the longest spines far from the ostium). *Oospila rogata* sp. n. has similar groups of longer spines just lateral to the ostium and lying parallel to the axis of ostium.

Description: Frons green with a brown stripe above. Facies (Figs 11, 12), wingspan and male genitalia (Figs 19, 20) as characterised in the diagnosis, males with wings usually almost plain green, females light green with dense white speckling. Male genitalia with armature and aedeagus (with one external process) as in *O. rogata*. The posterior processes of the last sternite of male abdomen truncate, shorter than in other similar species. Female genitalia (Fig. 24): The ostium is cup-shaped, covered with a parallel-sided transverse sclerite and edged by slanting, spinose folds (with the longest spines far from the ostium and directed towards each other). The signum is broad leaf-shaped and bicornute.

Distribution: The moths were collected in fragments of tall mountane forests in Pichincha province of western Ecuador.

Derivatio nominis: The posterior processes of the male last sternite are truncate and cut straight. Therefore, the new species is named *Oospila truncata* sp. n.

***Oospila rogata* Viidalepp & Lindt, sp. n. (Figs 13, 14, 21, 22, 25)**

Material: Holotype ♂, ECUADOR, Napo prov., Cotundo 1280 m, 14-II-2008, 00° 42' 46" S, 77° 44' 27" W (ID: TAMZ0175915), A. Lindt leg. (slide 554). Paratypes: ECUADOR, Napo prov., Cotundo, 1280 m, 1 ♂; 05-II-2008, 00° 42' 46" S, 77° 44' 27" W; Napo prov., Cosanga, 2180 m, 1 ♀, 15-II-2008, 00° 36' 26" S, 78° 30' 11" W; Zamora-Chinchipec prov., El Enquentros, 1460 m, 2 ♂♂, 21-IV-2007, 03° 48' 47" S, 78° 36' 39" W (slide 287); Napo prov., Bermejo, 2007 m, 1 ♀, 18-V-2007, 00° 31' 24" S, 77° 54' 07" W (slide 531); Napo prov., Cosanga, 2150 m, 1 ♀, 21-V-2007, 00° 36' 18" S, 77° 53' 23" W, A. Lindt leg. (slide 553).

The holotype is deposited in the collection of the Estonian Museum of Natural History (Tallinn), and the paratypes are in the Estonian Museum of Natural History, in the IZBE insect collection (Tartu) and in the private collection of A. Lindt.

Diagnosis: *Oospila rogata* sp. n. is distinguished from other members of the *O. stagonata* complex by its fringe which is grey underneath, and by characteristics of the male genitalia (the strongly serrate posterior edges of the processes of the eighth sternite) and female genitalia (viz. the ornamentation of the ostial area and the frayed signum in the bursa copulatrix).

Description: Wingspan 25-28 mm in males, 37-39 mm in females (Figs 13, 14). The frons is relatively broad, green with a brown line above; the slender fillet is white and the vertex green. The wings are green with white mottling, the forewing discal spot is green, not contrasting, with the ground color, and hindwing has two white discal marks. The marginal line is grey and disrupted by white spots at veins; the fringe is white above, chequered greyish against vein ends, darker, greyish underneath. Male genitalia (Figs 21, 22): Aedeagus with one tough spur or leaf-like ventral process. The distal processes of the male eighth abdominal sternite are strongly serrate, the central incision slender, rounded basally (not pointed and V-shaped as in *O. truncata* sp. n. described above). Female genitalia (Fig. 25): The ostium is cup-shaped, edged by spinose folds lying perpendicularly to the ostium; the longest spines are very close to the ostium and directed parallel to the axis of the body. The signum is present as a stripe in the bursa which is clearly bordered on one side and frayed along the opposite side.

Distribution: *O. rogata* sp. n. was collected from Napo and Zamora-Chinchipec provinces in Eastern Ecuador.

Derivatio nominis; “Rogata” can be translated from Latin as “questioned”; male moths with the serrate-edged last abdominal sternite have stood unnamed in our collections for a long time.

Oospila arycanda (Druce, 1892) (Figs 8, 26)

Racheospila arycanda Druce, 1892. *Biol. Centr. Amer., Zool., Lep. Het.*, **2**: 89, pl. 49, fig. 21

Type locality: Río Sucio, COSTA RICA

Progonodes arycanda (Druce, 1892): PROUT, 1912: 135

Progonodes stagonata arycanda (Druce): PROUT, 1933: 60

Oospila stagonata (Felder & Rogenhofer, 1875): Synonymized by COOK & SCOBLE, 1995: 69

Material: Costa Rica, Laguna de Arenal, 700 m, 1 ♀, 16-II-2007, A. Lindt leg. (gen. 529).

Diagnosis: The specimen has a brown frons while all species discussed above have green coloured feons. It is different from the females described above as well as from the *Oospila stagonata* and *Oospila athena* (Druce, 1892) females studied.

Description: The moth has a brown frons and light green wings with white speckling (Fig. 22). The ductus bursae of the female is as long as the corpus bursae (Fig. 26) and has a leaf-shaped, bicornute sigmun. The folds of the sterigma lateral to the ostium are smooth, not spiny.

Remarks: Restored from synonymy with *Oospila stagonata* (Felder & Rogenhofer).

Acknowledgements

We are thankful to Dr. A. Vives and to an unnamed reviewer for constructive comments on the manuscript. The senior author’s studies were partially funded by grant 9174 of the Estonian Science Foundation and by institutional research funding (IUE21-1) from the Estonian Ministry of Education and Research. He is thankful to Dr. L. Pitkin, for tutorship during his short stay at the BMNH as a Sys-Resource fellow. Our thanks go to Dr. R. B. Davis for linguistic revision of the manuscript, to Dr. I. Renge and A. Selim (Tallinn) for loan of study material and to Dr. L. Lennuk for technical advice.

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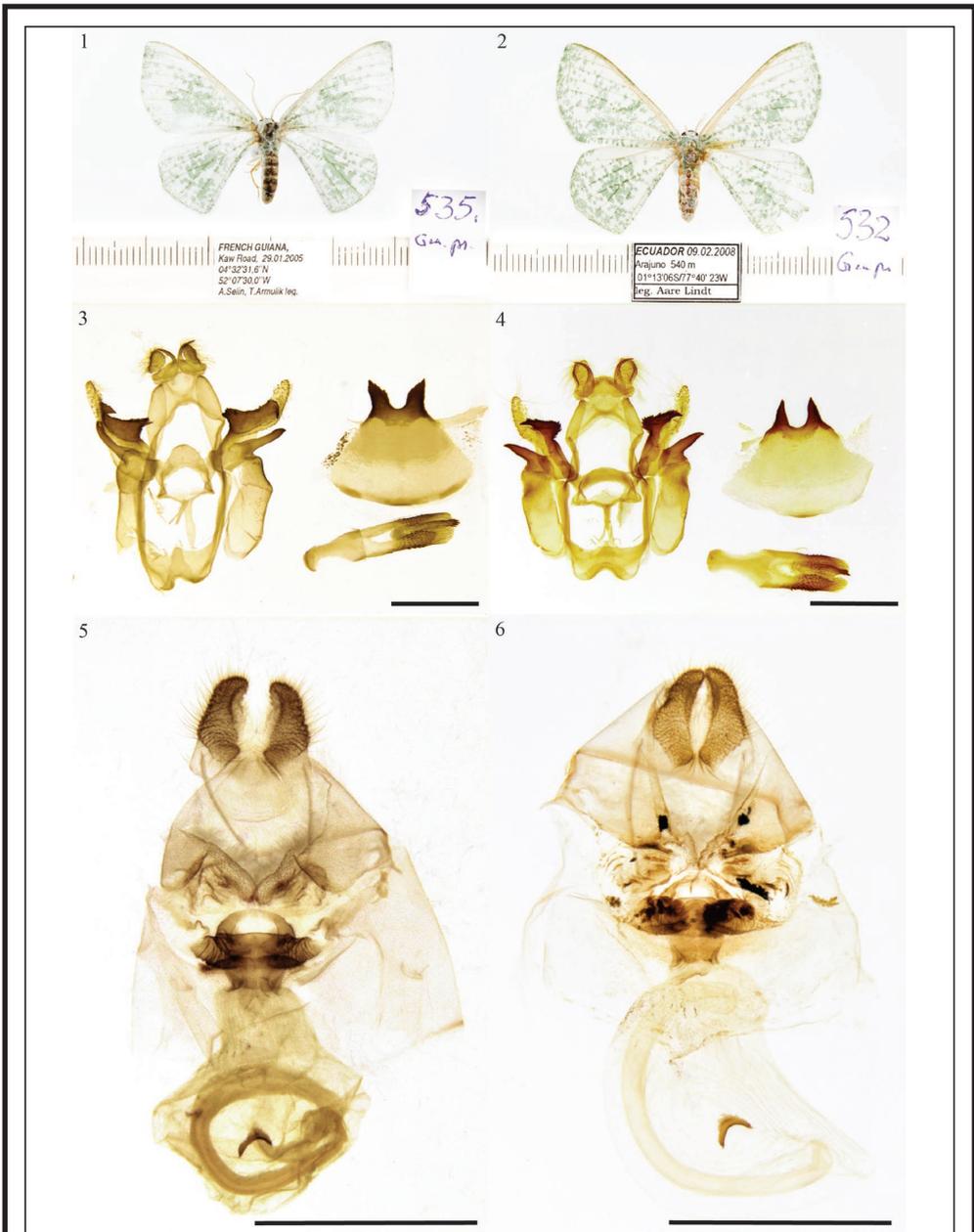
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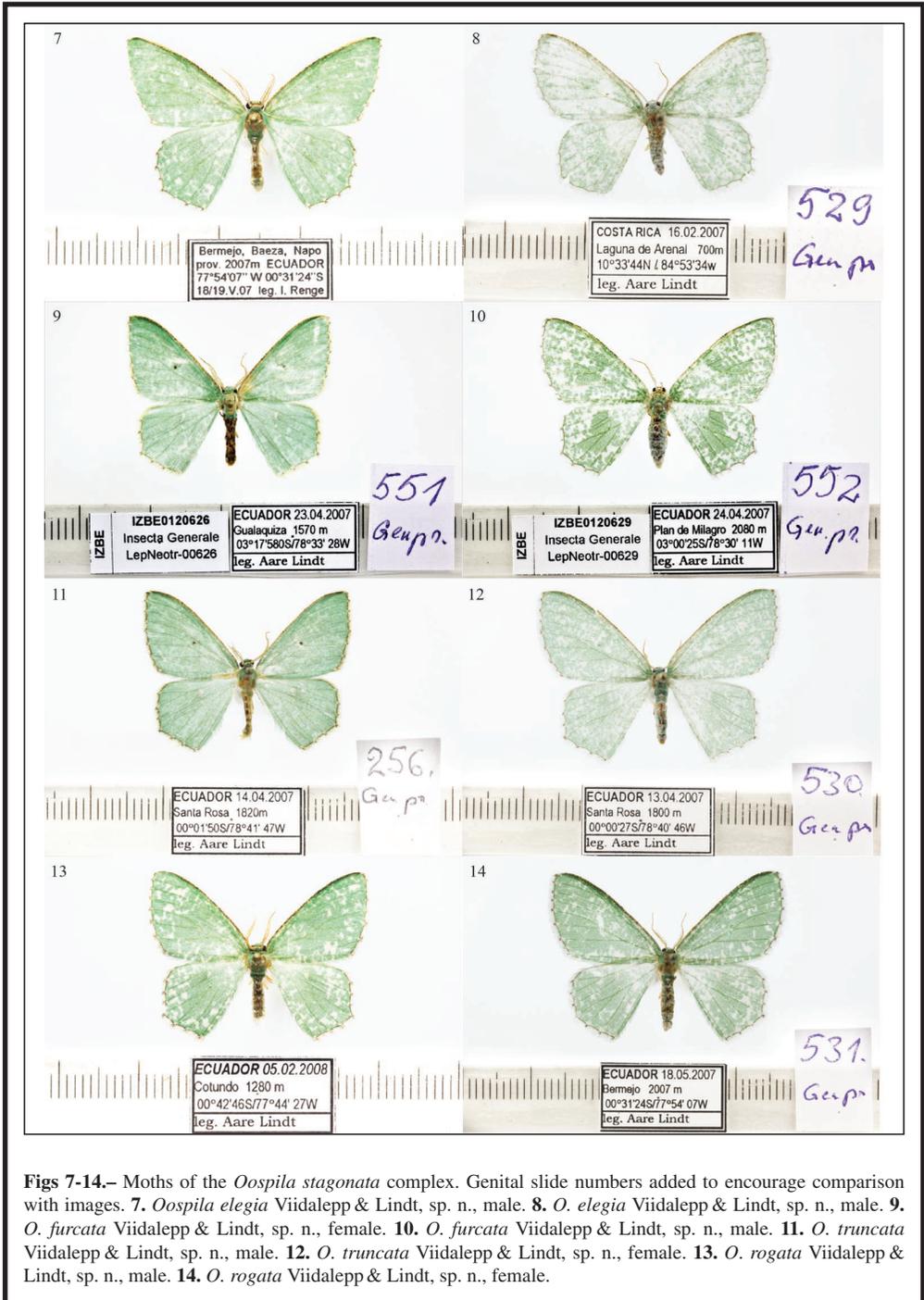
(Recibido para publicación / *Received for publication* 9-VI-2020)

(Revisado y aceptado / *Revised and accepted* 28-X-2020)

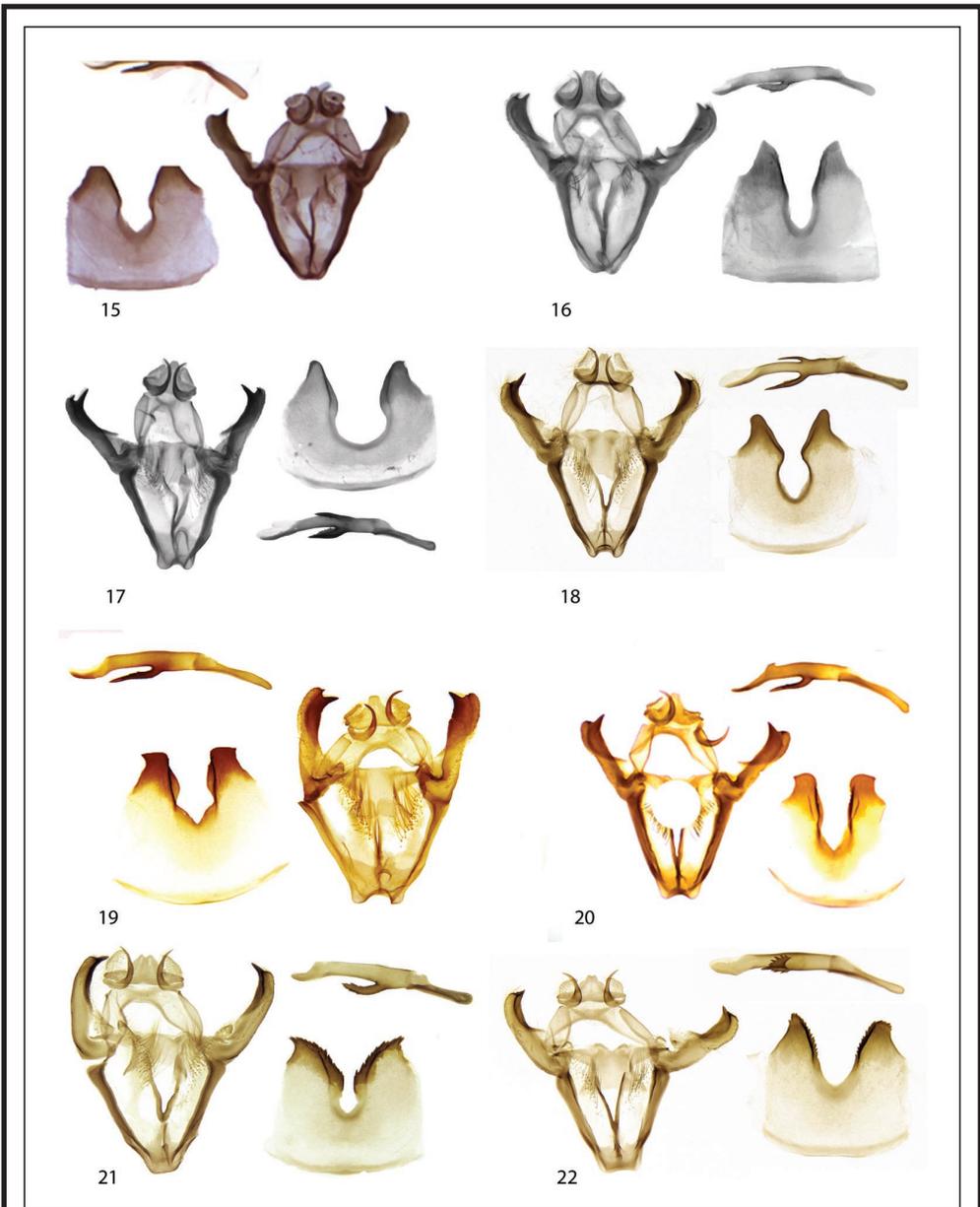
(Publicado / *Published* 30-IX-2021)



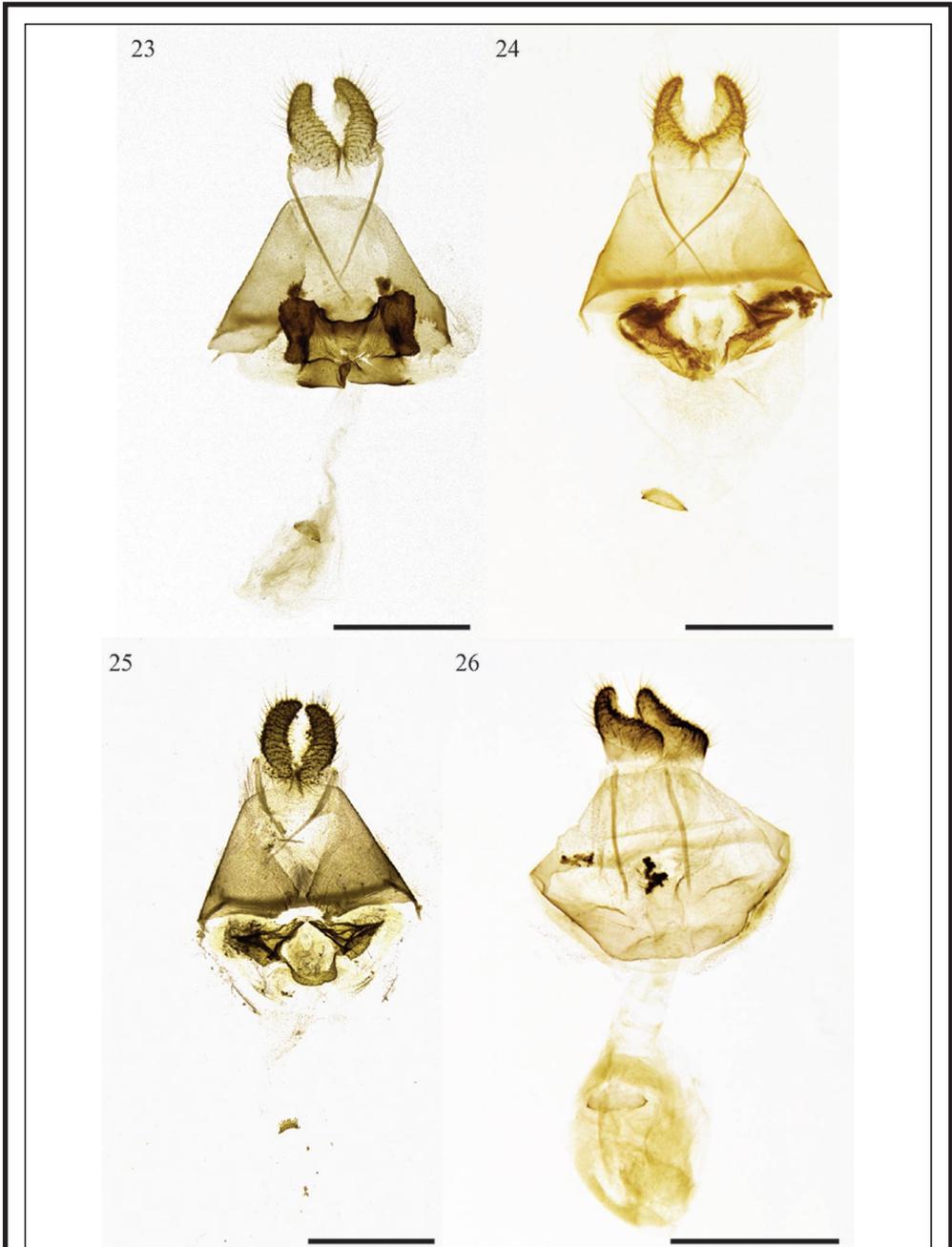
Figs 1-6.— 1-2. *Oospila curvimargo* and *Oospila sporadata* moths. 1. *O. curvimargo*, male. 2. *O. sporadata*, male. 3-4. male genitalia. 3. *O. curvimargo*, male genital armature, aedeagus and eighth sternite (slide 535). 4. *O. sporadata*, male genital armature, aedeagus and eighth sternite (slide 7751). 5-6. female genitalia. 5. *O. curvimargo*, female genitalia (slide 532). 6. *O. sporadata*, female genitalia (slide 522).



Figs 7-14.– Moths of the *Oospila stagonata* complex. Genital slide numbers added to encourage comparison with images. **7.** *Oospila elegia* Viidalepp & Lindt, sp. n., male. **8.** *O. elegia* Viidalepp & Lindt, sp. n., male. **9.** *O. furcata* Viidalepp & Lindt, sp. n., female. **10.** *O. furcata* Viidalepp & Lindt, sp. n., male. **11.** *O. truncata* Viidalepp & Lindt, sp. n., male. **12.** *O. truncata* Viidalepp & Lindt, sp. n., female. **13.** *O. rogata* Viidalepp & Lindt, sp. n., male. **14.** *O. rogata* Viidalepp & Lindt, sp. n., female.



Figs 15-22.— Male genitalia of the species of the *Oospila stagonata* complex. **15.** *O. elegia* Viidalepp & Lindt, sp. n. (Holotype, slide 7996). **16.** *O. elegia* Viidalepp & Lindt, sp. n. (Paratype, slide 7212). **17.** *O. furcata* Viidalepp & Lindt, sp. n. (Paratype, slide 8184). **18.** *O. furcata* Viidalepp & Lindt, sp. n. (Paratype, slide 551). **19.** *O. truncata* Viidalepp & Lindt, sp. n. (Paratype, slide 256). **20.** *O. truncata* Viidalepp & Lindt, sp. n. (Holotype, slide 8171). **21.** *O. rogata* Viidalepp & Lindt, sp. n. (Holotype, slide 554). **22.** *O. rogata* Viidalepp & Lindt, sp. n. (Paratype, slide 556).



Figs 23-26.— Female genitalia of the species of *Oospila stagonata* complex. **23.** *Oospila furcata*, paratype. **24.** *O. truncata*, paratype. **25.** *O. rogata* Viidalepp & Lindt, sp. n., paratype. **26.** *O. arycanda*.