

# Annotated Checklist of Brazilian Ophioninae (Hymenoptera: Ichneumonidae)

Daniell Rodrigo Rodrigues Fernandes<sup>1</sup>✉, Helena Carolina Onody<sup>2</sup>,  
Rogéria Inês Rosa Lara<sup>3</sup> & Nelson Wanderley Periato<sup>1,3</sup>

1. Faculdade de Ciências Agrárias e Veterinárias/Universidade Estadual Paulista, e-mail: [daniellrodrigo@hotmail.com](mailto:daniellrodrigo@hotmail.com) (Autor para correspondência ✉), [nperioto2@gmail.com](mailto:nperioto2@gmail.com). 2. Museu de Zoologia da Universidade de São Paulo, e-mail: [helenaonody@yahoo.com.br](mailto:helenaonody@yahoo.com.br). 3. Agência Paulista de Tecnologia dos Agronegócios - Centro Leste, e-mail: [rirlara@apta.sp.gov.br](mailto:rirlara@apta.sp.gov.br).

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**Abstract.** The aim of this study was to provide an updated checklist of the species of Ophioninae (Hymenoptera: Ichneumonidae) reported for Brazil. Were catalogued 86 nominal species of Ophioninae, of which 61 of *Enicospilus*, nine of *Thyreodon*, five of *Stauropoctonus*, three of *Ophiogastrella* and of *Ophion*, two of *Alophophion* and of *Rhynchophion* and one of *Prethophion*. *Enicospilus*, to occur in 19 states and, is the most widely distributed genus. The present study reveals that knowledge of the fauna of Ophioninae is incipient in Brazil, much of the country remains subsampled and should have priority in future studies.

**Keywords:** Biodiversity; Parasitoids; Species list; Taxonomy.

## Lista Anotada dos Ophioninae (Hymenoptera: Ichneumonidae) Brasileiros

**Resumo.** O objetivo deste estudo foi apresentar uma lista atualizada das espécies de Ophioninae (Hymenoptera: Ichneumonidae) relatadas para o Brasil. Foram catalogadas 86 espécies, dentre as quais 61 de *Enicospilus*, nove de *Thyreodon*, cinco de *Stauropoctonus*, três de *Ophiogastrella* e de *Ophion*, duas de *Alophophion* e de *Rhynchophion* e uma de *Prethophion*. *Enicospilus*, por ocorrer em 19 estados, é o gênero com maior distribuição geográfica. O presente estudo revela que o conhecimento da fauna de Ophioninae no Brasil é incipiente, que grande parte do país continua subamostrada e deve ter prioridade em estudos futuros.

**Palavras-Chave:** Biodiversidade; Lista de espécies; Parasitoides; Taxonomia.

Ichneumonidae (Hymenoptera: Ichneumonoidea) has about 24,000 valid species, distributed in about 1,500 genera and 48 subfamilies (YU & HORSTMANN 1997; YU *et al.* 2012); it is one of the largest families of insects and and it is possible that there are 30,000 species of its species in the tropical regions of South America (GAULD 2006).

Ophioninae, with more than a thousand valid species, is one of the largest subfamilies of Ichneumonidae and about 230 of its species are reported for the Neotropical region (YU & HORSTMANN 1997; GAULD & JANZEN 2004; FERNÁNDEZ-TRIANA 2005) distributed through twelve genera, six of which endemics: *Alophophion* Cushman, 1947, *Agathophiona* Westwood, 1882, *Sicophion*, Gauld, 1979, *Janzophion* Gauld, 1985, *Ophiogastrella* Brues, 1912 and *Prethophion* Townes, 1971 (GAULD & LANFRANCO 1987).

The subfamily is very abundant in the humid tropics, where they usually behave like solitary koinobiont endoparasitoids of lepidopteran larvae that develop in exposed vegetation as Arctiidae, Geometridae, Lasiocampidae, Lymantriidae, Noctuidae, Sphingidae and Saturniidae (GAULD & MITCHELL 1978, GAULD 1985; GAULD 1988; GAULD & JANZEN 2004). Many of the species of those families have crepuscular or nocturnal habits (GAULD 1988).

The knowledge about the Ophioninae that occur in Brazil comes from species descriptions, papers sporadically published or data of catalogs. This paper presents an updated list of species of Ophioninae that occur in Brazil and the authors wish that it will serve as foundation for future studies on taxonomy and diversity of fauna Ophioninae.

## MATERIAL AND METHODS

The information on Ophioninae species occurring in Brazil were based on BRULLÉ (1846), HOOKER (1912), MORLEY (1912), CUSHMAN (1947), TOWNES (1971), GAULD (1988), GAULD & JANZEN (2004), ONODY & PENTEADO-DIAS (2002), ONODY *et al.* (2002), ONODY & PENTEADO-DIAS (2005) and LIMA *et al.* (2012, 2013), and in the catalogs of TOWNES & TOWNES (1966) and DE SANTIS (1980).

The checklist is sorted in alphabetical order by taxon name with the present valid name, according to YU *et al.* (2012).

## RESULTS AND DISCUSSION

Eigth genera and 86 nominal species of Ophioninae have occurrence reported to Brazil (Figure 1 and Table 1): *Enicospilus* Stephens, 1835 (61 species), *Thyreodon* Brullé, 1846 (nine), *Stauropoctonus* Brauns, 1889 (five), *Ophiogastrella* and *Ophion* Fabricius, 1798 (three in each of them), *Alophophion* and *Rhynchophion* (two in each of them) and *Prethophion* (one). In Brazil, the most widely distributed genus is *Enicospilus*, with related occurrence in 19 states, allowed by *Ophion* (nine states), *Thyreodon* (eight), *Stauropoctonus* (five), *Ophiogastrella* (three), *Prethophion* and *Rhynchophion* Enderlein, 1912 (two in each of them) and *Alophophion* (one).

It was not possible to include *Alophophion flavorufus* (Brullé, 1846), *Enicospilus flavofuscus* (Brullé, 1846), *Enicospilus undulatus* (Gravenhorst, 1829), *Rhynchophion ligulifer* (Morley,

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1912) and *Thyreodon laticinctus* Cresson, 1874 on the study about the geographic distribution because their collection localities are unknown.

The knowledge about the Brazilian Ophioninae is still incipient and based mainly in the fauna from southern and southeastern regions; there are no records of Ophioninae species to the states of Acre, Amapá, Maranhão, Mato Grosso do Sul, Piauí, Roraima, Sergipe and Tocantins. Santa Catarina is the state with the highest number of species recorded (30), reflecting the extensive sampling carried out by Fritz Plaumann in Nova Teutônia; Bahia, Rio de Janeiro, Minas Gerais, São Paulo and Amazonas are represented by, at least, 15 species each. The nocturnal habits of most of the species of Ophioninae may be related poor knowledge concerning this group of insects, since few of them are captured with Malaise traps, the main passive method of capture of Ichneumonidae.

In addition to the scarce taxonomic knowledge, we have too a knowledge gap concerning the biological information of the Brazilian Ophioninae species. Hosts records are disponibile only for 21 species (24.4% of the species of Ophioninae in Brazil) and, almost all of them, were obtained in other countries (Table 2); nothing is known about the hosts of the remainder species. The knowledge of parasitoid-host interactions is relevant not only for basic studies, but also for applied ones, such as the establishment of integrated pest management programs. Species such as *Ophion flavidus* Brullé, 1846 are common in agroecosystems (GAULD 1988) and its role on the regulation of pest insects populations might be underestimated.

Therefore, studies to increase the taxonomic biological and biogeographical knowledges of Ophioninae in Brazil should take into account that: (1) many areas and environments of the country continues subsampled, its should be considered in future studies priority; (2) different sampling methods should be employed in the collection, including light traps and (3) studies should also be prioritize host-parasitoid relationships.

### *Alophophion* Cushman, 1947

#### *Alophophion flavorufus* (Brullé, 1846)

Geographical distribution: Brazil (HOOKER 1912; MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

#### *Alophophion holosericeus* (Taschenberg, 1875)

Geographical distribution: Paraná (HOOKER 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

**Remarks:** *Alophophion* includes seven nominal species (Yu *et al.* 2012). *A. flavorufus* was recorded only to Brazil, without specific locality data. *A. holosericeus* occurs in Brazil and Argentina and the remainder species in the south of the Neotropical Region (Argentina, Chile and Falkland Islands) (TOWNES & TOWNES 1966), so that the state of Paraná is, apparently, the northern limit of its distribution in Brazil. ESTELA (2005) reported the parasitism of *Alophophion* sp. in *Agrotis gypaetina* Guenée, 1852, *Agrotis malefida* Guenée, 1852 and *Peridroma saucia* (Hübner, 1808) (Lepidoptera: Noctuidae).

### *Enicospilus* Stephens, 1835

#### *Enicospilus aduncicostatus* (Enderlein, 1921)

Geographical distribution: Espírito Santo (TOWNES & TOWNES 1966; DE SANTIS 1980).

#### *Enicospilus americanus* (Christ, 1791)

Geographical distribution: Santa Catarina (BRULLÉ 1846; TOWNES & TOWNES 1966; DE SANTIS 1980; GAULD 1988).

#### *Enicospilus bima* Gauld, 1988

Geographical distribution: Rio de Janeiro (GAULD 1988).

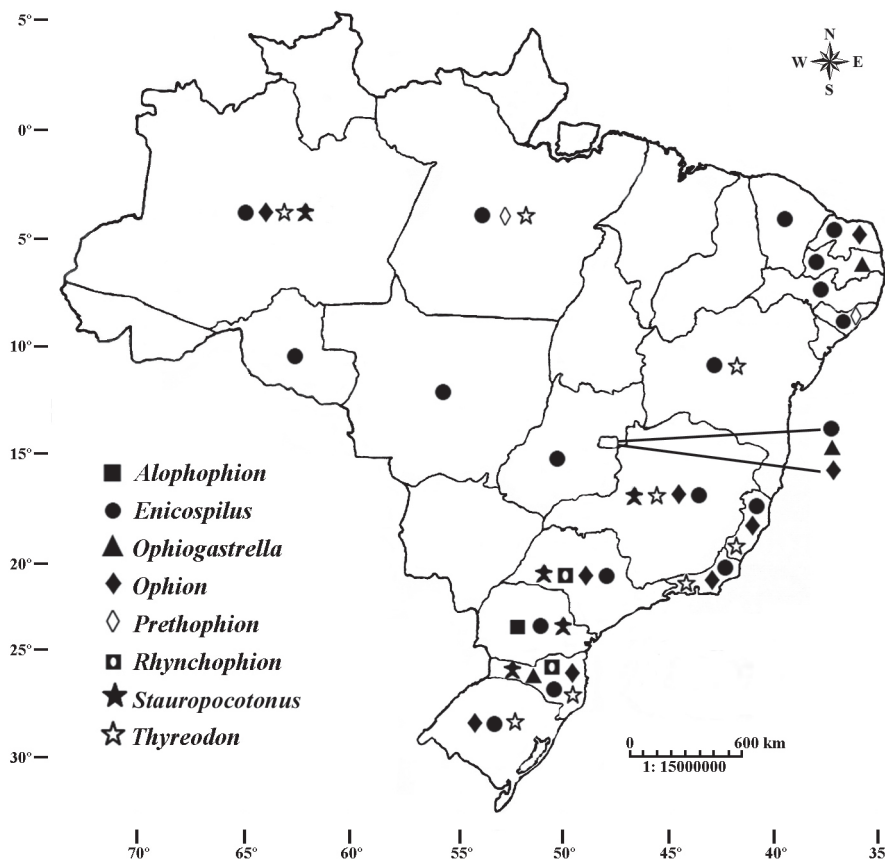


Figure 1. Genera of Ophioninae (Hymenoptera: Ichneumonidae) that occur in Brazil.

Table 1. Number of species of Ophioninae (Hymenoptera: Ichneumonidae) that occur in the Brazilian states, classified by genus.

State	Genus							Total	
	Alophophion	Enicospilus	Ophiogastrella	Ophion	Prethophion	Rhynchophion	Staurupoctonus		Thyreodon
Acre									
Alagoas		2			1			3	
Amapá									
Amazonas		11		1			4	19	
Bahia		27					1	28	
Ceará		4						4	
Distrito Federal		1	1	1				3	
Espírito Santo		9		2			2	13	
Goiás		6						6	
Maranhão									
Mato Grosso		11						11	
Mato Grosso do Sul									
Minas Gerais		21		2			3	27	
Pará		6			1			9	
Paraíba		1	1					2	
Paraná	1	8					1	10	
Pernambuco		2						2	
Piauí									
Rio de Janeiro		17		1			3	21	
Rio Grande do Norte		4		1				5	
Rio Grande do Sul		4		1			3	8	
Rondônia		1						1	
Roraima									
Santa Catarina		24	1	2		1	1	30	
São Paulo		13		2		1	1	17	
Sergipe									
Tocantins									
Number of states	1	19	3	9	2	2	5	8	19

Table 2. Species of Ophioninae (Hymenoptera: Ichneumonidae) and their hosts.

Species	Family Host	Host*	
<i>Enicospilus americanus</i> (Christ, 1791)	Arctiidae	<i>Hyphantria cunea</i> (Drury, 1773)	
		<i>Pyrrharctia isabella</i> (Smith, 1797)	
	Lasiocampidae	<i>Tolype pauperata</i> Burmeister, 1878	
		Noctuidae	<i>Acronicta americana</i> (Harris, 1841)
	Saturniidae	<i>Actias luna</i> (Linnaeus, 1758)	
		<i>Antheraea polyphemus</i> (Cramer, 1775)	
		<i>Apatelodes torrefacta</i> (Smith, 1797)	
		<i>Automeris cecrops</i> (Boisduval, 1875)	
		<i>Automeris io</i> (Fabricius, 1775)	
		<i>Callosamia promethea</i> (Drury, 1773)	
		<i>Callosamia securifera</i> (Maassen, 1873)	
		<i>Hyalophora cecropia</i> (Linnaeus, 1758)	
		<i>Hyalophora columbia</i> (Smith, 1865)	
		<i>Hyalophora euryalus</i> (Boisduval, 1855)	
		<i>Rothschildia arethusa</i> Walker, 1855	
		<i>Rothschildia aroma</i> Schaus, 1905	
	<i>Rothschildia jorulla</i> (Westwood, 1853)		
	<i>Rothschildia maurus</i> (Burmeister, 1879)		
	<i>Rothschildia orizaba</i> (Westwood, 1853)		
	<i>Rothschildia schreiteriana</i> (Breyer & Orfila, 1945)		
<i>Samia cynthia</i> (Drury, 1773)			
<i>Enicospilus flavofuscus</i> (Brullé, 1846)	Pyralidae	<i>Diatraea lineolata</i> (Walker, 1856)	
		<i>Diatraea saccharalis</i> (Fabricius, 1794)	
<i>Enicospilus flavoscutellatus</i> (Brullé, 1846)	Sphingidae	<i>Manduca sexta</i> (Linnaeus, 1763)	
<i>Enicospilus flavostigma</i> Hooker, 1912	Noctuidae	<i>Alabama argillacea</i> (Hübner, 1823)	
		<i>Melipotis fasciolaris</i> (Hübner, 1831)	
		<i>Mythimna unipuncta</i> (Haworth, 1809)	
		<i>Scoliopteryx libatrix</i> (Linnaeus, 1758)	
		Notodontidae	<i>Heterocampa guttivitta</i> (Walker, 1855)
			<i>Heterocampa manteo</i> (Doubleday, 1869)
	<i>Hippia packardi</i> (Morrison, 1875)		
	<i>Lochmaeus manteo</i> Doubleday, 1841		
	<i>Nadata gibbosa</i> (Smith, 1797)		
	<i>Schizura concinna</i> (Smith, 1797)		
	<i>Enicospilus flavus</i> (Fabricius, 1775)	Noctuidae	<i>Spodoptera frugiperda</i> (Smith, 1797)
	<i>Enicospilus glabratus</i> (Say, 1835)	Arctiidae	<i>Hypercompe albicornis</i> Grote, 1866
<i>Hypercompe deflorata</i> (Fabricius, 1775)			
<i>Hypercompe eridanus</i> (Cramer, 1775)			
<i>Hypercompe icasia</i> (Cramer, 1777)			
<i>Hypercompe scribonia</i> (Stoll, 1790)			
<i>Hypercompe suffuse</i> (Schaus, 1889)			
<i>Hyphantria cunea</i> (Drury, 1773)			
<i>Lophocampa maculate</i> Harris, 1841			
<i>Pyrrharctia isabella</i> (Smith, 1797)			
<i>Spilosoma virginicum</i> (Fabricius, 1798)			
Lasiocampidae			<i>Artace cribraria</i> (Ljungh, 1825)
Lymantriidae			<i>Dasychira basiflava</i> (Packard, 1864)
			<i>Orgyia leucostigma</i> (Smith, 1797)
Saturniidae			<i>Automeris io</i> (Fabricius, 1775)
	<i>Callosamia promethea</i> (Drury, 1773)		
<i>Enicospilus lebophagus</i> Gauld, 1988	Saturniidae	<i>Rothschildia forbesi</i> Benjamin, 1934	

Continues...

Table 2. To be continued...

Species	Family Host	Host*
		<i>Rothschildia jorulla</i> (Westwood, 1853)
		<i>Rothschildia lebeau</i> (Guérin-Mèneville, 1868)
<i>Enicospilus liesneri</i> Gauld, 1988	Noctuidae	<i>Eulepidotis rectimargo</i> (Guenée, 1852)
<i>Enicospilus maritzai</i> Gauld, 1988	Noctuidae	<i>Thysania zenobia</i> (Cramer, 1777)
<i>Enicospilus merdarius</i> (Gravenhorst, 1829)	Lymantriidae	<i>Euproctis fraterna</i> Moore, 1883
		<i>Euproctis scintillans</i> (Walker, 1856)
		<i>Lymantria dispar</i> (Linnaeus, 1758)
	Noctuidae	<i>Agrotis biconica</i> Kollar, 1844
		<i>Agrotis exclamationis</i> (Linnaeus, 1758)
		<i>Agrotis ipsilon</i> (Hufnagel, 1766)
		<i>Agrotis ripae</i> (Hübner, 1823)
		<i>Agrotis segetum</i> (Denis & Schiffermuller, 1775)
		<i>Agrotis subterranea</i> (Fabricius, 1794)
		<i>Alabama argillacea</i> (Hübner, 1823)
		<i>Cucullia argentea</i> (Hufnagel, 1766)
		<i>Cucullia chamomillae</i> (Denis & Schiffermuller, 1775)
		<i>Discestra trifolii</i> (Hufnagel, 1766)
		<i>Dysgonia algira</i> (Linnaeus, 1767)
		<i>Faronta albilinea</i> (Hübner, 1821)
		<i>Hadena aberrans</i> (Eversmann, 1856)
		<i>Hadena albimacula</i> (Borkhausen, 1792)
		<i>Hadena irregularis</i> (Hufnagel, 1766)
		<i>Hecatera bicolorata</i> (Hufnagel, 1766)
		<i>Hecatera dysodea</i> (Denis & Schiffermuller, 1775)
		<i>Helicoverpa zea</i> (Boddie, 1850)
		<i>Heliothis virescens</i> (Hufnagel, 1766)
		<i>Leucania latiuscula</i> Herrich-Schaffer, 1868
		<i>Leucania multilinea</i> Walker, 1856
		<i>Melanchra picta</i> (Harris, 1841)
		<i>Mocis latipes</i> (Guenée, 1852)
		<i>Morrisonia confusa</i> (Hübner, 1831)
		<i>Neogalea sunia</i> (Guenée, 1852)
		<i>Ophiura tirhaca</i> (Cramer, 1777)
		<i>Panolis flammea</i> (Denis & Schiffermuller, 1775)
		<i>Peridroma saucia</i> (Hübner, 1808)
		<i>Mythimna adultera</i> (Schaus, 1894)
		<i>Mythimna unipuncta</i> (Haworth, 1809)
		<i>Scoliopteryx libatrix</i> (Linnaeus, 1758)
		<i>Simyra nervosa</i> (Denis & Schiffermuller, 1775)
		<i>Spodoptera frugiperda</i> (Smith, 1797)
		<i>Spodoptera ornithogalli</i> (Guenée, 1852)
	Notodontidae	<i>Clostera curtula</i> (Linnaeus, 1758)
		<i>Heterocampa guttivitta</i> (Walker, 1855)
		<i>Schizura concinna</i> (Smith, 1797)
		<i>Schizura unicornis</i> (Smith, 1797)
		<i>Symmerista leucitys</i> Franclemont, 1946
	Saturniidae	<i>Hyalophora cecropia</i> (Linnaeus, 1758)
	Diprionidae (Symphyta)	<i>Diprion pini</i> (Linnaeus, 1758)
<i>Enicospilus monticola</i> (Cameron, 1886)	Noctuidae	<i>Gonodonta bidens</i> Geyer, 1932
		<i>Gonodonta clothilda</i> (Stoll, 1790)
		<i>Gonodonta incurva</i> (Sepp, 1840)

Continues...

Table 2. To be continued...

Species	Family Host	Host*
		<i>Gonodonta pyrgo</i> (Cramer, 1775)
<i>Enicospilus pescadori</i> Gauld, 1988	Noctuidae	<i>Eulepidotis</i> sp.
<i>Enicospilus purgatus</i> (Say, 1835)	Drepanidae	<i>Drepana bilineata</i> (Packard, 1864)
	Noctuidae	<i>Agrotis subterranea</i> (Fabricius, 1794)
		<i>Alabama argillacea</i> (Hübner, 1823)
		<i>Discestra trifolii</i> (Hufnagel, 1766)
		<i>Leucania latiuscula</i> Herrich-Schaffer, 1868
		<i>Leucania multilinea</i> Walker, 1856
		<i>Melanchra picta</i> (Harris, 1841)
		<i>Mocis latipes</i> (Guenée, 1852)
		<i>Peridroma saucia</i> (Hübner, 1808)
		<i>Mythimna unipuncta</i> (Haworth, 1809)
		<i>Scoliopteryx libatrix</i> (Linnaeus, 1758)
		<i>Spodoptera frugiperda</i> (Smith, 1797)
		<i>Spodoptera ornithogalli</i> (Guenée, 1852)
	Notodontidae	<i>Heterocampa guttivitta</i> (Walker, 1855)
		<i>Schizura concinna</i> (Smith, 1797)
		<i>Schizura unicornis</i> (Smith, 1797)
	Pyralidae	<i>Ostrinia nubilalis</i> (Hübner, 1796)
	Saturniidae	<i>Antheraea polyphemus</i> (Cramer, 1775)
<i>Enicospilus randalli</i> Gauld, 1988	Noctuidae	<i>Euclystis guerini</i> (Guenée, 1852)
<i>Enicospilus simoni</i> Gauld, 1988	Notodontidae	<i>Lirimiris lignitecta</i> Walker, 1865
<i>Enicospilus tenuigena</i> (Kriechbaumer, 1901)	Saturniidae	<i>Automeris tridens</i> (Herrich-Schäffer, 1856)
<i>Enicospilus trilineatus</i> (Brullé, 1846)	Noctuidae	<i>Amyna octo</i> (Guenée, 1852)
<i>Enicospilus undulatus</i> (Gravenhorst, 1829)	Lasiocampidae	<i>Dendrolimus pini</i> (Linnaeus, 1758)
		<i>Lasiocampa palaestinensis</i> Staudinger, 1894
		<i>Lasiocampa quercus</i> (Linnaeus, 1758)
		<i>Lasiocampa serrula</i> Guenée, 1858
		<i>Lasiocampa terreni</i> (Herrich-Schäffer, 1847)
		<i>Lasiocampa trifolii</i> (Denis & Schiffermuller, 1775)
		<i>Macrothylacia rubi</i> (Linnaeus, 1758)
		<i>Phyllodesma ilicifolia</i> (Linnaeus, 1758)
		<i>Phyllodesma tremulifolia</i> Hübner, 1810
		<i>Streblote</i> sp.
	Noctuidae	<i>Orthosia gothica</i> (Linnaeus, 1758)
	Notodontidae	<i>Spatalia argentina</i> (Denis & Schiffermuller, 1775)
	Sphingidae	<i>Deilephila elpenor</i> (Linnaeus, 1758)
<i>Ophion flavidus</i> Brullé, 1846	Noctuidae	<i>Agrotis ipsilon</i> (Hufnagel, 1766)
		<i>Helicoverpa armigera</i> (Hübner, 1809)
		<i>Helicoverpa zea</i> (Boddie, 1850)
		<i>Peridroma saucia</i> (Hübner, 1808)
		<i>Mythimna unipuncta</i> (Haworth, 1809)
		<i>Spodoptera eridania</i> (Stoll, 1782)
		<i>Spodoptera frugiperda</i> (Smith, 1797)
	Notodontidae	<i>Symmerista leucitys</i> Franclemont, 1946
<i>Thyreodon atriventris</i> (Cresson, 1874)	Sphingidae	<i>Pachylia ficus</i> (Linnaeus, 1758)
		<i>Pachylia syces</i> Hübner, 1822
		<i>Pachylioides resumens</i> (Walker, 1856)
<i>Thyreodon laticinctus</i> Cresson, 1874	Sphingidae	<i>Xylophanes anubus</i> (Cramer, 1777)
		<i>Spodoptera eridania</i> (Stoll, 1782)
		<i>Spodoptera frugiperda</i> (Smith, 1797)
	Notodontidae	<i>Symmerista leucitys</i> Franclemont, 1946

Continues...

Table 2. To be continued...

Species	Family	Host*
<i>Thyreodon atriventris</i> (Cresson, 1874)	Sphingidae	<i>Pachylia ficus</i> (Linnaeus, 1758)
		<i>Pachylia syces</i> Hübner, 1822
		<i>Pachylioides resumens</i> (Walker, 1856)
<i>Thyreodon laticinctus</i> Cresson, 1874	Sphingidae	<i>Xylophanes anubus</i> (Cramer, 1777)

\*Hosts according to taxapad.com (Yu *et al.* 2012).***Enicospilus brevis* (Morley, 1912)**

Geographical distribution: Amazonas (MORLEY 1912; TOWNES &amp; TOWNES 1966; DE SANTIS 1980; GAULD 1988).

***Enicospilus burgosi* Gauld, 1988**

Geographical distribution: Bahia and Santa Catarina (GAULD 1988).

***Enicospilus cameronii* (Dalla Torre, 1901)**

Geographical distribution: Minas Gerais, Espírito Santo and Paraná (MORLEY 1912; TOWNES &amp; TOWNES 1966; DE SANTIS 1980).

***Enicospilus carri* Gauld, 1988**

Geographical distribution: Amazonas (GAULD 1988).

***Enicospilus cepillo* Gauld, 1988**

Geographical distribution: Bahia (GAULD 1988).

***Enicospilus chiriquensis* (Cameron, 1886)**

Geographical distribution: Amazonas, Mato Grosso and Santa Catarina (MORLEY 1912, TOWNES &amp; TOWNES 1966; DE SANTIS 1980; GAULD 1988).

***Enicospilus clarkorum* Gauld, 1988**

Geographical distribution: Amazonas and Mato Grosso (GAULD 1988).

***Enicospilus columbianus* (Enderlein, 1921)**

Geographical distribution: Rio de Janeiro and Mato Grosso (GAULD 1988).

***Enicospilus cornifuscus* Gauld, 1988**

Geographical distribution: Santa Catarina (GAULD 1988).

***Enicospilus diae* Lima & Kumagai, 2012**Geographical distribution: Minas Gerais (LIMA *et al.* 2012).***Enicospilus echeverri* Gauld, 1988**

Geographical distribution: Bahia, Minas Gerais and Rio de Janeiro (GAULD 1988).

***Enicospilus enigmus* Gauld, 1988**

Geographical distribution: Mato Grosso and Santa Catarina (GAULD 1988).

***Enicospilus exoticus* (Morley, 1912)**

Geographical distribution: Pará, Bahia and Minas Gerais (HOOKER 1912; MORLEY 1912, TOWNES &amp; TOWNES 1966; DE SANTIS 1980; GAULD 1988).

***Enicospilus fernaldi* Hooker, 1912**

Geographical distribution: Amazonas, Ceará, Rio Grande do Norte and Rio de Janeiro (GAULD 1988).

***Enicospilus flavipennis* (Morley, 1912)**

Geographical distribution: Amazonas (MORLEY 1912; TOWNES &amp; TOWNES 1966; DE SANTIS 1980).

***Enicospilus flavofuscus* (Brullé, 1846)**

Geographical distribution: Brazil (BRULLÉ 1846; HOOKER 1912; TOWNES &amp; TOWNES 1966).

***Enicospilus flavoscutellatus* (Brullé, 1846)**Geographical distribution: Bahia, Espírito Santo, Rio de Janeiro, São Paulo, Santa Catarina and Rio Grande do Sul (BRULLÉ 1846; HOOKER 1912; MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980; GAULD 1988; ONODY *et al.* 2002).***Enicospilus flavostigma* Hooker, 1912**Geographical distribution: Rio Grande do Norte, Bahia, Mato Grosso, Minas Gerais, Rio de Janeiro, São Paulo and Santa Catarina (HOOKER 1912; TOWNES & TOWNES 1966; DE SANTIS 1980; GAULD 1988; ONODY & PENTEADO-DIAS 2002; ONODY *et al.* 2002).***Enicospilus flavus* (Fabricius, 1775)**

Geographical distribution: Rio Grande do Norte, Bahia, Espírito Santo and Santa Catarina (TOWNES &amp; TOWNES 1966; DE SANTIS 1980; GAULD 1988; ONODY &amp; PENTEADO-DIAS 2002).

***Enicospilus fuscatus* (Szépligeti, 1906)**

Geographical distribution: Santa Catarina (HOOKER 1912; DE SANTIS 1980; TOWNES &amp; TOWNES 1966).

***Enicospilus gallegosi* Gauld, 1988**

Geographical distribution: Rio Grande do Norte and Bahia (GAULD 1988; ONODY &amp; PENTEADO-DIAS 2002).

***Enicospilus glabratus* (Say, 1835)**

Geographical distribution: Bahia, Goiás, Rio de Janeiro, Paraná, Santa Catarina and Rio Grande do Sul (GAULD 1988).

***Enicospilus guatemalensis* (Cameron, 1886)**

Geographical distribution: Minas Gerais (GAULD 1988).

***Enicospilus hacha* Gauld, 1988**

Geographical distribution: Alagoas, Minas Gerais, Paraná and Rio Grande do Sul (ONODY &amp; PENTEADO-DIAS 2005).

***Enicospilus hallwachsae* Gauld, 1988**

Geographical distribution: Santa Catarina (GAULD 1988).

***Enicospilus hookeri* Townes, 1966**

Geographical distribution: São Paulo (HOOKER 1912; TOWNES &amp; TOWNES 1966; DE SANTIS 1980).

***Enicospilus jessicae* Gauld, 1988**

Geographical distribution: Bahia (GAULD 1988).

***Enicospilus kleini* Gauld, 1988**

Geographical distribution: Ceará, Bahia, Minas Gerais and São Paulo (GAULD 1988).

***Enicospilus lacsae* Gauld, 1988**

Geographical distribution: Bahia, Minas Gerais and Santa Catarina (GAULD 1988).

***Enicospilus lebophagus* Gauld, 1988**

Geographical distribution: Pará, Paraíba, Alagoas, Bahia, Distrito Federal, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo and Paraná (ONODY & PENTEADO-DIAS 2005).

***Enicospilus leoni* Gauld, 1988**

Geographical distribution: Bahia and Minas Gerais (GAULD 1988).

***Enicospilus liesneri* Gauld, 1988**

Geographical distribution: Pará, Minas Gerais and Santa Catarina (GAULD 1988).

***Enicospilus lovejoyi* Gauld, 1988**

Geographical distribution: Pará, Bahia, Minas Gerais and Rio de Janeiro (GAULD 1988).

***Enicospilus maculipennis* (Cameron, 1886)**

Geographical distribution: Amazonas (ONODY & PENTEADO-DIAS 2005).

***Enicospilus madrigalae* Gauld, 1988**

Geographical distribution: Bahia, Mato Grosso and Minas Gerais (GAULD 1988).

***Enicospilus major* (Morley, 1912)**

Geographical distribution: Amazonas and Mato Grosso (MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980; GAULD 1988).

***Enicospilus marini* Gauld, 1988**

Geographical distribution: Bahia and Minas Gerais (GAULD 1988).

***Enicospilus maritzai* Gauld, 1988**

Geographical distribution: Bahia (GAULD, 1988).

***Enicospilus merdarius* (Gravenhorst, 1829)**

Geographical distribution: Minas Gerais, Espírito Santo and Rio de Janeiro (TOWNES & TOWNES 1966; DE SANTIS 1980).

***Enicospilus mexicanus* (Cresson, 1874)**

Geographical distribution: Rondônia, Bahia, Paraná and Santa Catarina (GAULD 1988).

***Enicospilus monticola* (Cameron, 1886)**

Geographical distribution: Amazonas, Bahia, Mato Grosso, Goiás, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo and Santa Catarina (HOOKER 1912; TOWNES & TOWNES 1966; DE SANTIS 1980; GAULD 1988; ONODY *et al.* 2002).

***Enicospilus nigricornis* (Brullé, 1846)**

Geographical distribution: Goiás, Rio de Janeiro and Santa Catarina (BRULLÉ 1846; HOOKER 1912; MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

***Enicospilus opleri* Gauld, 1988**

Geographical distribution: Bahia (GAULD 1988).

***Enicospilus parkeri* Gauld, 1988**

Geographical distribution: Santa Catarina (GAULD 1988).

***Enicospilus pescadori* Gauld, 1988**

Geographical distribution: Bahia (GAULD 1988).

***Enicospilus purgatus* (Say, 1835)**

Geographical distribution: Amazonas, Bahia, Minas Gerais, Paraná and Santa Catarina (BRULLÉ 1846; HOOKER 1912; GAULD 1988; LIMA *et al.* 2012).

***Enicospilus randalli* Gauld, 1988**

Geographical distribution: Bahia and Mato Grosso (GAULD 1988).

***Enicospilus scuintlei* Gauld, 1988**

Geographical distribution: Ceará, Pernambuco, Bahia, Mato Grosso, Goiás, Minas Gerais, Rio de Janeiro, Paraná and Santa Catarina (GAULD 1988).

***Enicospilus simoni* Gauld, 1988**

Geographical distribution: São Paulo and Santa Catarina (GAULD 1988).

***Enicospilus stevensi* Gauld, 1988**

Geographical distribution: Espírito Santo and São Paulo (ONODY & PENTEADO-DIAS 2005).

***Enicospilus tenuigena* (Kriechbaumer, 1901)**

Geographical distribution: São Paulo (HOOKER 1912; TOWNES & TOWNES 1966; DE SANTIS 1980; GAULD 1988).

***Enicospilus teodora* Gauld, 1988**

Geographical distribution: Goiás, Rio de Janeiro and São Paulo (GAULD 1988; ONODY *et al.* 2002).

***Enicospilus trilineatus* (Brullé, 1846)**

Geographical distribution: Pará, Ceará, Pernambuco, Bahia, Mato Grosso, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina and Rio Grande do Sul (BRULLÉ 1846; HOOKER 1912; MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980; GAULD 1988; ONODY *et al.* 2002).

***Enicospilus ulfstrandii* Gauld, 1988**

Geographical distribution: São Paulo and Santa Catarina (ONODY & PENTEADO-DIAS 2005).

***Enicospilus undulatus* (Gravenhorst, 1829)**

Geographical distribution: Brazil (BRULLÉ 1846; HOOKER 1912).

***Enicospilus vegai* Gauld, 1988**

Geographical distribution: Rio de Janeiro (GAULD 1988).

***Enicospilus xanthocarpus* (Szépligeti, 1906)**

Geographical distribution: Amazonas, Pará, Bahia, Mato Grosso, Goiás, Minas Gerais, Rio de Janeiro, São Paulo and Santa Catarina (GAULD 1988).

***Enicospilus xanthostigma* (Szépligeti, 1906)**



Geographical distribution: Santa Catarina (HOOKER 1912; TOWNES & TOWNES 1966; DE SANTIS 1980; GAULD 1988).

**Remarks:** *Enicospilus* has 699 nominal species, of which 116 species are listed to Meso-America and 61 to Brazil (GAULD 1988; YU *et al.* 2012). *E. trilineatus* is widely distributed in Brazil, with reports of its occurrence for 13 states.

### ***Ophiogastrella* Brues, 1912**

#### ***Ophiogastrella lemairei* Gauld, 1988**

Geographical distribution: Distrito Federal (ONODY & PENTEADO-DIAS 2005).

#### ***Ophiogastrella maculithorax* Brues, 1912**

Geographical distribution: Paraíba (TOWNES & TOWNES 1966; DE SANTIS 1980; GAULD 1988).

#### ***Ophiogastrella nigrifrons* (Enderlein, 1921)**

Geographical distribution: Santa Catarina (TOWNES & TOWNES 1966; DE SANTIS 1980).

**Remarks:** This genus has six described species (YU *et al.* 2012), of which three have occurrence recorded for Brazil. *O. maculithorax*, whose fore wing's length is about 6mm is, probably, the smallest known species of Ophioninae (GAULD 1988).

### ***Ophion* Fabricius, 1798**

#### ***Ophion calliope* Gauld, 1988**

Geographical distribution: Distrito Federal, Espírito Santo, São Paulo and Santa Catarina (ONODY & PENTEADO-DIAS 2005).

#### ***Ophion flavidus* Brullé, 1846**

Geographical distribution: Amazonas, Rio Grande do Norte, Minas Gerais, Espírito Santo and São Paulo (BRULLÉ 1846; HOOKER 1912; MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980; GAULD 1988; ONODY & PENTEADO-DIAS 2002).

#### ***Ophion pallipes* Brullé, 1846**

Geographical distribution: Minas Gerais, Rio de Janeiro and Santa Catarina (BRULLÉ 1846; HOOKER 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

**Remarks:** *Ophion* has 138 described species (YU *et al.* 2012), of which 13 to Mesoamerica (GAULD 1988). FERNÁNDEZ-TRIANA (2005) described a new species from Cuba. Three species are reported to Brazil and, *O. flavidus* is the most common and well distributed species of Ophioninae in America (GAULD 1988) and, in Brazil, there are records to five states; it is endoparasitoid of Noctuidae (Lepidoptera) larvae which feed on herbaceous vegetation in disturbed environments or in agricultural production areas. GAULD (1988) reported that some species of Lepidoptera which cause economic damages in agricultural activities, such as *Spodoptera eridania* (Cramer, 1782), *Spodoptera frugiperda* (Smith, 1797), *Agrotis ipsilon* (Hufnagel, 1767), *Helicoverpa zea* (Boddie, 1850), *Mythimna unipuncta* (Haworth, 1809) and *Peridroma saucia* (Hübner, 1808), are its hosts. Some species are erroneously reported for Brazil, such as *Ophion flavoorbitalis* Cameron, 1886 and *Ophion intricatus* Brullé, 1846 (GAULD 1988), which were cited to Brazil by MORLEY (1912) and catalogued by TOWNES & TOWNES (1966) and DE SANTIS (1980) to the state of Rio de Janeiro, but were erroneously identified (GAULD 1988).

### ***Prethophion* Townes, 1971**

#### ***Prethophion latus* Townes, 1971**

Geographical distribution: Pará e Alagoas (ONODY & PENTEADO-

DIAS 2005).

**Remarks:** This genus has only one described species with occurrences reported for Bolivia, Brazil, Costa Rica, Panama and Peru (TOWNES 1971; GAULD 1988; ONODY & PENTEADO-DIAS 2005). Nothing is known about its hosts.

### ***Rhynchophion* Enderlein, 1912**

#### ***Rhynchophion odontandroplox* Enderlein, 1912**

Geographical distribution: São Paulo and Santa Catarina (CUSHMAN 1947; TOWNES & TOWNES 1966; DE SANTIS 1980).

#### ***Rhynchophion ligulifer* (Morley, 1912)**

Geographical distribution: Brazil (MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

**Remarks:** *Rhynchophion* has only four described species (GAULD & JANZEN 2004), out of which two have occurrence reported for Brazil. Concerning *R. ligulifer*, parasitoid of *Manduca* Hübner, 1807 (Lepidoptera: Sphingidae) (GAULD & JANZEN 2004), no information about its collection locality is available (MORLEY 1912; DE SANTIS 1980; TOWNES & TOWNES 1966).

### ***Stauropoctonus* Brauns, 1889**

#### ***Stauropoctonus amazonensis* Lima & Kumagai, 2013**

Geographical distribution: Amazonas (LIMA *et al.* 2013).

#### ***Stauropoctonus excarinatus* (Cushman, 1947)**

Geographical distribution: Amazonas, Minas Gerais and Santa Catarina (LIMA *et al.* 2013).

#### ***Stauropoctonus leotacilioi* Lima & Kumagai, 2013**

Geographical distribution: Minas Gerais, Sao Paulo and Paraná (LIMA *et al.* 2013).

#### ***Stauropoctonus michelle* Lima & Kumagai, 2013**

Geographical distribution: Amazonas and Minas Gerais (LIMA *et al.* 2013).

#### ***Stauropoctonus rectus* Lima & Kumagai, 2013**

Geographical distribution: Amazonas (LIMA *et al.* 2013).

**Remarks:** *Stauropoctonus*, with eleven described species, is a small and rarely collected genus of Ophioninae (GAULD 1988; YU *et al.* 2012; LIMA *et al.* 2013). The record of *Stauropoctonus* species in Brazil was recently reported by LIMA *et al.* (2013).

### ***Thyreodon* Brullé, 1846**

#### ***Thyreodon atriventris* (Cresson, 1874)**

Geographical distribution: Bahia, Rio de Janeiro, Santa Catarina and Rio Grande do Sul (HOOKER 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

#### ***Thyreodon cyaneus* Brullé, 1846**

Geographical distribution: Amazonas, Pará, Minas Gerais, Espírito Santo and Rio de Janeiro (BRULLÉ 1846; HOOKER 1912; MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

#### ***Thyreodon fenestratus* (Taschenberg, 1875)**

Geographical distribution: Espírito Santo and Rio de Janeiro (HOOKER 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

#### ***Thyreodon lacteipennis* Morley, 1912**

Geographical distribution: Amazonas (MORLEY 1912; DE SANTIS 1980).

***Thyreodon laticinctus* Cresson, 1874**

Geographical distribution: Brazil (MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

***Thyreodon morosus* Smith, 1879**

Geographical distribution: Rio Grande do Sul (HOOKER 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

***Thyreodon ruficornis* Brullé, 1846**

Geographical distribution: Rio Grande do Sul (BRULLÉ 1846; MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

***Thyreodon spectabilis* (Perty, 1833)**

Geographical distribution: Amazonas (HOOKER 1912; MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

***Thyreodon venustus* Enderlein, 1912**

Geographical distribution: Pará (MORLEY 1912; TOWNES & TOWNES 1966; DE SANTIS 1980).

**Remarks:** *Thyreodon*, with 45 described species, is the third most specious genus of Ophioninae, of which nine are reported to Brazil (Yu *et al.* 2012); although specious, its species that behave mainly as parasitoids of Sphingidae (Lepidoptera) are rarely collected (GAULD & JANZEN 2004). Usually, species of *Thyreodon* has diurnal habits, whereas species like *T. atriventris* is nocturnal (GAULD 1988; GAULD & JANZEN 2004).

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