



Hymenoptera Type Material from the National Museum of Costa Rica I: Holotypes

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Abstract

An investigation was carried out with the objective of determining the number of holotypes that should be present in the National Museum of Costa Rica, according to the literature. For this, a review was carried out of the scientific articles that described species from Costa Rica and indicated that they had deposited the holotypes in the National Institute of Biodiversity, whose collections have been under the administration of the National Museum since 2015, in addition to a physical review of the entire Hymenoptera collection to confirm the presence of each specimen. It was found that there should be 849 holotypes, of which 169 were not found. This leaves us with a final inventory of 684 holotypes representing 8 families, 29 subfamilies and 29 tribes, all of them in perfect condition.

Subject Areas

Entomology

Keywords

Ants, Bees, Type Catalogue, Voucher Specimen, Wasps

1. Introduction

After the closure of most of the services and projects of the National Institute of Biodiversity (INBio), the National Museum of Costa Rica (MNCR) assumed custody of the scientific collections of plants and insects, the latter with nearly three million specimens.

A significant number of type specimens that had not been inventoried have been deposited in this collection. Some were not even included in the collection's database. This made the accessibility of the material difficult for researchers from all over the world, since in order to carry out the descriptions of new spe-

cies or to make the complete vision of a genus, it is essential to have the type specimens.

Given these circumstances, the objective of this research was to generate a complete inventory of the holotypes that should be deposited in the MNCR, for which the literature corresponding to the description of species from Costa Rica that indicated having deposited the holotypes in the INBio was reviewed, to subsequently review the complete collection of Hymenoptera and confirm the presence of the specimen. Since there is no previous study, it was necessary to start from scratch.

2. Methodology

An inventory of taxa mentioned in the following literature was carried out, whose holotypes were deposited in INBio, and with respect to which the physical review was subsequently carried out: Aguilar (2004) [1], Areekul and Quicke (2006) [2], Ayala and Engel (2014) [3], Bordera and González-Moreno (2011) [4], Branstetter (2013) [5], Briceño (2003) [6], Cameron (1901) [7], Carpenter and Kojima (2002) [8], Dobrovikoff and Longino (2004) [9], Engel (2009) [10], Feitosa and Brandão (2008) [11], Fernández and Mackay (2003) [12], Figueiroa-De La Rosa *et al.* (2003) [13], Fortier (2000) [14], Gauld (1991) [15], Gauld *et al.* (2002) [16], Gauld *et al.* (1997) [17], Gauld *et al.* (2000) [18], Gauld and Janzen (2004) [19], Gauld *et al.* (1998) [20], Gates (2008) [21], Hansson (2002) [22], Hansson and La Salle (2003) [23], Hansson (2004) [24], Hansson (2010) [25], Hansson (2011) [26], Hansson and La Salle (2010) [27], Hansson (2012) [28], Huber and Noyes (2013) [29], Janzen *et al.* (1998) [30], Khaim and Broad (2013) [31], Khaim (2010) [32], LaPolla (2004) [33], LaPolla and Longino (2006) [34], Lattke (2011) [35], Leathers and Sharkey (2003) [36], Lindsay and Sharkey (2006) [37], Longino (2003) [38], Longino (2005) [39], Longino (2006) [40], Longino (2007) [41], Longino (2009) [42], Longino (2012) [43], Longino (2013) [44], Mackay and Makay (2007) [45], Marsh *et al.* (2013) [46], Noyes (2004) [47], O'Keefe and Agosti (1997) [48], Pitz and Sharkey (2007) [49], Sarmiento-Monroy (2006) [50], Schauff and Janzen (2001) [51], Schauff and Janzen (1995) [52], Sharkov and Wooley (1997) [53], Shaw (1996) [54], Smith (1996) [54], Smith (2003) [55], Smith (2008) [56], Smith (2012) [57], Valerio and Whitfield (2003) [58], Valerio *et al.* (2004) [59], Valerio *et al.* (2005) [60], Valerio *et al.* (2009) [61], Valerio and Whitfield (2015) [62], van Achterberg *et al.* (1997) [63], Ward (2017) [64] and Zúñiga (2004) [65]. Likewise, a physical review was carried out to corroborate the presence of the specimens in the Museum's collection.

3. Results

From the literature, approximately 2500 taxa described for Costa Rica were extracted until 2021, of which only 849 were deposited in the National Museum of Costa Rica, 169 of them were not found in the collection (**Table 1**), and more than 100 required to be digitized in the database.

Table 1. MNCR holotype inventory.

Family	Number of specimens in collection	
Subfamily	Species	Specimens
Tribe		
Apidae		
Apinae		
Meliponini	<i>Nogueirapis costaricana</i> Ayala and Engel 2014	Not deposited
	<i>Langideus isidro</i> D.R. Smith 2012	MNCR-A 4356432
Argidae	<i>Langideus tapanti</i> D.R. Smith 2012	MNCR-A 459525
	<i>Aulacus costaricensis</i> Smith 2008	MNCR-A 604300
Aulacidae	<i>Aulacus maculosus</i> Smith 2008	MNCR-A 1133241
	<i>Pristaulacus singulus</i> Smith 2008	MNCR-A 1725804
Braconidae		
Agathidinae		
	<i>Alabagrus derailersi</i> Leathers and Sharkey 2003	MNCR-A 2302045
	<i>Alabagrus donnai</i> Leathers and Sharkey 2003	MNCR-A 326876
	<i>Alabagrus englishi</i> Leathers and Sharkey 2003	MNCR-A 2302108
	<i>Alabagrus sarapiqui</i> Leathers and Sharkey 2003	MNCR-A 2277561
	<i>Alabagrus watsoni</i> Leathers and Sharkey 2003	MNCR-A 2261453
	<i>Amputoearinus alafumidus</i> Lindsay and Sharkey 2006	MNCR-A 2165617
	<i>Amputoearinus niger</i> Lindsay and Sharkey 2006	MNCR-A 4080128
	<i>Pneumagathis brooksi</i> (Sharkey 1998) ^a	Not found
	<i>Sesioctonus analogus</i> Briceño 2003	MNCR-A 1877961
	<i>Sesioctonus acrolophus</i> Briceño 2003	MNCR-A 492066
	<i>Sesioctonus biospleres</i> Briceño 2003	MNCR-A 2566588
	<i>Sesioctonus diazi</i> Briceño 2003	MNCR-A 2283713
	<i>Sesioctonus dichromus</i> Briceño 2003	MNCR-A 2213057
	<i>Zelomorpha hallwachsae</i> Sarmiento-Monroy 2006	MNCR-A 1178883
	<i>Zelomorpha katatonus</i> Sarmiento-Monroy 2006	MNCR-A 1291146
	<i>Zelomorpha sharkeyi</i> Sarmiento-Monroy 2006	MNCR-A 1798196
Cenocoeliinae		
Cenocoeliini	<i>Capitonius vegrandis</i> Pitz and Sharkey 2007	Not found
Doryctinae	<i>Psenobolus triangularis</i> van Achterberg and Marsh 2002	MNCR-A 1938873
Heterospilini	<i>Paraheterospilus ceciliaensis</i> Marsh 2013	Not found
	<i>Paraheterospilus eumekus</i> Marsh 2013	Not found
Euphorinae		
Euphorini	<i>Plynops megakephalos</i> Shaw 1996	Not found

Continued

Mendesellinae	<i>Epsilogaster antoniae</i> Valerio and Whitefield 2004	MNCR-A 4077796
	<i>Mendesella oriana</i> Valerio and Whitfield 2000	MNCR-A 1778759
Microgastrinae	<i>Hypomicrogaster evrys</i> Valerio 2015	MNCR-A 4077817
	<i>Hypomicrogaster plagios</i> Valerio 2015	MNCR-A 4077842
	<i>Hypomicrogaster rugosa</i> Valerio 2015	MNCR-A 4077746
	<i>Hypomicrogaster zan</i> Valerio 2015	MNCR-A 4077818
	<i>Pholetesor hannieae</i> (Valerio and Whitefield 2003)	MNCR-A 1962581
	<i>Parapanteles complexus</i> Valerio and Janzen 2009	MNCR-A 4080114
	<i>Parapanteles continua</i> Valerio and Whitefield 2009	MNCR-A 4077813
	<i>Parapanteles em</i> Valerio and Whitefield 2009	MNCR-A 4080108
	<i>Parapanteles mariae</i> Valerio and Whitefield 2009	MNCR-A 4080115
	<i>Parapanteles noae</i> Valerio and Whitefield 2009	MNCR-A 1866062
	<i>Parapanteles polus</i> Valerio and Whitefield 2009	MNCR-A 4080095
	<i>Parapanteles scotii</i> Valerio and Whitefield 2009	MNCR-A 4080088
	<i>Parapanteles tessares</i> Valerio and Whitefield 2009	MNCR-A 4077800
	<i>Prasmodon zlotnicki</i> Valerio and Rodriguez 2005	MNCR-A 5133063
Rogadinae		
Aleiodini	<i>Aleiodes leptocarina</i> Fortier 2000	Not found
Yeliconini	<i>Pseudoyelicones limonensis</i> Areekul and Quicke 2004	Not found
	<i>Pseudoyelicones nigriscutum</i> van Achterberg 1997	MNCR-A 1729933
	<i>Pseudoyelicones rojasii</i> Areekul and Quicke 2004	Not found
	<i>Yelicones anitae</i> Areekul and Quicke 2006	Not found
	<i>Yelicones artitus</i> Areekul and Quicke 2006	MNCR-A 47541
	<i>Yelicones gavinbroadi</i> Areekul and Quicke 2006	MNCR-A 2012394
	<i>Yelicones nigrocaputus</i> Areekul and Quicke 2006	MNCR-A 2012393
	<i>Yelicones theinsrii</i> Areekul and Quicke 2006	MNCR-A 1140025
	<i>Yelicones usae</i> Areekul and Quicke 2006	MNCR-A 5133064
	<i>Yelicones vestigium</i> Areekul and Quicke 2006	MNCR-A 656516
Sigalphinae		
Sigalphiini	<i>Sigalus romeroi</i> Sharkey 1995	Not found
Encyrtidae		
Encyrtinae	<i>Metaphycus chicle</i> Noyes 2004	MNCR-A 3925828
	<i>Metaphycus cinna</i> Noyes 2004	Not found
	<i>Metaphycus cures</i> Noyes 2004	MNCR-A 3925826
	<i>Metaphycus elisa</i> Noyes 2004	MNCR-A 3923081

Continued

	<i>Metaphycus fasula</i> Noyes 2004	Not found
	<i>Metaphycus faustus</i> Noyes 2004	MNCR-A 3925830
	<i>Metaphycus galata</i> Noyes 2004	MNCR-A 3923082
	<i>Metaphycus genava</i> Noyes 2004	MNCR-A 3923083
	<i>Metaphycus hippo</i> Noyes 2004	MNCR-A 3923078
	<i>Metaphycus inachus</i> Noyes 2004	MNCR-A 5135798
	<i>Metaphycus lexova</i> Noyes 2004	MNCR-A 3923123
	<i>Metaphycus lucar</i> Noyes 2004	MNCR-A 5135796
	<i>Metaphycus lupia</i> Noyes 2004	MNCR-A 5135799
	<i>Metaphycus metor</i> Noyes 2004	MNCR-A 3925821
	<i>Metaphycus mycene</i> Noyes 2004	MNCR-A 3925822
	<i>Metaphycus naxos</i> Noyes 2004	MNCR-A 3923080
	<i>Metaphycus othyras</i> Noyes 2004	MNCR-A 3923079
	<i>Metaphycus perdivo</i> Noyes 2004	MNCR-A 5135797
	<i>Metaphycus pydnos</i> Noyes 2004	MNCR-A 3925823
Tetracneminae	<i>Hambletonia pilosifrons</i> Sharkov and Woolley 1997	Not found
	<i>Hambletonia undulitibiae</i> Sharkov and Woolley 1997	Not found
Eulophidae	<i>Pediobomyia canaliculata</i> Hansson 2002	MNCR 4132402
Entedoninae	<i>Achrysocharoides asperulus</i> Hansson 2012	MNCR-A 4399408
	<i>Achrysocharoides cuspidatus</i> Hansson 2012	MNCR-A 4399407
	<i>Achrysocharoides infuscus</i> Hansson 2012	MNCR-A 4399405
	<i>Aleuroctonus marki</i> Hansson and LaSalle 2003	MNCR-A 4132362
	<i>Ametallon anticlypeus</i> Hansson 2004	MNCR-A 4132407
	<i>Ametallon barbillae</i> Hansson 2004	MNCR-A 4132626
	<i>Ametallon paloverdense</i> Hansson 2004	MNCR-A 4132406
	<i>Ametallon pedunculatum</i> Hansson 2004	MNCR-A 4132419
	<i>Apleurotropis albicaulis</i> Hansson 2010	MNCR-A 4406708
	<i>Apleurotropis anemia</i> Hansson 2010	MNCR-A 4406431
	<i>Apleurotropis assis</i> Hansson 2010	MNCR-A 4406701
	<i>Apleurotropis strix</i> Hansson 2010	MNCR-A 4406435
	<i>Cabeza ugaldei</i> Hansson and LaSalle 2003	MNCR-A 4132353
	<i>Chrysonotomyia altamirae</i> Hansson 2004	MNCR-A 4132608
	<i>Chrysonotomyia arenalicola</i> Hansson 2004	MNCR-A 4132415
	<i>Chrysonotomyia barbata</i> Hansson 2004	MNCR-A 4132630
	<i>Chrysonotomyia burrufascia</i> Hansson 2004	MNCR-A 4132605

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<i>Chrysonotomyia cecropiae</i> Hansson 2004	MNCR-A 4132386
<i>Chrysonotomyia deltaceps</i> Hansson 2004	MNCR-A 4132610
<i>Chrysonotomyia dictyota</i> Hansson 2004	MNCR-A 4132403
<i>Chrysonotomyia dinomerinx</i> Hansson 2004	MNCR-A 4132621
<i>Chrysonotomyia indigitus</i> Hansson 2004	MNCR-A 4132627
<i>Chrysonotomyia jimenezi</i> Hansson 2004	MNCR-A 4132408
<i>Chrysonotomyia laevis</i> Hansson 2004	MNCR-A 4132609
<i>Chrysonotomyia laeviscuta</i> Hansson 2004	MNCR-A 4132604
<i>Chrysonotomyia lavigenensis</i> Hansson 2004	MNCR-A 4132628
<i>Chrysonotomyia leucotela</i> Hansson 2004	MNCR-A 4132629
<i>Chrysonotomyia lioceps</i> Hansson 2004	MNCR-A 4132633
<i>Chrysonotomyia megalops</i> Hansson 2004	MNCR-A 4132606
<i>Chrysonotomyia multitincta</i> Hansson 2004	MNCR-A 4132405
<i>Chrysonotomyia niveicrus</i> Hansson 2004	MNCR-A 4132417
<i>Chrysonotomyia pansata</i> Hansson 2004	MNCR-A 4132603
<i>Chrysonotomyia perlonga</i> Hansson 2004	MNCR-A 4132388
<i>Chrysonotomyia rubii</i> Hansson 2004	MNCR-A 4132387
<i>Chrysonotomyia setiscuta</i> Hansson 2004	MNCR-A 4132625
<i>Chrysonotomyia striolata</i> Hansson 2004	MNCR-A 4132414
<i>Chrysonotomyia upalacola</i> Hansson 2004	MNCR-A 4132411
<i>Chrysonotomyia varitincta</i> Hansson 2004	MNCR-A 4132421
<i>Cornugon anais</i> Hansson 2011	MNCR-A 5133065
<i>Cornugon diceros</i> Hansson 2011	MNCR-A 5133066
<i>Cornugon leios</i> Hansson 2011	MNCR-A 5133067
<i>Cornugon unicornis</i> Hansson 2011	MNCR-A 5133068
<i>Dentalion apon</i> Hansson 2011	Not found
<i>Dentalion jimenezi</i> Hansson 2011	Not found
<i>Dinopteridion corcovadoense</i> Hansson 2004	MNCR-A 4132412
<i>Dinopteridion languidiceps</i> Hansson 2004	MNCR-A 4132389
<i>Dinopteridion turbinis</i> Hansson 2004	MNCR-A 4132416
<i>Emersonella desantisi</i> Hansson 2002	MNCR-A 4132359
<i>Emersonella hastata</i> Hansson 2002	MNCR-A 4132358
<i>Emersonella jimenezi</i> Hansson 2002	MNCR-A 4132361
<i>Emersonella mediocarinata</i> Hansson 2002	MNCR-A 4132568
<i>Emersonella petiolata</i> Hansson 2002	MNCR-A 4132567

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<i>Emersonella umanai</i> Hansson 2002	MNCR-A 4132614
<i>Emersonella varicolor</i> Hansson 2002	MNCR-A 4132450
<i>Entedononecremnus hansonii</i> Hansson and LaSalle 2003	MNCR-A 4132452
<i>Entedononecremnus parfer</i> Hansson and LaSalle 2003	MNCR-A 4132413
<i>Klyngon albicornis</i> Hansson and LaSalle 2010	MNCR-A 4406712
<i>Klyngon aulacis</i> Hansson and LaSalle 2010	MNCR-A 4406426
<i>Klyngon bouceki</i> Hansson, 2005	MNCR-A 4406700
<i>Klyngon hortense</i> Hansson and LaSalle 2010	MNCR-A 4406711
<i>Klyngon jimenezi</i> Hansson, 2005	MNCR-A 4406692
<i>Neopomphale dichrous</i> Hansson and LaSalle 2003	MNCR-A 5133069
<i>Neopomphale erecta</i> Hansson and LaSalle 2003	MNCR-A 5133070
<i>Neopomphale nonaequa</i> Hansson and LaSalle 2003	MNCR-A 5133071
<i>Neopomphale umbonata</i> Hansson and LaSalle 2003	MNCR-A 5133072
<i>Omphale adynata</i> Hansson 2004	MNCR-A 4132568
<i>Omphale agujascola</i> Hansson 2004	MNCR-A 4132567
<i>Omphale altamiraensis</i> Hansson 2004	MNCR-A 4132614
<i>Omphale antonioi</i> Hansson 2004	MNCR-A 4132450
<i>Omphale argothryymma</i> Hansson 2004	MNCR-A 4132452
<i>Omphale aspersa</i> Hansson 2004	MNCR-A 4132413
<i>Omphale aulacis</i> Hansson 2004	MNCR-A 4132445
<i>Omphale baryhypha</i> Hansson 2004	MNCR-A 4132401
<i>Omphale bitaeniata</i> Hansson 2004	MNCR-A 4132563
<i>Omphale bitincta</i> Hansson 2004	MNCR-A 4132390
<i>Omphale bouischium</i> Hansson 2004	MNCR-A 4132454
<i>Omphale bricenoi</i> Hansson 2004	MNCR-A 4132559
<i>Omphale caelata</i> Hansson 2004	MNCR-A 4132393
<i>Omphale carballoii</i> Hansson 2004	MNCR-A 4132451
<i>Omphale clypeogilba</i> Hansson 2004	MNCR-A 4132418
<i>Omphale cocaensis</i> Hansson 2004	MNCR-A 5133073
<i>Omphale derogaster</i> Hansson 2004	MNCR-A 4132579
<i>Omphale earina</i> Hansson 2004	MNCR-A 4132440
<i>Omphale flavirufa</i> Hansson 2004	MNCR-A 4132602
<i>Omphale foviger</i> Hansson 2004	MNCR-A 4132562
<i>Omphale friedmani</i> Hansson 2004	MNCR-A 4132437

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<i>Omphale ganota</i> Hansson 2004	MNCR-A 4132439
<i>Omphale gauldi</i> Hansson 2004	MNCR-A 4132631
<i>Omphale guanacastensis</i> Hansson 2004	MNCR-A 4132444
<i>Omphale hermosa</i> Hansson 2004	MNCR-A 4132447
<i>Omphale ianthina</i> Hansson 2004	MNCR-A 4132446
<i>Omphale ivani</i> Hansson 2004	MNCR-A 4132455
<i>Omphale kasirensis</i> Hansson 2004	MNCR-A 4132448
<i>Omphale leirostoma</i> Hansson 2004	MNCR-A 4132585
<i>Omphale leucoclasma</i> Hansson 2004	MNCR-A 5133074
<i>Omphale lurida</i> Hansson 2004	MNCR-A 4132438
<i>Omphale merista</i> Hansson 2004	MNCR-A 4132560
<i>Omphale morulipes</i> Hansson 2004	MNCR-A 4132580
<i>Omphale narinosa</i> Hansson 2004	MNCR-A 4132441
<i>Omphale ochrosoma</i> Hansson 2004	MNCR-A 4132453
<i>Omphale perimeces</i> Hansson 2004	MNCR-A 4132564
<i>Omphale pitillae</i> Hansson 2004	MNCR-A 488870
<i>Omphale prolata</i> Hansson 2004	MNCR-A 4132391
<i>Omphale rhorata</i> Hansson 2004	MNCR-A 4132449
<i>Omphale selvae</i> Hansson 2004	MNCR-A 4132584
<i>Omphale semiabdita</i> Hansson 2004	MNCR-A 4132566
<i>Omphale stenobasis</i> Hansson 2004	MNCR-A 4132576
<i>Omphale tanytelson</i> Hansson 2004	MNCR-A 4132624
<i>Omphale tapantibios</i> Hansson 2004	MNCR-A 4132394
<i>Omphale tropifer</i> Hansson 2004	MNCR-A 4132392
<i>Omphale truncatipennis</i> Hansson 2004	MNCR-A 4132443
<i>Omphale vargasii</i> Hansson 2004	MNCR-A 4132613
<i>Omphale villalobosi</i> Hansson 2004	MNCR-A 4132611
<i>Oradis phaeomeles</i> Hansson 2002	MNCR-A 4132442
<i>Oradis selva</i> Hansson 2002	MNCR-A 4132620
<i>Paracrias arcuatus</i> Hansson 2002	MNCR-A 4132409
<i>Paracrias gigaspis</i> Hansson 2002	MNCR-A 1657434
<i>Paracrias gnomus</i> Hansson 2002	MNCR-A 4132383
<i>Paracrias lanceolatus</i> Hansson 2002	MNCR-A 4132400
<i>Paracrias obtusiclavatus</i> Hansson 2002	MNCR-A 4132384
<i>Paracrias quesadai</i> Hansson 2002	MNCR-A 4132399

Continued

	<i>Paracrias uoides</i> Hansson 2002	MNCR-A 4132623
	<i>Pediobius caelatus</i> Hansson 2002	MNCR-A 684088
	<i>Pediobius planiusculus</i> Hansson 2002	MNCR-A 4132622
	<i>Pediobius smicrifrons</i> Hansson 2002	MNCR-A 4132398
	<i>Pediobius tapanticola</i> Hansson 2002	MNCR-A 4132385
	<i>Perditorulus ancylus</i> Hansson 2004	MNCR-A 4132600
	<i>Perditorulus anticus</i> Hansson 2004	MNCR-A 4132396
	<i>Perditorulus apophysis</i> Hansson 2004	MNCR-A 4132573
	<i>Perditorulus batmani</i> Hansson 2004	MNCR-A 4132581
	<i>Perditorulus catatonus</i> Hansson 2004	MNCR-A 4132617
	<i>Perditorulus dactyloides</i> Hansson 2004	MNCR-A 4132599
	<i>Perditorulus deltoideus</i> Hansson 2004	MNCR-A 4132561
	<i>Perditorulus dimidiatus</i> Hansson 2004	MNCR-A 4132558
	<i>Perditorulus liboides</i> Hansson 2004	MNCR-A 4132574
	<i>Perditorulus lingulatus</i> Hansson 2004	MNCR-A 4132618
	<i>Perditorulus microdrilus</i> Hansson 2004	MNCR-A 4132619
	<i>Perditorulus nebulaensis</i> Hansson 2004	MNCR-A 4132395
	<i>Perditorulus oresbios</i> Hansson 2004	MNCR-A 4132598
	<i>Perditorulus pagophilus</i> Hansson 2004	MNCR-A 4132572
	<i>Perditorulus paxillus</i> Hansson 2004	MNCR-A 4132557
	<i>Perditorulus phoxus</i> Hansson 2004	MNCR-A 4132583
	<i>Perditorulus prominulus</i> Hansson 2004	MNCR-A 4132582
	<i>Perditorulus rhamphodes</i> Hansson 2004	MNCR-A 4132565
	<i>Perditorulus stenodrilus</i> Hansson 2004	MNCR-A 4132397
	<i>Perditorulus zanclus</i> Hansson 2004	MNCR-A 4132570
Eulophinae		
	<i>Euplectrus anae</i> Schauff 2001	MNCR-A 5133075
	<i>Euplectrus carlowae</i> Schauff 2001	MNCR-A 5133076
	<i>Euplectrus edithae</i> Schauff 2001	MNCR-A 5133077
	<i>Euplectrus floryae</i> Schauff 2001	MNCR-A 5133078
	<i>Euplectrus ireneae</i> Schauff 2001	MNCR-A 5133079
	<i>Euplectrus ivonae</i> Schauff 2001	MNCR-A 5133080
	<i>Euplectrus josei</i> Schauff 2001	MNCR-A 5133081
	<i>Euplectrus magdae</i> Schauff 2001	MNCR-A 5133082
	<i>Euplectrus mariae</i> Schauff 2001	MNCR-A 5133083
	<i>Euplectrus orias</i> Schauff 2001	MNCR-A 5133084
	<i>Euplectrus xiomarae</i> Schauff 2001	MNCR-A 5133086

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Eurytomidae	<i>Khamul lanceolatus</i> Gates, 2008	Not found
Formicidae		
Dolichoderinae		
Bothriomyrmecini	<i>Bothriomyrmex paradoxus</i> Dubovikov and Longino 2004	MNCR-A 5133087
Leptomyrmecini	<i>Azteca flavigaster</i> Longino 2007	Not found
	<i>Azteca nanogyna</i> Longino 2007	Not found
	<i>Azteca oecocordia</i> Longino 2007	Not found
	<i>Azteca quadraticeps</i> Longino 2007	Not found
Dorylinae	<i>Leptanilloides mckennaee</i> Longino 2003	Not found
Formicinae		
Lasiini	<i>Acropyga keira</i> LaPolla 2004	Not found
Myrmelachistini	<i>Brachymyrmex nebulosus</i> LaPolla and Longino 2006	Not found
	<i>Myrmelachista flavocotea</i> Longino 2006	MNCR-A 5133088
	<i>Myrmelachista flavoguarea</i> Longino 2006	MNCR-A 5133089
	<i>Myrmelachista haberii</i> Longino 2006	MNCR-A 2281806
	<i>Myrmelachista joycei</i> Longino 2006	MNCR-A 5133090
	<i>Myrmelachista lauroatlantica</i> Longino 2006	MNCR-A 5133091
	<i>Myrmelachista lauropacifica</i> Longino 2006	MNCR-A 5133092
	<i>Myrmelachista longiceps</i> Longino 2006	MNCR-A 5133093
	<i>Myrmelachista meganaranja</i> Longino 2006	MNCR-A 5133094
	<i>Myrmelachista nigrocotea</i> Longino 2006	MNCR-A 5133095
	<i>Myrmelachista osa</i> Longino 2006	MNCR-A 5133096
Myrmicinae		
Adelomyrmecini	<i>Adelomyrmex brenesi</i> Longino 2006	MNCR-A 4067541
	<i>Adelomyrmex coco</i> Longino 2012	Not found
	<i>Adelomyrmex foveolatus</i> Fernández 2003	MNCR-A 1237378
	<i>Adelomyrmex longinoi</i> Fernández 2003	MNCR-A 1279879
	<i>Adelomyrmex microps</i> Fernández 2003	MNCR-A 1266263
Attini	<i>Eurhopalothrix ortizae</i> Longino 2013	Not found
	<i>Eurhopalothrix oscillum</i> Longino 2013	Not found
	<i>Eurhopalothrix xibalba</i> Longino 2013	Not found
	<i>Pheidole carinata</i> (Wilson 2003)	MNCR-A 5133611
	<i>Pheidole debilis</i> Longino 2009	MNCR-A 3622662
	<i>Pheidole eowilsoni</i> Longino 2009	MNCR-A 5133612
	<i>Pheidole epiphyta</i> Longino 2009	MNCR-A 5133614

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	<i>Pheidole fossimandibula</i> Longino 2009	MNCR-A 5133615
	<i>Pheidole gymnoceras</i> Longino 2009	MNCR-A 3659251
	<i>Pheidole janzeni</i> Longino 2009	MNCR-A 5133617
	<i>Pheidole karolmorae</i> Longino 2009	MNCR-A 5133618
	<i>Pheidole karolsetosa</i> Longino 2009	MNCR-A 5133621
	<i>Pheidole mesomontana</i> Longino 2009	MNCR-A 5133623
	<i>Pheidole pararugiceps</i> Longino 2009	MNCR-A 5133624
	<i>Pheidole picobarva</i> Longino 2009	MNCR-A 5133625
	<i>Pheidole rhinomontana</i> Longino 2009	MNCR-A 5133627
	<i>Pheidole sebofila</i> Longino 2009	MNCR-A 5133628
	<i>Pheidole sparsisculpta</i> Longino 2009	MNCR-A 3214434
	<i>Pheidole tenuicepsala</i> Longino 2009	MNCR-A 5133633
	<i>Procryptocerus eladio</i> Longino 2009	MNCR-A 5133801
	<i>Procryptocerus kempfi</i> Longino 2009	MNCR-A 5133802
	<i>Procryptocerus nalini</i> Longino and Snelling 2002	MNCR-A 1238551
	<i>Procryptocerus tortuguero</i> Longino and Snelling 2002	MNCR-A 3931377
	<i>Rhopalothrix subspatulata</i> Longino and Boudinot 2013	Not found
Crematogastrini	<i>Crematogaster (Orthocrema) bryophilia</i> Longino 2003	MNCR-A 1225782
	<i>Crematogaster (Orthocrema) flavomicrops</i> Longino 2003	MNCR-A 3931374
	<i>Crematogaster (Orthocrema) foliocrypta</i> Longino 2003	MNCR-A 3931372
	<i>Crematogaster (Orthocrema) jardinero</i> Longino 2003	MNCR-A 3931370
	<i>Crematogaster (Orthocrema) monteverdensis</i> Longino 2003	MNCR-A 5133609
	<i>Crematogaster (Orthocrema) raptor</i> Longino 2003	MNCR-A 3931373
	<i>Crematogaster (Orthocrema) snellingi</i> Longino 2003	MNCR-A 3931375
	<i>Crematogaster (Orthocrema) sotobosque</i> Longino 2003	MNCR-A 1237410
	<i>Crematogaster (Orthocrema) wardi</i> Longino 2003	MNCR-A 1238528
Dacetini	<i>Strumigenys augustandrewi</i> (Longino 2006)	MNCR-A 3213484
	<i>Strumigenys cascanteae</i> (Longino 2006)	MNCR-A 3623928
	<i>Strumigenys erickae</i> (Longino 2006)	MNCR-A 3214077
	<i>Strumigenys oconitrilloae</i> (Longino 2006)	MNCR-A 4067537
	<i>Strumigenys paniaguae</i> (Longino 2006)	MNCR-A 4067538
Lenomyrmecini	<i>Lenomyrmex colwelli</i> Longino 2006	MNCR-A 3211842
	<i>Nesomyrmex vargasii</i> Longino 2006	MNCR-A 4067539

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Stenammini	<i>Lachnomyrmex laticeps</i> Feitosa and Brandão 2008 <i>Lachnomyrmex longinoi</i> Feitosa and Brandão 2008 <i>Lachnomyrmex regularis</i> Feitosa and Brandão 2008 <i>Stenamma alas</i> Longino 2005 <i>Stenamma expolitico</i> Branstetter 2013 <i>Stenamma tico</i> Branstetter 2013	Not found Not found Not found Not found Not found Not found
Ponerinae		
Ponerini	<i>Leptogenys volcanica</i> Lattke 2011 <i>Simopelta pentadentata</i> Mackay and Mackay 2008	Not found Not found
Proceratiinae		
Probolomyrmecini	<i>Probolomyrmex guanacastensis</i> O'Keefe and Agosti 1998 <i>Pseudomyrmex evitus</i> Ward 2017	MNCR-A 5133803 Not found
Halictidae		
Halictinae		
Augochlorini	<i>Chlerogella pinocchio</i> Engel 2009	Not found
Ichneumonidae		
Anomaloninae		
Anomalonini	<i>Anomalon anaee</i> Gauld and Bradshaw 1997 <i>Anomalon acevedoi</i> Gauld and Bradshaw 1997 <i>Anomalon avanzoi</i> Gauld and Bradshaw 1997 <i>Anomalon canoae</i> Gauld and Bradshaw 1997 <i>Anomalon cerdasi</i> Gauld and Bradshaw 1997 <i>Anomalon cotoei</i> Gauld and Bradshaw 1997 <i>Anomalon cuetoii</i> Gauld and Bradshaw 1997 <i>Anomalon duniae</i> Gauld and Bradshaw 1997 <i>Anomalon fermini</i> Gauld and Bradshaw 1997 <i>Anomalon guisellea</i> Gauld and Bradshaw 1997 <i>Anomalon karlae</i> Gauld and Bradshaw 1997 <i>Anomalon ovandoi</i> Gauld and Bradshaw 1997 <i>Anomalon pabloi</i> Gauld and Bradshaw 1997 <i>Anomalon petronae</i> Gauld and Bradshaw 1997 <i>Anomalon ugaldei</i> Gauld and Bradshaw 1997 <i>Anomalon villegasi</i> Gauld and Bradshaw 1997 <i>Anomalon yescaei</i> Gauld and Bradshaw 1997	MNCR-A 5132025 Not found MNCR-A 1123443 MNCR-A 466651 MNCR-A 1889234 MNCR-A 1123442 MNCR-A 5132026 MNCR-A 1123428 MNCR-A 1123431 MNCR-A 1149629 MNCR-A 123436 MNCR-A 343829 MNCR-A 979823 MNCR-A 774448 MNCR-A 837888 MNCR-A 5132144 MNCR-A 5132028

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Gravenhorstiini	<i>Agrypon gaciai</i> Gauld and Bradshaw 1997	MNCR-A 1149632
	<i>Agrypon nelsoni</i> Gauld and Bradshaw 1997	MNCR-A 1123444
	<i>Agrypon santanai</i> Gauld and Bradshaw 1997	MNCR-A 821827
	<i>Aphanistes didii</i> Gauld and Bradshaw 1997	MNCR-A 5132145
	<i>Aphanistes elbae</i> Gauld and Bradshaw 1997	MNCR-A 148438
	<i>Aphanistes felixi</i> Gauld and Bradshaw 1997	MNCR-A 1123451
	<i>Aphanistes guadamaiae</i> Gauld and Bradshaw 1997	MNCR-A 407757
	<i>Aphanistes orchasdae</i> Gauld and Bradshaw 1997	MNCR-A 5132029
	<i>Corsoncus marianoi</i> Gauld and Bradshaw 1997	MNCR-A 442478
	<i>Corsoncus minori</i> Gauld and Bradshaw 1997	MNCR-A 1342842
	<i>Habronyx carmonai</i> Gauld and Bradshaw 1997	MNCR-A 1963972
	<i>Ophionellus arayai</i> Gauld and Bradshaw 1997	MNCR-A 1401885
	<i>Ophionellus ericki</i> Gauld and Bradshaw 1997	MNCR-A 875416
	<i>Ophionellus freddyi</i> Gauld and Bradshaw 1997	MNCR-A 5132030
	<i>Ophionellus harryi</i> Gauld 1997 Gauld and Bradshaw 1997	MNCR-A 343237
	<i>Ophionellus marini</i> Gauld and Bradshaw 1997	MNCR-A 229841
	<i>Ophionellus shezari</i> Gauld and Bradshaw 1997	MNCR-A 5132031
	<i>Parania pizarroi</i> Gauld and Bradshaw 1997	MNCR-A 551705
	<i>Podogaster acostai</i> Gauld and Bradshaw 1997	MNCR-A 1123459
	<i>Podogaster benignoi</i> Gauld and Bradshaw 1997	MNCR-A 5132032
	<i>Podogaster eldae</i> Gauld and Bradshaw 1997	MNCR-A 5132022
	<i>Podogaster fallacious</i> Gauld and Bradshaw 1997	MNCR-A 2129822
	<i>Podogaster mariae</i> Gauld and Bradshaw 1997	MNCR-A 1859221
	<i>Podogaster orozcoi</i> Gauld and Bradshaw 1997	MNCR-A 1123457
	<i>Podogaster pinedai</i> Gauld and Bradshaw 1997	MNCR-A 5132023
	<i>Podogaster rosteri</i> Gauld and Bradshaw 1997	MNCR-A 5132024
	<i>Podogaster ruthae</i> Gauld and Bradshaw 1997	MNCR-A 1362597
	<i>Podogaster tranae</i> Gauld and Bradshaw 1997	MNCR-A 5132033
	<i>Podogaster ulisesi</i> Gauld and Bradshaw 1997	MNCR-A 5132034
	<i>Trichomma batistai</i> Gauld and Bradshaw 1997	MNCR-A 1880090
Banchinae		
Atrophini	<i>Cecidopimpla montana</i> Ugalde and Gauld 2002	MNCR-A 2367267
	<i>Cordeleboea nasuta</i> Ugalde and Gauld 2002	MNCR-A 1110452
	<i>Cordeleboea nigrata</i> Ugalde and Gauld 2002	Not found
	<i>Cordeleboea ovaresi</i> Ugalde and Gauld 2002	MNCR-A 1897333

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<i>Diradops azopa</i> Ugalde and Gauld 2002	MNCR-A 1975430
<i>Diradops cardena</i> Ugalde and Gauld 2002	MNCR-A 1883531
<i>Diradops diora</i> Ugalde and Gauld 2002	MNCR-A 1146301
<i>Diradops empuza</i> Ugalde and Gauld 2002	MNCR-A 2411231
<i>Diradops fixata</i> Ugalde and Gauld 2002	MNCR-A 1109560
<i>Diradops granulata</i> Ugalde and Gauld 2002	MNCR-A 1109556
<i>Diradops horta</i> Ugalde and Gauld 2002	MNCR-A 85474
<i>Diradops maijae</i> Ugalde and Gauld 2002	Not found
<i>Diradops norae</i> Ugalde and Gauld 2002	Not found
<i>Diradops opeva</i> Ugalde and Gauld 2002	MNCR-A 1802703
<i>Diradops poirena</i> Ugalde and Gauld 2002	MNCR-A 1109551
<i>Diradops quila</i> Ugalde and Gauld 2002	MNCR-A 1146007
<i>Diradops rabida</i> Ugalde and Gauld 2002	MNCR-A 2578876
<i>Diradops robusta</i> Ugalde and Gauld 2002	MNCR-A 2598865
<i>Diradops rugosa</i> Ugalde and Gauld 2002	MNCR-A 5132047
<i>Diradops runea</i> Ugalde and Gauld 2002	MNCR-A 2602029
<i>Diradops surena</i> Ugalde and Gauld 2002	MNCR-A 1146556
<i>Diradops tamaska</i> Ugalde and Gauld 2002	Not found
<i>Diradops vilmae</i> Ugalde and Gauld 2002	MNCR-A 1355992
<i>Diradops wangora</i> Ugalde and Gauld 2002	MNCR-A 337180
<i>Diradops wiensi</i> Ugalde and Gauld 2002	Not found
<i>Diradops yovera</i> Ugalde and Gauld 2002	Not found
<i>Diradops zootita</i> Ugalde and Gauld 2002	MNCR-A 2388243
<i>Hadeleboea haberri</i> Ugalde and Gauld 2002	MNCR-A 1109750
<i>Hadrostethus eberhardi</i> Ugalde and Gauld 2002	MNCR-A 5132050
<i>Hadrostethus hansonii</i> Ugalde and Gauld 2002	MNCR-A 5132049
<i>Hapsinotus albomaculatus</i> Ugalde and Gauld 2002	Not Found
<i>Hapsinotus brevicaudus</i> Ugalde and Gauld 2002	Not found
<i>Hapsinotus carinatus</i> Ugalde and Gauld 2002	MNCR-A 1922204
<i>Hapsinotus convexus</i> Ugalde and Gauld 2002	Not found
<i>Hapsinotus granulatus</i> Ugalde and Gauld 2002	Not found
<i>Hapsinotus morenus</i> Ugalde and Gauld 2002	Not found
<i>Hapsinotus nigrogena</i> Ugalde and Gauld 2002	MNCR-A 1146611
<i>Hapsinotus notaulator</i> Ugalde and Gauld 2002	MNCR-A 5132035
<i>Hapsinotus parvatus</i> Ugalde and Gauld 2002	Not found

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<i>Hapsinotus planifascies</i> Ugalde and Gauld 2002	MNCR-A 1122902
<i>Hapsinotus scutellatus</i> Ugalde and Gauld 2002	MNCR-A 754661
<i>Leptobatopsis abuelita</i> Ugalde and Gauld 2002	MNCR-A 1991656
<i>Lissonota aorba</i> Ugalde and Gauld 2002	MNCR-A 1113786
<i>Lissonota aziba</i> Ugalde and Gauld 2002	MNCR-A 1146437
<i>Lissonota babela</i> Ugalde and Gauld 2002	MNCR-A 841906
<i>Lissonota bezaga</i> Ugalde and Gauld 2002	MNCR-A 1109701
<i>Lissonota canula</i> Ugalde and Gauld 2002	MNCR-A 3137932
<i>Lissonota conulla</i> Ugalde and Gauld 2002	MNCR-A 85863
<i>Lissonota crudeta</i> Ugalde and Gauld 2002	MNCR-A 425249
<i>Lissonota dineta</i> Ugalde and Gauld 2002	MNCR-A 2249034
<i>Lissonota gurna</i> Ugalde and Gauld 2002	MNCR-A 2317914
<i>Lissonota horpa</i> Ugalde and Gauld 2002	MNCR-A 1109642
<i>Lissonota justina</i> Ugalde and Gauld 2002	MNCR-A 85775
<i>Lissonota monona</i> Ugalde and Gauld 2002	MNCR-A 1146366
<i>Lissonota muertae</i> Ugalde and Gauld 2002	MNCR-A 1146024
<i>Lissonota nirna</i> Ugalde and Gauld 2002	MNCR-A 85877
<i>Lissonota pevola</i> Ugalde and Gauld 2002	Not found
<i>Lissonota pseudeleboea</i> Ugalde and Gauld 2002	MNCR-A 85906
<i>Lissonota roveba</i> Ugalde and Gauld 2002	MNCR-A 2452456
<i>Lissonota sevina</i> Ugalde and Gauld 2002	MNCR-A 1146368
<i>Lissonota tostada</i> Ugalde and Gauld 2002	MNCR-A 2249345
<i>Lissonota vebena</i> Ugalde and Gauld 2002	MNCR-A 3051417
<i>Loxodocus genalis</i> Ugalde and Gauld 2002	MNCR-A 1109703
<i>Loxodocus luteator</i> Ugalde and Gauld 2002	MNCR-A 2565752
<i>Loxodocus migratus</i> Ugalde and Gauld 2002	MNCR-A 3134972
<i>Loxodocus nitidus</i> Ugalde and Gauld 2002	MNCR-A 1189717
<i>Loxodocus pallidus</i> Ugalde and Gauld 2002	MNCR-A 2029539
<i>Loxodocus parvus</i> Ugalde and Gauld 2002	MNCR-A 1967611
<i>Loxodocus vulgator</i> Ugalde and Gauld 2002	MNCR-A 5132053
<i>Meniscomorpha astrema</i> Ugalde and Gauld 2002	Not found
<i>Meniscomorpha culiota</i> Ugalde and Gauld 2002	MNCR-A 1123853
<i>Meniscomorpha glasta</i> Ugalde and Gauld 2002	MNCR-A 1123254
<i>Meniscomorpha hiljei</i> Ugalde and Gauld 2002	MNCR-A 1343028
<i>Meniscomorpha janzeni</i> Ugalde and Gauld 2002	MNCR-A 3050872

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<i>Meniscomorpha kerna</i> Ugalde and Gauld 2002	MNCR-A 450566
<i>Meniscomorpha kevla</i> Ugalde and Gauld 2002	MNCR-A 1712192
<i>Meniscomorpha mitica</i> Ugalde and Gauld 2002	MNCR-A 1122929
<i>Meniscomorpha wasenia</i> Ugalde and Gauld 2002	MNCR-A 556383
<i>Meniscomorpha xeresa</i> Ugalde and Gauld 2002	MNCR-A 1145984
<i>Meniscomorpha yoventa</i> Ugalde and Gauld 2002	MNCR-A 1123284
<i>Meniscomorpha zacasta</i> Ugalde and Gauld 2002	MNCR-A 5132054
<i>Mnioes arves</i> Ugalde and Gauld 2002	Not found
<i>Mnioes bores</i> Ugalde and Gauld 2002	MNCR-A 1146041
<i>Mnioes cerves</i> Ugalde and Gauld 2002	Not found
<i>Mnioes dorves</i> Ugalde and Gauld 2002	Not found
<i>Mnioes flomes</i> Ugalde and Gauld 2002	MNCR-A 1922239
<i>Mnioes garnes</i> Ugalde and Gauld 2002	Not found
<i>Mnioes hiles</i> Ugalde and Gauld 2002	Not found
<i>Mnioes kebes</i> Ugalde and Gauld 2002	Not found
<i>Mnioes nalbes</i> Ugalde and Gauld 2002	Not found
<i>Podeleboa altissima</i> Ugalde and Gauld 2002	MNCR-A 85724
<i>Podeleboa bifenestralis</i> Ugalde and Gauld 2002	Not found
<i>Podeleboa bricenoi</i> Ugalde and Gauld 2002	MNCR-A 2316150
<i>Podeleboa cacaoi</i> Ugalde and Gauld 2002	MNCR-A 85719
<i>Podeleboa limoni</i> Ugalde and Gauld 2002	MNCR-A 1106777
<i>Podeleboa morena</i> Ugalde and Gauld 2002	MNCR-A 2318788
<i>Podeleboa perplexa</i> Ugalde and Gauld 2002	MNCR-A 2316468
<i>Podeleboa pitillai</i> Ugalde and Gauld 2002	MNCR-A 1109598
<i>Podeleboa punctiblanca</i> Ugalde and Gauld 2002	MNCR-A 1110231
<i>Podeleboa vitoi</i> Ugalde and Gauld 2002	MNCR-A 2249004
<i>Quillonota cangrejae</i> Ugalde and Gauld 2002	MNCR-A 1123270
<i>Quillonota fondai</i> Ugalde and Gauld 2002	MNCR-A 1120123
<i>Quillonota incompleta</i> Ugalde and Gauld 2002	MNCR-A 1109608
<i>Quillonota petronae</i> Ugalde and Gauld 2002	Not found
<i>Quillonota zurquia</i> Ugalde and Gauld 2002	MNCR-A 1109607
<i>Sphelodon gunacastensis</i> Ugalde and Gauld 2002	MNCR-A 2171088
<i>Syzeuctus abonis</i> Ugalde and Gauld 2002	Not found
<i>Syzeuctus besamis</i> Ugalde and Gauld 2002	Not found
<i>Syzeuctus cenitus</i> Ugalde and Gauld 2002	Not found

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<i>Syzeuctus clovis</i> Ugalde and Gauld 2002	Not found
<i>Syzeuctus dorcus</i> Ugalde and Gauld 2002	Not found
<i>Syzeuctus forpis</i> Ugalde and Gauld 2002	Not found
<i>Syzeuctus hezonicus</i> Ugalde and Gauld 2002	Not found
<i>Syzeuctus iampus</i> Ugalde and Gauld 2002	Not found
<i>Syzeuctus judtitus</i> Ugalde and Gauld 2002	Not found
<i>Syzeuctus kespis</i> Ugalde and Gauld 2002	Not found
<i>Syzeuctus lurinus</i> Ugalde and Gauld 2002	MNCR-A 85798
<i>Syzeuctus movicus</i> Ugalde and Gauld 2002	MNCR-A 1114048
<i>Syzeuctus possitus</i> Ugalde and Gauld 2002	MNCR-A 1114001
<i>Syzeuctus vedoris</i> Ugalde and Gauld 2002	Not found
<i>Wahllamia anasiphaga</i> Ugalde and Gauld 2002	MNCR-A 1106499
<i>Wahllamia brevigena</i> Ugalde and Gauld 2002	MNCR-A 3137169
<i>Wahllamia corticauda</i> Ugalde and Gauld 2002	MNCR-A 3140445
<i>Wahllamia illuminata</i> Ugalde and Gauld 2002	Not found
<i>Wahllamia incognita</i> Ugalde and Gauld 2002	Not found
<i>Wahllamia phloridiphobia</i> Ugalde and Gauld 2002	MNCR-A 2354345
<i>Wahllamia taliskiphila</i> Ugalde and Gauld 2002	MNCR-A 3137118
<i>Zaglytomorpha auxiliadora</i> Godoy and Gauld 2002	MNCR-A 43560
<i>Zaglytomorpha betilafea</i> Godoy and Gauld 2002	MNCR-A 3139439
<i>Zaglytomorpha cornuta</i> Godoy and Gauld 2002	MNCR-A 3135846
<i>Zaglytomorpha daschi</i> Godoy and Gauld 2002	MNCR-A 154432
<i>Zaglytomorpha flaquis</i> Godoy and Gauld 2002	MNCR-A 1974196
<i>Zaglytomorpha gabrieli</i> Godoy and Gauld 2002	Not found
<i>Zaglytomorpha lorraineae</i> Godoy and Gauld 2002	MNCR-A 2326222
<i>Zaglytomorpha minuta</i> Godoy and Gauld 2002	MNCR-A 2335495
<i>Zaglytomorpha ventura</i> Godoy and Gauld 2002	MNCR-A 3135786
Banchini	<i>Exetastes demerus</i> Gauld and Ugalde 2002
	MNCR-A 1113648
	<i>Exetastes eithus</i> Gauld and Ugalde 2002
	MNCR-A 1109584
	<i>Exetastes hamatus</i> Gauld and Ugalde 2002
	MNCR-A 1109584
	<i>Exetastes lorinus</i> Gauld and Ugalde 2002
	MNCR-A 1113729
	<i>Exetastes navetus</i> Gauld and Ugalde 2002
	MNCR-A 2578742
	<i>Exetastes niblus</i> Gauld and Ugalde 2002
	MNCR-A 1146551
	<i>Exetastes ometus</i> Gauld and Ugalde 2002
	MNCR-A 1120221
	<i>Exetastes pasculus</i> Gauld and Ugalde 2002
	MNCR-A 1146585

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	<i>Exetastes quarus</i> Gauld and Ugalde 2002	MNCR-A 1113642
	<i>Exetastes schuttei</i> Gauld and Ugalde 2002	MNCR-A 1113673
Glyptini	<i>Glypta altamirai</i> Godoy and Gauld 2002	MNCR-A 3135775
	<i>Glypta cuericiensis</i> Godoy and Gauld 2002	MNCR-A 2452466
	<i>Glypta punctata</i> Godoy and Gauld 2002	MNCR-A 1122816
	<i>Glypta wahli</i> Godoy and Gauld 2002	MNCR-A 3572405
Brachycyrtinae	<i>Brachycyrtus veriatrix</i> Gauld and Ward 2000	MNCR-A 5132105
	<i>Brachycyrtus walkleyae</i> Gauld and Ward 2000	MNCR-A 5132106
	<i>Brachycyrtus xorix</i> Gauld and Ward 2000	MNCR-A 5132130
Campopleginae	<i>Dusona</i> Cameron 1901	MNCR-A 2578742
Cremastinae	<i>Eiphosoma bogan</i> Gauld 2000	Not found
	<i>Eiphosoma gollum</i> Gauld 2000	MNCR-A 5132109
	<i>Eiphosoma henorum</i> Gauld 2000	MNCR-A 5132110
	<i>Eiphosoma kelpanum</i> Gauld 2000	MNCR-A 5132107
	<i>Eiphosoma perti</i> Gauld 2000	MNCR-A 5132108
	<i>Eiphosoma porrax</i> Gauld 2000	MNCR-A 2560194
	<i>Eiphosoma rудelium</i> Gauld 2000	MNCR-A 635470
	<i>Eiphosoma strontorium</i> Gauld 2000	MNCR-A 1975429
	<i>Eiphosoma terrax</i> Gauld 2000	MNCR-A 2557315
	<i>Eiphosoma urgulium</i> Gauld 2000	MNCR-A 1406859
	<i>Pristomerus anxius</i> Gauld 2000	MNCR-A 801083
	<i>Pristomerus jugulator</i> Gauld 2000	MNCR-A 740040
	<i>Temelucha dannix</i> Gauld 2000	MNCR-A 5133785
	<i>Trathala abraxa</i> Gauld 2000	MNCR-A 2129906
	<i>Trathala aelena</i> Gauld 2000	MNCR-A 5132114
	<i>Trathala aella</i> Gauld 2000	MNCR-A 5132111
	<i>Trathala betuna</i> Gauld 2000	MNCR-A 5132112
	<i>Trathala carmena</i> Gauld 2000	MNCR-A 5132113
	<i>Trathala diva</i> Gauld 2000	MNCR-A 5132115
	<i>Trathala flaca</i> Gauld 2000	MNCR-A 5132116
	<i>Trathala gifa</i> Gauld 2000	MNCR-A 2129903
	<i>Trathala jurva</i> Gauld 2000	MNCR-A 5132117
	<i>Trathala karma</i> Gauld 2000	MNCR-A 5132118
	<i>Trathala kula</i> Gauld 2000	MNCR-A 5132119
	<i>Trathala lisa</i> Gauld 2000	MNCR-A 5132120

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<i>Trathala moira</i> Gauld 2000	MNCR-A 5132121
<i>Trathala nora</i> Gauld 2000	MNCR-A 5132122
<i>Trathala ocypteta</i> Gauld 2000	MNCR-A 5132123
<i>Trathala ophelia</i> Gauld 2000	MNCR-A 5132127
<i>Trathala paula</i> Gauld 2000	Not found
<i>Trathala reena</i> Gauld 2000	MNCR-A 5132126
<i>Trathala sara</i> Gauld 2000	MNCR-A 5132124
<i>Trathala specula</i> Gauld 2000	MNCR-A 5132125
<i>Trathala yaqui</i> Gauld 2000	MNCR-A 5132128
<i>Xiphosomella agana</i> Gauld 2000	MNCR-A 5132131
<i>Xiphosomella aida</i> Gauld 2000	MNCR-A 5132132
<i>Xiphosomella belinda</i> Gauld 2000	MNCR-A 753473
<i>Xiphosomella bonera</i> Gauld 2000	MNCR-A 5132133
<i>Xiphosomella ctenator</i> Gauld 2000	MNCR-A 907951
<i>Xiphosomella daphne</i> Gauld 2000	MNCR-A 5132134
<i>Xiphosomella deceptor</i> Gauld 2000	MNCR-A 1818361
<i>Xiphosomella denticulella</i> Gauld 2000	MNCR-A 846671
<i>Xiphosomella ephusia</i> Gauld 2000	MNCR-A 1826776
<i>Xiphosomella evadne</i> Gauld 2000	MNCR-A 5132135
<i>Xiphosomella falsata</i> Gauld 2000	MNCR-A 5132136
<i>Xiphosomella folicana</i> Gauld 2000	MNCR-A 5132137
<i>Xiphosomella forgana</i> Gauld 2000	MNCR-A 5132138
<i>Xiphosomella gasmia</i> Gauld 2000	MNCR-A 374110
<i>Xiphosomella gethne</i> Gauld 2000	MNCR-A 698062
<i>Xiphosomella hippolita</i> Gauld 2000	MNCR-A 5132139
<i>Xiphosomella jacusme</i> Gauld 2000	MNCR-A 2130030
<i>Xiphosomella kismeta</i> Gauld 2000	MNCR-A 5132140
<i>Xiphosomella merida</i> Gauld 2000	MNCR-A 469738
<i>Xiphosomella pesada</i> Gauld 2000	MNCR-A 680496
<i>Xiphosomella rufina</i> Gauld 2000	MNCR-A 2241630
<i>Xiphosomella slenda</i> Gauld 2000	MNCR-A 5132141
<i>Xiphosomella velora</i> Gauld 2000	MNCR-A 5132142
<i>Xiphosomella wirra</i> Gauld 2000	MNCR-A 5132143
<i>Xiphosomella xora</i> Gauld 2000	MNCR-A 343031
<i>Xiphosomella zilla</i> Gauld 2000	MNCR-A 2130513

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Cryptinae		
Mesostenini		
	<i>Polycyrtus alei</i> Zúñiga 2004	MNCR-A 2450191
	<i>Polycyrtus alexisi</i> Zúñiga 2004	MNCR-A 2597204
	<i>Polycyrtus avilae</i> Zúñiga 2004	MNCR-A 3891376
	<i>Polycyrtus barrrientosi</i> Zúñiga 2004	MNCR-A 953490
	<i>Polycyrtus bicolor</i> Zúñiga 2004	MNCR-A 3318162
	<i>Polycyrtus calii</i> Zúñiga 2004	MNCR-A 970518
	<i>Polycyrtus chalmersi</i> Zúñiga 2004	MNCR-A 3891447
	<i>Polycyrtus clausus</i> Zúñiga 2004	MNCR-A 3159660
	<i>Polycyrtus condylobus</i> Zúñiga 2004	MNCR-A 1837734
	<i>Polycyrtus dahianae</i> Zúñiga 2004	MNCR-A 3891385
	<i>Polycyrtus donzoi</i> Zúñiga 2004	MNCR-A 2485083
	<i>Polycyrtus duplaris</i> Zúñiga 2004	MNCR-A 1112021
	<i>Polycyrtus eliethae</i> Zúñiga 2004	MNCR-A 3891587
	<i>Polycyrtus elviae</i> Zúñiga 2004	MNCR-A 3891381
	<i>Polycyrtus eneyae</i> Zúñiga 2004	MNCR-A 3126581
	<i>Polycyrtus enriquei</i> Zúñiga 2004	MNCR-A 3891458
	<i>Polycyrtus fonsecai</i> Zúñiga 2004	MNCR-A 3176188
	<i>Polycyrtus gauldi</i> Zúñiga 2004	MNCR-A 614392
	<i>Polycyrtus gynnae</i> Zúñiga 2004	MNCR-A 3891371
	<i>Polycyrtus hernandezi</i> Zúñiga 2004	MNCR-A 360007
	<i>Polycyrtus herrerae</i> Zúñiga 2004	MNCR-A 3891369
	<i>Polycyrtus hidalgoi</i> Zúñiga 2004	MNCR-A 845438
	<i>Polycyrtus inezae</i> Zúñiga 2004	MNCR-A 1387241
	<i>Polycyrtus isidroi</i> Zúñiga 2004	MNCR-A 3891374
	<i>Polycyrtus javieri</i> Zúñiga 2004	MNCR-A 950275
	<i>Polycyrtus josei</i> Zúñiga 2004	MNCR-A 1806326
	<i>Polycyrtus juani</i> Zúñiga 2004	MNCR-A 701463
	<i>Polycyrtus juanmii</i> Zúñiga 2004	MNCR-A 1882284
	<i>Polycyrtus kattyae</i> Zúñiga 2004	MNCR-A 2444612
	<i>Polycyrtus latigulus</i> Zúñiga 2004	MNCR-A 1112022
	<i>Polycyrtus lidiae</i> Zúñiga 2004	MNCR-A 914154
	<i>Polycyrtus lindhae</i> Zúñiga 2004	MNCR-A 3891577
	<i>Polycyrtus lovejoyi</i> Zúñiga 2004	MNCR-A 3141437
	<i>Polycyrtus luisi</i> Zúñiga 2004	MNCR-A 400398

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	<i>Polycyrtus maculatus</i> Zúñiga 2004	MNCR-A 3016050
	<i>Polycyrtus marcoi</i> Zúñiga 2004	MNCR-A 657549
	<i>Polycyrtus martini</i> Zúñiga 2004	MNCR-A 3891373
	<i>Polycyrtus nanii</i> Zúñiga 2004	MNCR-A 3891437
	<i>Polycyrtus parmenioi</i> Zúñiga 2004	MNCR-A 2456279
	<i>Polycyrtus patriciae</i> Zúñiga 2004	MNCR-A 3368045
	<i>Polycyrtus raveni</i> Zúñiga 2004	MNCR-A 3891451
	<i>Polycyrtus rebecae</i> Zúñiga 2004	MNCR-A 3175843
	<i>Polycyrtus retusus</i> Zúñiga 2004	MNCR-A 997882
	<i>Polycyrtus sigillatus</i> Zúñiga 2004	MNCR-A 604190
	<i>Polycyrtus solisi</i> Zúñiga 2004	MNCR-A 3891377
	<i>Polycyrtus tigrinus</i> Zúñiga 2004	MNCR-A 3160202
	<i>Polycyrtus wilsoni</i> Zúñiga 2004	MNCR-A 3891444
Phygadeuontini	<i>Fractipons dasyscutum</i> Bordera and González 2011	MNCR-A 5133597
Ctenopelmatinae		
Euryproctini	<i>Phobetes alexi</i> Gauld 1997	MNCR-A 1123472
	<i>Phobetes bienvenidai</i> Gauld 1997	MNCR-A 1123476
	<i>Phobetes contrerasi</i> Gauld 1997	MNCR-A 1123474
	<i>Phobetes floryae</i> Gauld 1997	MNCR-A 1123473
	<i>Phobetes guilleni</i> Gauld 1997	MNCR-A 1123471
	<i>Phobetes maltezi</i> Gauld 1997	MNCR-A 1123475
	<i>Phobetes pastranai</i> Gauld 1997	MNCR-A 1116218
Perilissini	<i>Coelorhachis edithae</i> Gauld 1997	MNCR-A 5132056
	<i>Coelorhachis felipei</i> Gauld 1997	MNCR-A 5132057
	<i>Coelorhachis heineri</i> Gauld 1997	MNCR-A 1149633
	<i>Jorgeus jimenezi</i> Gauld 1997	MNCR-A 1123470
	<i>Lathrolestes haroldi</i> Gauld 1997	MNCR-A 1149635
	<i>Lathrolestes irenea</i> Gauld 1997	MNCR-A 5132058
	<i>Nanium huberti</i> Gauld 1997	MNCR-A 5132059
	<i>Nanium mairenai</i> Gauld 1997	MNCR-A 1149636
Pionini	<i>Asthenara donlonae</i> Gauld 1997	MNCR-A 1123469
Scolobatini	<i>Physotarsus adriani</i> Gauld 1997	Not found
	<i>Physotarsus bonillai</i> Gauld 1997	MNCR-A 5132060
	<i>Physotarsus castilloi</i> Gauld 1997	MNCR-A 1149638
	<i>Physotarsus davidi</i> Gauld 1997	MNCR-A 880647
	<i>Physotarsus fabioi</i> Gauld 1997	MNCR-A 619411

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Cyllocerinae	<i>Cylloceria alvaradoi</i> Gauld 1991	MNCR-A 1101645
	<i>Cylloceria barbouraki</i> Gauld 1991	MNCR-A 1101666
	<i>Cylloceria trishae</i> Gauld 1991	MNCR-A 1102023
	<i>Cylloceria ugaldevi</i> Gauld 1991	MNCR-A 1101999
Diplazontinae	<i>Schachticraspedon juniori</i> Gauld and Hanson 1997	MNCR-A 379289
	<i>Sussaba fallasi</i> Gauld and Hanson 1997	MNCR-A 4441264
	<i>Syrrhlidepulo arroyoi</i> Gauld and Hanson 1997	MNCR-A 5132098
	<i>Syrrhlidepulo chaconi</i> Gauld and Hanson 1997	MNCR-A 5132099
	<i>Syrphoconus hurtadoi</i> Gauld and Hanson 1997	MNCR-A 1146011
	<i>Woldstedtius cruzae</i> Gauld and Hanson 1997	MNCR-A 5132103
	<i>Woldstedtius eduardoi</i> Gauld and Hanson 1997	MNCR-A 5132100
	<i>Woldstedtius garitai</i> Gauld and Hanson 1997	MNCR-A 5132101
	<i>Woldstedtius isidroi</i> Gauld and Hanson 1997	MNCR-A 5132102
	<i>Woldstedtius marcelae</i> Gauld and Hanson 1997	MNCR-A 1112309
	<i>Woldstedtius pereirae</i> Gauld and Hanson 1997	MNCR-A 699789
	<i>Woldstedtius rojasae</i> Gauld and Hanson 1997	MNCR-A 1149640
	<i>Woldstedtius salasae</i> Gauld and Hanson 1997	MNCR-A 5132104
Labeninae		
Groteini	<i>Grotea gracillea</i> Gauld 2000	MNCR-A 5132558
	<i>Grotea vanessae</i> Gauld 2000	MNCR-A 5132559
Labenini	<i>Apechoneura arida</i> Gauld 2000	MNCR-A 1215279
	<i>Apechoneura atlantica</i> Gauld 2000	MNCR-A 2130378
	<i>Apechoneura aureata</i> Gauld 2000	MNCR-A 5132551
	<i>Apechoneura brevita</i> Gauld 2000	MNCR-A 5132552
	<i>Apechoneura compacta</i> Gauld 2000	MNCR-A 5132553
	<i>Apechoneura mariae</i> Gauld 2000	MNCR-A 5132554
	<i>Apechoneura pelucida</i> Gauld 2000	MNCR-A 2354299
	<i>Apechoneura selvata</i> Gauld 2000	MNCR-A 5132555
	<i>Apechoneura salablancae</i> Gauld 2000	MNCR-A 5132556
	<i>Apechoneura valerieae</i> Gauld 2000	MNCR-A 5132557
	<i>Apechoneura vieja</i> Gauld 2000	MNCR-A 842101
	<i>Labena delta</i> Gauld 2000	MNCR-A 5132561
	<i>Labena espinita</i> Gauld 2000	MNCR-A 5132563
	<i>Labena eremica</i> Gauld 2000	MNCR-A 5132562
	<i>Labena humida</i> Gauld 2000	MNCR-A 5132560

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	<i>Labena lachryma</i> Gauld 2000	MNCR-A 5132564
	<i>Labena mimica</i> Gauld 2000	MNCR-A 5132565
	<i>Labena moragai</i> Gauld 2000	MNCR-A 1342634
	<i>Labena morda</i> Gauld 2000	MNCR-A 770044
	<i>Labena obscura</i> Gauld 2000	MNCR-A 734906
	<i>Labena ogra</i> Gauld 2000	MNCR-A 697422
	<i>Labena petita</i> Gauld 2000	Not found
	<i>Labena pluvia</i> Gauld 2000	Not found
	<i>Labena tarsata</i> Gauld 2000	Not found
	<i>Labena zerita</i> Gauld 2000	Not found
Lycorininae	<i>Lycorina luzae</i> Gauld 1997	Not found
	<i>Lycorina marvini</i> Gauld 1997	MNCR-A 1146687
	<i>Lycorina mirandai</i> Gauld 1997	Not found
	<i>Lycorina moralesi</i> Gauld 1997	Not found
	<i>Lycorina sanabriae</i> Gauld 1997	Not found
Metopiinae	<i>Exochus dondus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus evitus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus farmellus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus flabinus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus gascus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus izbus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus jacinctus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus krellus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus obezus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus ozanus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus pedanticus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus quozus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus ravetus</i> Ugalde and Gauld 2002	MNCR-A 3135763
	<i>Exochus teborus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus urzus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus vlops</i> Ugalde and Gauld 2002	Not found
	<i>Exochus xarus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus xetus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus yalupus</i> Ugalde and Gauld 2002	Not found
	<i>Exochus yorizus</i> Ugalde and Gauld 2002	Not found

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Ophioninae		
Enicospilini	<i>Hypsicera dundundu</i> Gauld and Sithole 2002	Not found
	<i>Hypsicera huma</i> Gauld and Sithole 2002	Not found
	<i>Hypsicera msana</i> Gauld and Sithole 2002	MNCR-A 4296831
Pimplinae		
Ephialtini	<i>Thyreodon carmeani</i> Gauld 2004	MNCR-A 3063481
	<i>Thyreodon darlingi</i> Gauld 2004	MNCR-A 1387070
	<i>Thyreodon deansi</i> Gauld 2004	MNCR-A 241727
	<i>Thyreodon delvarei</i> Gauld 2004	MNCR-A 718458
	<i>Thyreodon papei</i> Gauld 2004	MNCR-A 1382878
	<i>Thyreodon whitfieldi</i> Gauld 2004	MNCR-A 587535
	<i>Thyreodon zitaniae</i> Gauld 2004	MNCR-A 1357367
<i>Anastelgis alturas</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5132147	
<i>Anastelgis barvae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5132148	
<i>Anastelgis garciai</i> Gauld 1991	Not found	
<i>Anastelgis jaramilloi</i> Gauld 1991	Not found	
<i>Anastelgis marini</i> Gauld 1991	Not found	
<i>Calliephialtes guevaraee</i> Gauld, Ugalde and Hanson 1998	MNCR-A 1101688	
<i>Calliephialtes ledezmae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 1116225	
<i>Calliephialtes picadoi</i> Gauld 1991	MNCR-A 1100787	
<i>Calliephialtes rojasii</i> Gauld, Ugalde and Hanson 1998	MNCR-A 728661	
<i>Calliephialtes ruizi</i> Gauld 1991	MNCR-A 1101636	
<i>Calliephialtes sittenfeldae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 1792864	
<i>Clistopyga calixtoi</i> Gauld 1991	MNCR-A 1100795	
<i>Clistopyga carvajali</i> Gauld, Ugalde and Hanson 1998	MNCR-A 1123887	
<i>Clistopyga chaconii</i> Gauld 1991	MNCR-A 1100792	
<i>Clistopyga eldae</i> Gauld 1991	MNCR-A 1100822	
<i>Clistopyga fernadezi</i> Gauld 1991	MNCR-A 1102098	
<i>Clistopyga henryi</i> Gauld 1991	MNCR-A 1100835	
<i>Clistopyga moraviae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 1123888	
<i>Clydonium analuisae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 1123889	
<i>Clydonium cabrerai</i> Gauld 1991	MNCR-A 1102026	
<i>Clydonium diazii</i> Gauld 1991	Not found	
<i>Clydonium fonseciae</i> Gauld 1991	MNCR-A 1102027	
<i>Clydonium moragai</i> Gauld, Ugalde and Hanson 1998	MNCR-A 1342951	

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<i>Clydonium quintanillai</i> Gauld 1991	MNCR-A 1102031
<i>Dolichomitus billorum</i> Gauld, Ugalde and Hanson 1998	Not found
<i>Dolichomitus cangrejae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5132149
<i>Dolichomitus cantillanoi</i> Gauld, Ugalde and Hanson 1998	Not found
<i>Dolichomitus flacissimus</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5132150
<i>Dolichomitus grilloi</i> Gauld 1991	Not found
<i>Eruga albanoi</i> Gauld 1991	MNCR-A 1102062
<i>Eruga draperi</i> Gauld 1991	MNCR-A 1102059
<i>Eruga guttfreundi</i> Gauld 1991	MNCR-A 1096969
<i>Eruga haseltinei</i> Gauld 1991	MNCR-A 1102079
<i>Eruga kauli</i> Gauld 1991	MNCR-A 1102071
<i>Eruga straussi</i> Gauld 1991	MNCR-A 1102061
<i>Eruga yehi</i> Gauld 1991	MNCR-A 1102076
<i>Flacopimpla gerardoi</i> Gauld, Ugalde and Hanson 1998	Not found
<i>Flacopimpla varelae</i> Gauld 1991	MNCR-A 1100867
<i>Iseropus serranoi</i> Gauld, Ugalde and Hanson 1998	MNCR-A 408362
<i>Polysphincta dizardi</i> Gauld 1991	Not found
<i>Polysphincta mascoi</i> Gauld	Not found
<i>Polysphincta naranjae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133589
<i>Polysphincta purcelli</i> Gauld 1991	Not found
<i>Polysphincta shabui</i> Gauld 1991	Not found
<i>Scambus basseyi</i> Gauld 1991	Not Found
<i>Scambus emeritae</i> Gauld 1991	Not found
<i>Scambus erasi</i> Gauld 1991	Not found
<i>Scambus espinozai</i> Gauld 1991	Not found
<i>Scambus yalileae</i> Gauld 1991	Not found
<i>Scambus zunigai</i> Khalaim, 2010	MNCR-A 5133593
<i>Tromatobia blancoi</i> Gauld 1991	Not found
<i>Tromatobia carballoii</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133786
<i>Tromatobia pacayae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133787
<i>Tromatobia zunigai</i> Gauld 1991	Not found
<i>Zatypota fonsecai</i> Gauld 1991	Not found
<i>Zatypota gerardoi</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133788
<i>Zatypota medranoi</i> Gauld 1991	Not found
<i>Zatypota petronae</i> Gauld 1991	Not found

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<i>Zatypota riverai</i> Gauld 1991	Not fund
<i>Zatypota solanoi</i> Gauld 1991	Not found
<i>Zatypota talamancae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133789
<i>Zonopimpla aguilari</i> Gauld 1991	Not found
<i>Zonopimpla armandoii</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133790
<i>Zonopimpla aurae</i> Gauld 1991	Not found
<i>Zonopimpla barbosai</i> Gauld 1991	Not found
<i>Zonopimpla bermudezi</i> Gauld 1991	Not found
<i>Zonopimpla carolinae</i> Gauld 1991	Not found
<i>Zonopimpla duviliae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133791
<i>Zonopimpla hebeae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133792
<i>Zonopimpla humbertoi</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133793
<i>Zonopimpla liliae</i> Gauld 1991	Not found
<i>Zonopimpla lizanoi</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133794
<i>Zonopimpla lorraineae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133795
<i>Zonopimpla mirandai</i> Gauld 1991	Not found
<i>Zonopimpla morai</i> Gauld 1991	Not found
<i>Zonopimpla onoroi</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133796
<i>Zonopimpla snortumi</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133797
<i>Zonopimpla tenorioi</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133798
<i>Zonopimpla zamorae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133799
<i>Zonopimpla zunigai</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133800
Pimplini	
<i>Neotheronia abramsae</i> Gauld 1991	Not found
<i>Neotheronia bostrandeae</i> Gauld 1991	Not found
<i>Neotheronia brandtae</i> Gauld 1991	Not found
<i>Neotheronia charli</i> Gauld 1991	Not found
<i>Neotheronia cherfasi</i> Gauld 1991	Not found
<i>Neotheronia cyrusi</i> Gauld 1991	Not found
<i>Neotheronia donovani</i> Gauld 1991	Not found
<i>Neotheronia hespenheidei</i> Gauld 1991	Not found
<i>Neotheronia holmae</i> Gauld 1991	Not found
<i>Neotheronia jugaldei</i> Gauld 1991	Not found
<i>Neotheronia kompassi</i> Gauld 1991	Not found
<i>Neotheronia lizzae</i> Gauld 1991	Not found
<i>Neotheronia lloydii</i> Gauld 1991	Not found

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	<i>Neotheronia longinoi</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5132155
	<i>Neotheronia matamorosi</i> Gauld 1991	Not found
	<i>Neotheronia murilloi</i> Gauld 1991	Not found
	<i>Neotheronia rosai</i> Gauld 1991	Not fpund
	<i>Nomosphecia godoyae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5132156
	<i>Nomosphecia phillipsae</i> Gauld 1991	Not found
	<i>Nomosphecia solisi</i> Gauld 1991	Not found
	<i>Pimpla carlosi</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133781
	<i>Pimpla hubendickae</i> Gauld 1991	Not found
	<i>Pimpla isidroi</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133782
	<i>Pimpla perssoni</i> Gauld 1991	Not found
	<i>Pimpla rojasii</i> Gauld 1991	Not found
	<i>Pimpla romeroi</i> Gauld 1991	Not found
	<i>Pimpla sondrae</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5133783
Polysphinctini	<i>Dreisbachia dota</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5132153
	<i>Dreisbachia eberhardi</i> Gauld, Ugalde and Hanson 1998	MNCR-A 5132154
	<i>Hymenoepimecis robertsae</i> Gauld 1991	MNCR-A 1102068
	<i>Hymenoepimecis tedfordi</i> Gauld 1991	MNCR-A 1102064
Tersilochinae	<i>Stethantyx altamira</i> Khalaim and Broad 2013	MNCR-A 5132516
	<i>Stethantyx cartagoa</i> Khalaim and Broad 2013	MNCR-A 5132517
	<i>Stethantyx cecilia</i> Khalaim and Broad 2013	MNCR-A 5132518
	<i>Stethantyx nigrofemorata</i> Khalaim and Broad 2013	MNCR-A 5132520
	<i>Stethantyx pseudoosa</i> Khalaim and Broad 2013	MNCR-A 5132521
	<i>Stethantyx tenoriosa</i> Khalaim and Broad 2013	MNCR-A 5132522
Tryphoninae		
Phytodietini	<i>Phytodietus adriani</i> Gauld 1997	MNCR-A 5132062
	<i>Phytodietus maximoi</i> Gauld 1997	MNCR-A 1123494
	<i>Phytodietus obandoi</i> Gauld 1997	MNCR-A 1381194
	<i>Phytodietus penai</i> Gauld 1997	MNCR-A 1123499
	<i>Phytodietus ronaldii</i> Gauld 1997	MNCR-A 1123521
	<i>Phytodietus sylviae</i> Gauld 1997	MNCR-A 1123500
	<i>Phytodietus valverdei</i> Gauld 1997	MNCR-A 1123514
	<i>Phytodietus yamilethi</i> Gauld 1997	MNCR-A 1123509
Mymaridae	<i>Tinkerella nana</i> Huber and Noyes 2013	Not found

Continued

Pergidae		
Syzygoniinae	<i>Lagideus isidro</i> Smith 2012	Not found
	<i>Lagideus tapanti</i> Smith 2012	Not found
Stephanidae	<i>Aguiarina costaricensis</i> (Aguiar 2004)	Not found
Tenthredinidae		
Allantinae	<i>Probleta decoratus</i> Smith 2003	Not found
Vespidae		
Polistinae		
Epiponini	<i>Polybia selvana</i> Carpenter 2002	MNCR-A 5133638

a. According to zoological nomenclature, when a species changes gender, the author's reference is placed in parentheses.

The 680 holotypes present in the Museum's Collection represent 9 families, 29 subfamilies and 29 tribes, all of them in perfect condition, so none required restoration.

4. Discussion

Although in general, the vast majority of specimens are within the collection, another important number is lost.

The holotype of the species *Plebeia costaricana* (Ayala and Engel 2014) [3] is still in the Division of Entomology, University of Kansas Natural History Museum, because the transfer of the collections of the previous INBio occurred just after its publication.

It is also imperative to mention that the species of genus *Zelomorpha* are only mentioned in Carlos Sarmiento's thesis (2006) [50], but despite the fact that they have not been officially published in a scientific journal, the holotypes improved in the National Museum's collection.

5. Conclusions

We conclude that the MNCR database is completely up to date regarding the holotypes present in the collection, so that all the information can be consulted through the following portal: <https://biodiversidad.museocostarica.go.cr/>.

Likewise, unfortunately, it is concluded that the 169 specimens not found are not in the general collection, so it is possible that they were included in a material loan made before the MNCR took custody of the material.

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We are grateful to all the contributors who willingly provided us with the literature that was not accessible online. Additionally, the entire community of entomologists is thanked in advance and their collaboration requested, to locate the lost holotypes or, if that is not achieved, to name the corresponding lectotypes,

since not all the species previously deposited in the MNCR have their paratypes in this collection.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Aguiar, A.P. (2004) Additions to the Revision of the Genus *Hemistephanus* Enderlein (Hymenoptera: Stephanidae), with Inclusion of Four Taxa and Description of Two New Species. *Papéis Avulsos de Zoologia (São Paulo)*, **44**, 13-43. <https://doi.org/10.1590/S0031-10492004000200001>
- [2] Areekul, B. and Quicke, D.L. (2006) Systematics of the Parasitic Wasp Genus *Yelicones* Cameron (Hymenoptera: Braconidae: Rogadinae) and Revision of the Genus from the New World. *Systematics and Biodiversity*, **4**, 255-376. <https://doi.org/10.1017/S1477200005001866>
- [3] Ayala, R. and Engel, M.S. (2014) A New Stingless Bee Species of the Genus <i>Nogueirapis</i> from Costa Rica (Hymenoptera: Apidae). *Journal of Melittology*, **37**, 1-9. <https://doi.org/10.17161/jom.v0i37.4775>
- [4] Bordera, S. and González-Moreno, A. (2011) The Species of the Neotropical Genus *Fractipons* Townes, 1970 (Hymenoptera, Ichneumonidae, Cryptinae). *ZooKeys*, **76**, 55-72. <https://doi.org/10.3897/zookeys.76.913>
- [5] Branstetter, M. (2013) Revision of the Middle American Clade of the Ant Genus *Stenamma* Westwood (Hymenoptera, Formicidae, Myrmicinae). *ZooKeys*, **295**, 1-277. <https://doi.org/10.3897/zookeys.295.4905>
- [6] Briceño, R.A. (2003) Taxonomic Revision of the Genus *Sesioctonus* Vireck (Hymenoptera: Braconidae: Agathinae). *Journal of Hymenoptera Research*, **12**, 238-271.
- [7] Cameron, P. (1901) On a Collection of Hymenoptera Made in the Neighbourhood of Wellington by Mr. G.V. Hudson, with Descriptions of New Genera and Species. *Transactions of the New Zealand Institute*, **33**, 104-120.
- [8] Carpenter, J.M. and Kojima, J. (2002) A New Species of Paper Wasp from Costa Rica (Hymenoptera: Vespidae, Polistinae, Epiponini). *Journal of the New York Entomological Society*, **110**, 212-223. [https://doi.org/10.1664/0028-7199\(2002\)110\[0212:ANSOPW\]2.0.CO;2](https://doi.org/10.1664/0028-7199(2002)110[0212:ANSOPW]2.0.CO;2)
- [9] Dubovikoff, D.A. and Longino, J.T. (2004) A New Species of the Genus *Bothriomyrmex* Emery, 1869 (Hymenoptera: Formicidae: Dolichoderinae) from Costa Rica. *Zootaxa*, **776**, 1-10. <https://doi.org/10.11646/zootaxa.776.1.1>
- [10] Engel, M.S. (2009) Revision of the Bee Genus *Chlerogella* (Hymenoptera, Halictidae), Part I: Central American Species. *Zookeys*, **23**, 47-75. <https://doi.org/10.3897/zookeys.23.248>
- [11] Feitosa, R. and Brandão, R. (2008) A Taxonomic Revision of the Neotropical Myrmicine Ant Genus *Lachnomyrmex* Wheeler (Hymenoptera: Formicidae). *Zootaxa*, **1890**, 1-49. <https://doi.org/10.11646/zootaxa.1890.1.1>
- [12] Fernández, F. and Mackay, W.P. (2003) The Myrmicine Ants of the Adelomyrmex Laevigatus Species Complex (Hymenoptera, Formicidae). *Sociobiology*, **41**, 593-604.
- [13] De La Rosa, J.I.F., Valerio, A.A., López-Martínez, V., Whitefield, J.B. and Sharkey, M.J. (2003) Two New Species of *Epsilogaster* Withfield and Mason (Hymenoptera: Braconidae) from México and Costa Rica. *PAN-Pacific Entomologist*, **79**, 198-206.

- [14] Fortier, J.C. (2000) Description of a New Gregarious Species of *Aleiodes* Wesmael (Hymenoptera: Braconidae: Rogadinae). *Journal of Hymenoptera Research*, **9**, 288-291.
- [15] Gauld, I.D. (1991) The Ichneumonidae of Costa Rica: Introduction, Keys to Subfamilies, and Keys to the Species of the Lower Pimpliform Subfamilies Rhyssinae, Poemniinae, Acaenitinae and Cylloceriinae. American Entomological Institute, Gainesville.
- [16] Gauld, I.D., Sithole, R., Ugalde Gómez, J.A. and Godoy, C. (2002) The Ichneumonidae of Costa Rica, 4. Introduction and Keys to Species of the Subfamilies Metopiinae and Banchinae. American Entomological Institute, Gainesville.
- [17] Gauld, I.D., Wahl, D., Bradshaw, K., Hanson, P. and Ward, S. (1997) The Ichneumonidae of Costa Rica, 2. Introduction and Keys to Species of the Smaller Subfamilies, Anomaloninae, Ctenopelmatinae, Diplazontinae, Lycorininae, Phrudinae, Tryphoninae (Excluding Netelia) and Xoridinae, with an Appendices on the Rhyssinae, and with a Cladistic Analysis of the Genera and Subgenera of Xoridinae. American Entomological Institute, Gainesville.
- [18] Gauld, I.D., Ward, S. and Mallet, V. (2000) The Ichneumonidae of Costa Rica, 3. Introduction and Keys to Species of the Subfamilies Brachycyrtinae, Cremastinae, Labeninae and Oxytorinae, with an Appendix on the Anomaloninae. American Entomological Institute, Gainesville.
- [19] Gauld, I. and Janzen, D. (2004) The Systematics and Biology of the Costa Rican Species of Parasitic Wasps in the *Thyreodon* Genus-Group (Hymenoptera: Ichneumonidae). *Zoological Journal of the Linnean Society*, **141**, 297-351.
<https://doi.org/10.1111/j.1096-3642.2004.00116.x>
- [20] Gauld, I., Ugalde, J. and Hanson, P. (1998) Guía de los pimpline (Hymenoptera: Ichneumonidae) de Costa Rica. *Revista de Biología Tropical*, **46**, 1-189.
- [21] Gates, M. (2008) Description of *Khamul*, gen. n. (Hymenoptera: Chalcidoidea: Eurytomidae), with a Hypothesis of Its Phylogenetic Placement. *Zootaxa*, **1898**, 1-33.
<https://doi.org/10.11646/zootaxa.1898.1.1>
- [22] Hasson, C. (2002) Eulophidae of Costa Rica (Hymenoptera: Chalcidoidea), 1. American Entomological Institute, Gainesville.
- [23] Hansson, C. and La Salle, J. (2003) Revision of the Neotropical Species of the Tribe Euderomphalini (Hymenoptera: Eulophidae). *Journal of Natural History*, **37**, 697-778.
<https://doi.org/10.1080/00222930110096744>
- [24] Hansson, C. (2004) Eulophidae of Costa Rica (Hymenoptera: Chalcidoidea), 2. American Entomological Institute, Gainesville.
- [25] Hansson, C. (2010) *Apleurotropis* Girault (Hymenoptera: Eulophidae) New to Tropical America, Including Six New Species and Biological Records. *Zootaxa*, **2563**, 35-52.
<https://doi.org/10.11646/zootaxa.2563.1.2>
- [26] Hansson, C. (2011) *Dentalion* (Hymenoptera: Eulophidae: Entedoninae) a New Genus from Tropical America with Eleven New Species. *Zootaxa*, **2811**, 1-21.
<https://doi.org/10.11646/zootaxa.2811.1.1>
- [27] Hansson, C. and La Salle, J. (2010) The Neotropical Genus *Klyngon* Hansson (Hymenoptera: Eulophidae), with New Species and Biological Information. *Zootaxa*, **2498**, 1-27. <https://doi.org/10.11646/zootaxa.2498.1.1>
- [28] Hansson, C. (2012) *Acrysocharoides* Girault (Hymenoptera, Eulophidae) New to Tropical America, with Eight New Species. *ZooKeys*, **173**, 79-108.
<https://doi.org/10.3897/zookeys.173.2653>
- [29] Huber, J. and Noyes, J. (2013) A New Genus and Species of Fairyfly, *Tinkerella nana*

(Hymenoptera, Mymaridae), with Comments on Its Sister Genus *Kikiki*, and Discussion on Small Size Limits in Arthropods. *Journal of Hymenoptera Research*, **32**, 17-44. <https://doi.org/10.3897/jhr.32.4663>

- [30] Janzen, D., Sahrkey, M.J. and Burns J.M. (1998) Parasitization Biology of a New Species of Braconidae (Hymenoptera) Feeding on Larvae of Costa Rican Dry Forest Skippers (Lepidoptera: Hesperiidae: Pyrginae). *Tropical Lepidoptera*, **9**, 33-41.
- [31] Khalaim, A. and Broad, G. (2013) Tersilochinae (Hymenoptera: Ichneumonidae) of Costa Rica, Part 2. Genera Megalochus gen. nov. and Stethantyx Townes. *Zootaxa*, **3693**, 221-266. <https://doi.org/10.11646/zootaxa.3693.2.8>
- [32] Khalaim, I. (2010) To the Study of Pimplinae (Hymenoptera: Ichneumonidae) of Costa Rica. *Russian Entomological Journal*, **18**, 209-210.
- [33] LaPolla, J.S. (2004) Acropyga (Hymenoptera: Formicidae) of the World. American Entomological Institute, Gainesville.
- [34] LaPolla, J.S. and Longino, J.T. (2006) An Unusual New Brachymyrmex Mayr from Costa Rica, with Implications for the Phylogeny of the Lasiine Tribe Group. *Proceedings of the Entomological Society of Washington*, **108**, 297-305.
- [35] Lattke J.E. (2011) Revision of the New World Species of the Genus Leptogenys Roger (Insecta: Hymenoptera: Formicidae: Ponerinae). *Arthropod Systematics and Phylogeny*, **69**, 127-264. <https://doi.org/10.3897/asp.69.e31744>
- [36] Leathers, J.W. and Sharkey, M.J. (2003) Taxonomy and Life History of Costa Rican Alabagrus (Hymenoptera: Braconidae), with a Key to World Species. *Contributions in Science (Los Angeles)*, **497**, 1-78. <https://doi.org/10.5962/p.214390>
- [37] Lindsay, C. and Sharkey, M. (2006) Revision of the Genus *Amputoearinus* (Hymenoptera: Braconidae: Agathidinae) with Fourteen New Species. *Zootaxa*, **1329**, 1-27. <https://doi.org/10.11646/zootaxa.1329.1.1>
- [38] Longino, J.T. (2003) The *Crematogaster* (Hymenoptera, Formicidae, Myrmicinae) of Costa Rica. *Zootaxa*, **151**, 1-150. <https://doi.org/10.11646/zootaxa.151.1.1>
- [39] Longino, J.T. (2005) Complex Nesting Behavior by Two Neotropical Species of the Ant Genus *Stenamma* (Hymenoptera: Formicidae). *Biotropica*, **37**, 670-675. <https://doi.org/10.1111/j.1744-7429.2005.00085.x>
- [40] Longino, J.T. (2006) New Species and Nomenclatural Changes for the Costa Rican Ant Fauna (Hymenoptera: Formicidae). *Myrmecologische Nachrichten*, **8**, 131-143.
- [41] Longino, J.T. (2007) A Taxonomic Review of the Genus *Azteca* (Hymenoptera: Formicidae) in Costa Rica and a Global Revision of the Aurita Group. *Zootaxa*, **1491**, 1-63. <https://doi.org/10.11646/zootaxa.1491.1.1>
- [42] Longino, J.T. (2009) Additions to the Taxonomy of New World *Pheidole* (Hymenoptera: Formicidae). *Zootaxa*, **2181**, 1-90. <https://doi.org/10.11646/zootaxa.2181.1.1>
- [43] Longino, J.T. (2012) A Review of the Ant Genus *Adelomyrmex* Emery 1897 (Hymenoptera, Formicidae) in Central America. *Zootaxa*, **3456**, 1-35. <https://doi.org/10.11646/zootaxa.3456.1.1>
- [44] Longino, J. (2013) A Review of the Central American and Caribbean Species of the ant Genus *Eurhopalothrix* Brown and Kempf, 1961 (Hymenoptera, Formicidae), with a Key to New World Species. *Zootaxa*, **3693**, 101-151. <https://doi.org/10.11646/zootaxa.3693.2.1>
- [45] Mackay, W.P. and Mackay, E. (2007) Revision of the Ants of the Genus Simopelta Mann. In: Jiménez, E., Fernández, F., Arias, T.M. and Lozano-Zambrano, F.H., Eds., *Sistemática, biogeografía y conservación de las hormigas cazadoras de Colombia*, In-

- stituto de Investigación de Recursos Biológicos Alexander von Humboldt, Bogotá, 285-328.
- [46] Marsh, P., Wild, A. and Whitfield, J. (2013) The Doryctinae (Braconidae) of Costa Rica: Genera and Species of the Tribe Heterospilini. *ZooKeys*, **347**, 1-474. <https://doi.org/10.3897/zookeys.347.6002>
- [47] Noyes, J.S. (2004) Encyrtidae of Costa Rica (Hymenoptera: Chalcidoidea), 2. Metaphycus and Related Genera, Parasitoids of Scale Insects (Coccoidea) and Whiteflies (Aleyrodidae). American Entomological Institute, Gainesville.
- [48] O'Keefe, S.T. and Agosti, D. (1997) A New Species of Probolomyrmex (Hymenoptera: Formicidae) from Guanacaste, Costa Rica. *Journal of the New York Entomological Society*, **105**, 190-192.
- [49] Pitz, K.M. and Sharkey, M.J. (2007) Three New Species of *Cenocoeliinae* (Hymenoptera: Braconidae) with Novel Morphological Characteristics and Habitat Records. *Journal of Hymenoptera Research*, **16**, 167-77.
- [50] Sarmiento-Monroy, C.E. (2006) Taxonomic Revision of Zelomorpha Ashmead, 1900 and Hemichoma Enderlein, 1920 (Braconidae: Agathidinae) with a Phylogenetic Analysis of Color Patterns. Master's Thesis, University of Kentucky, Lexington.
- [51] Schauff, M. and Janzen, D. (2001) Taxonomy and Ecology of Costa Rican *Euplectrus* (Hymenoptera: Eulophidae), Parasitoids of Caterpillars. *Journal of Hymenoptera Research*, **10**, 181-230.
- [52] Sharkey, M.J. and Janzen, D.H. (1995) Review of the World Species of Sigalphus (Hymenoptera: Braconidae: Sigalphinae) and Biology of Sigalphus Romerovi, New Species. *Journal of Hymenoptera Research*, **4**, 99-109.
- [53] Sharkov, A. and Wooley, J.B. (1997) A Revision of the Genus Hambletonia Compere (Hymenoptera: Encyrtidae). *Journal of Hymenoptera Research*, **6**, 191-218.
- [54] Shaw, S.R. (1996) Plynops, a Peculiar New Neotropical Genus and Seven New Species (Hymenoptera: Braconidae: Euphorinae). *Journal of Hymenoptera Research*, **5**, 166-183.
- [55] Smith, D. (2003) A Synopsis of the *Sawflies* (Hymenoptera: Symphyta) of America South of the United States: Tenthredinidae (Allantinae). *Journal of Hymenoptera Research*, **12**, 148-192.
- [56] Smith, D. (2008) Aulacidae of the Southwestern United States, Mexico, and Central America (Hymenoptera). *Beiträge zur Entomologie*, **58**, 267-355. <https://doi.org/10.21248/contrib.entomol.58.2.267-355>
- [57] Smith, D. (2012) The South American Genus *Lagideus* Konow (Hymenoptera: Perigidae: Syzygoniinae), a Supplement. *Zootaxa*, **3413**, 1-18. <https://doi.org/10.11646/zootaxa.3413.1.1>
- [58] Valerio, A. and Whitfield, J. (2003) A New Species of the Enigmatic Genus *Teremys* Mason, *T. hanniae*, from Costa Rica (Hymenoptera: Braconidae). *Zootaxa*, **364**, 1-9. <https://doi.org/10.11646/zootaxa.364.1.1>
- [59] Valerio A., Deans, A. and Whitfield, J. (2004) Review of the Microgastrine Braconid Wasp Genus *Exoryza*, with Description of a New Species, *E. monocavus*, from Central America. *Zootaxa*, **526**, 1-11. <https://doi.org/10.11646/zootaxa.526.1.1>
- [60] Valerio, A., Rodríguez, J., Whitefield, J. and Janzen, D. (2005) *Prasmodon zlotnicki*, a New Neotropical Species of the Genus *Prasmodon* Nixon (Braconidae: Microgastrinae) from Costa Rica, with the First Host Records for the Genus. *Zootaxa*, **1016**, 29-38. <https://doi.org/10.11646/zootaxa.1016.1.4>

- [61] Valerio, A., Whitefield, J. and Janzen, D. (2009) Review of World *Parapanteles* Ashmead (Hymenoptera: Braconidae: Microgastrinae), with Description of Fourteen New Neotropical Species and the First Description of the Final Instar Larvae. *Zootaxa*, **2084**, 1-49. <https://doi.org/10.11164/zootaxa.2084.1.1>
- [62] Valerio, A.A. and Whitefield, J.B. (2015) Taxonomic Review of the Genus *Hypomicrogaster* Ashmead (Hymenoptera: Braconidae: Microgastrinae), with Descriptions of 40 New Species. *Zootaxa*, **3979**, 1-98. <https://doi.org/10.11164/zootaxa.3979.1.1>
- [63] van Achterberg, C., Penteado-Dias, A.M. and Quicke, D.L. (1997) Pseudoyelicones (Hymenoptera: Braconidae: Rogadinae), a New Genus from Brazil and Costa Rica. *Zoologische Mededelingen*, **71**, 1-8.
- [64] Ward, P. (2017) A Review of the *Pseudomyrmex ferrugineus* and *Pseudomyrmex goeldii* Species Groups: Acacia-Ants and Relatives (Hymenoptera: Formicidae). *Zootaxa*, **4227**, 524-542. <https://doi.org/10.11164/zootaxa.4227.4.3>
- [65] Zúñiga, R. (2004) The Taxonomy and Biology of the Polycyrtus Species (Hymenoptera: Ichneumonidae, Cryptinae) of Costa Rica. American Entomological Institute, Gainesville.