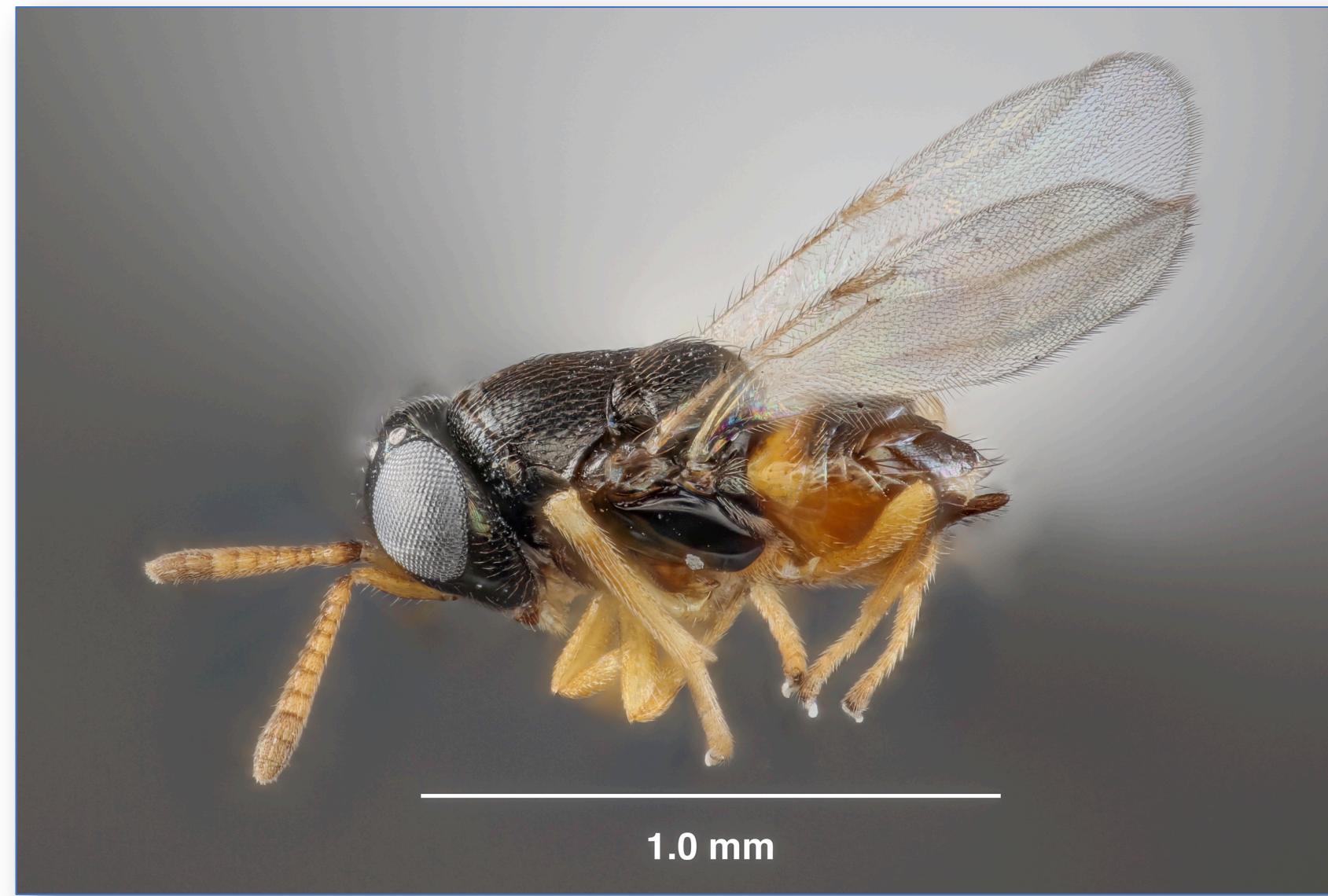


Universal Chalcidoidea Database (UCD) – Status Report

TaxonWorks Together 2023

Jim Woolley, Texas A&M University



Superfamily Chalcidoidea

- As of today, 27,347 valid species in 53 families (3 are extinct)
- Most species are parasitoids of other insects or are associated with galls
- Very important in natural and biological control of insect pests



Universal Chalcidoidea Database

- Created by John Noyes,
Natural History Museum,
London
- Served on-line by NHM
- Last updates in March
2019
- Based on 56,499
publications going back to
Jan. 1, 1758
- Essential resource for
taxonomists, researchers
in biological control, etc.



UCD moves to TaxonWorks

- Major support was provided by collaborative NSF award to John Heraty, Matt Yoder and myself
- Data tables ported to TW in 2019
- Extended period of debugging and ground-proofing of data by chalcidologists and TW team
- We continue to meet weekly
- The model provides a community-curated, ongoing resource
- 79 project members, about 10 have been actively curating data
- Big emphasis on training – user manual and YouTube channel with tutorials



Literature in UCD@TW

- Contains virtually all literature from UCD @ BMNH
- Almost up to date
- Most publications have PDF files available for download
- Using tags in TW to control workflow for curators

Source unprocessed

Nomenclatural Acts

No Nomenclatural Acts

Source processed - Biology

Source processed - Complete

Source processed - Distribution

Source Processed Except for Figures

Source processed - Nomenclature



Literature in UCD@TW

- 834 new papers added since move to TW
- 306 papers completely curated
- 16 in progress
- 27 papers with nomenclatural actions unprocessed (some of these may actually be in progress)
- Huge backlog of 485 papers without nomenclatural actions remains to be processed



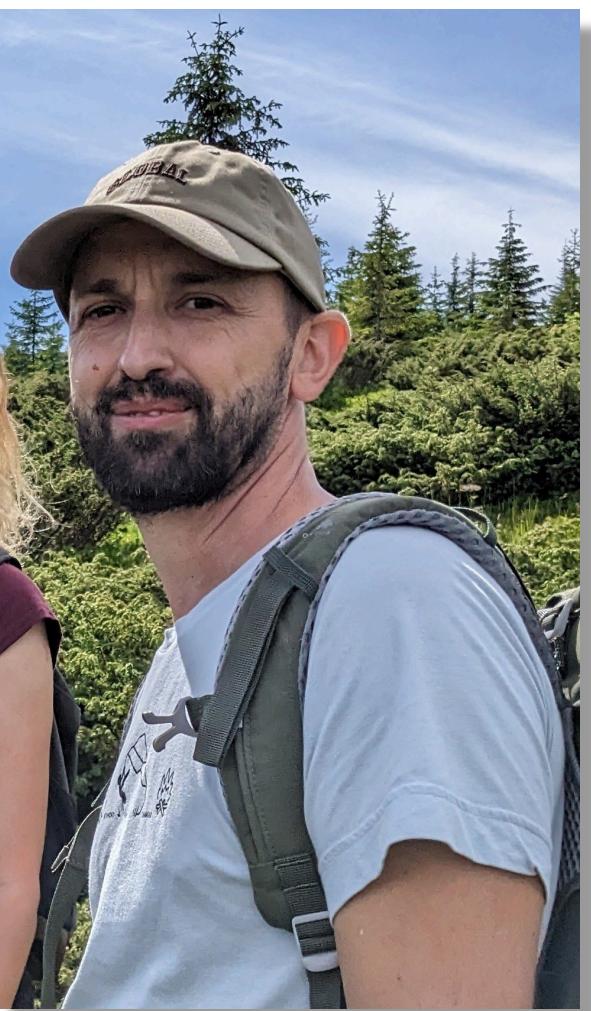
BBQ Concept

- Small group of people working together on-line with a common goal
- In our case, curating papers for UCD@TW
- Alternate between synchronous and asynchronous periods
- People working independently most of the time
- But chat rooms open if somebody gets stuck or has a question
- UCD group meets for two hours every other week
- Many thanks to Luke Kresslein and Debbie Paul for getting us started!





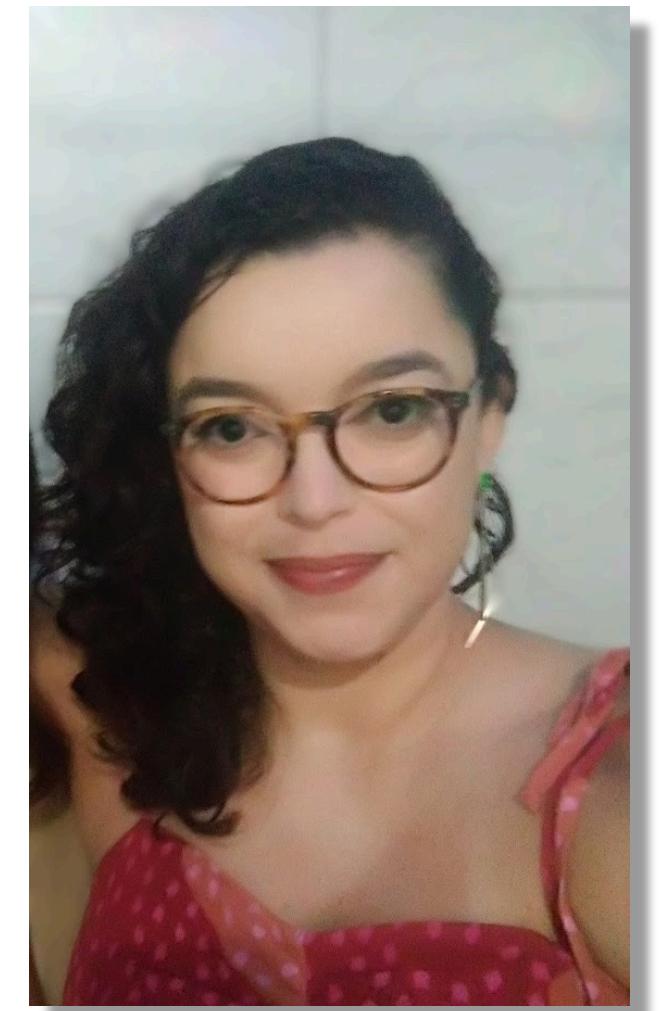
Luke Kresslein,
Systematic Entomology Lab
Washington DC, USA



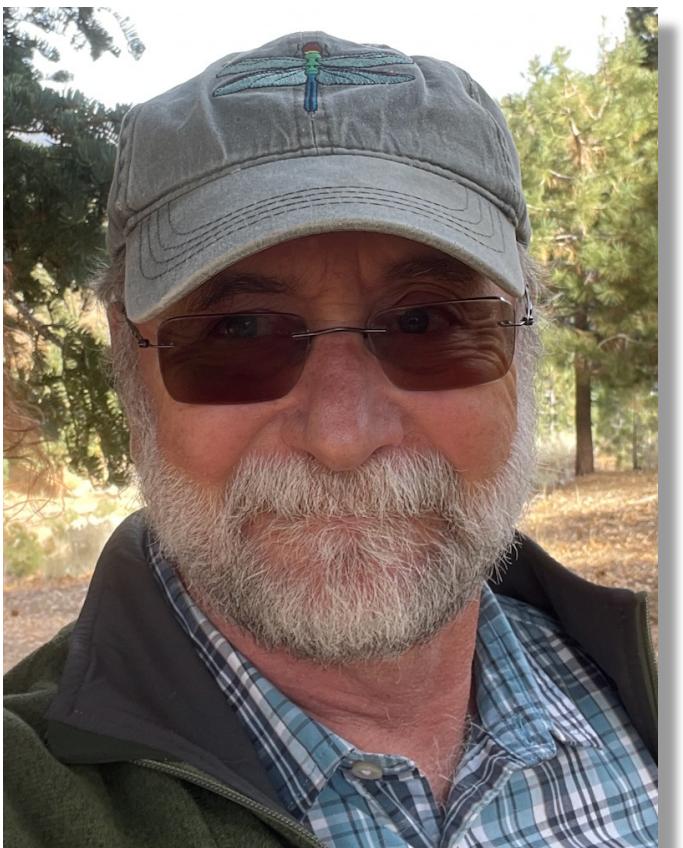
Mircea Dan Mitroiu,
Alexandru Ioan Cuza Univ.
Iasi, Romania



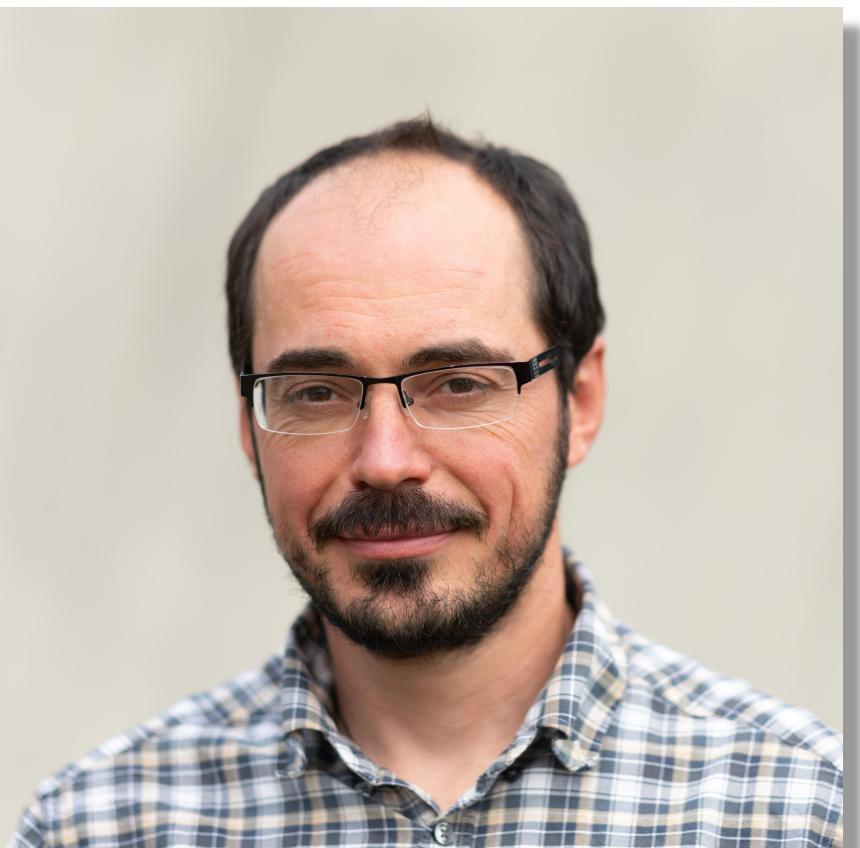
Natalie Dale-Skey
Natural History Museum
London, UK



Pamella Saguiah Machado
Fed. Univ. Espírito Santo
Vitoria, Brazil



John Heraty
University of California,
Riverside, CA, USA



Petr Janšta
Charles University
Prague, Czech Republic



Lucian Fusu,
Alexandru Ioan Cuza Univ.
Iasi, Romania



Chris Darling
Royal Ontario Museum
Toronto, Canada

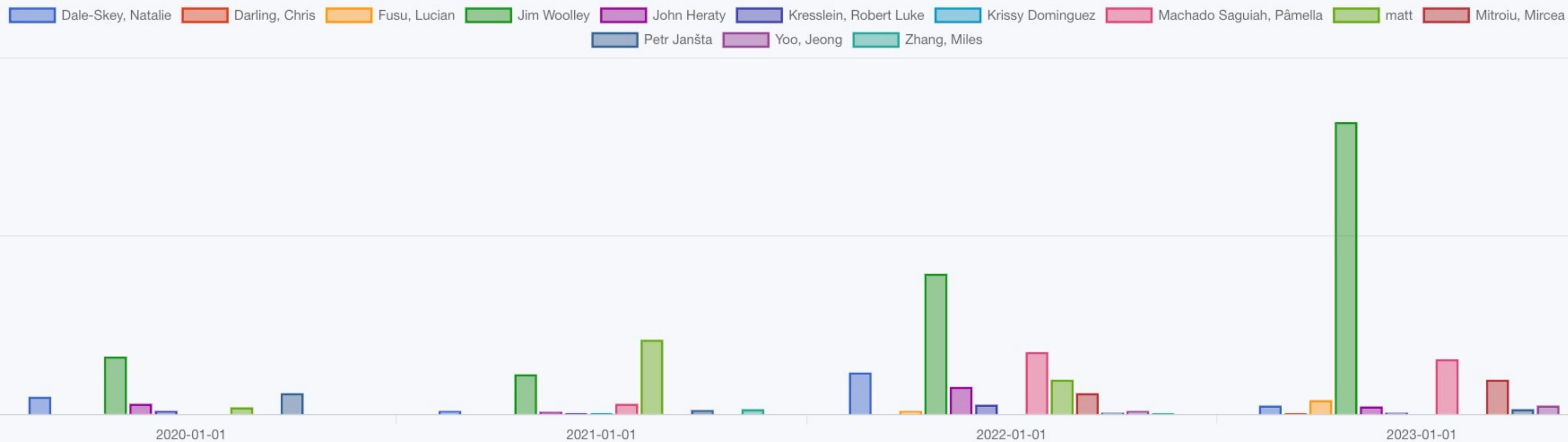
Book-Keeping via a Google Sheet

paper	family	id	doi	author	year	title	booktitle
PMS - done	Chalcididae	108707	10.15625/0866-71	Long, Khuat Dang and Hiep,	2019	A new species of the genus <i>	
JY - done	Chalcididae	113758	10.3897/zookeys.9	Gadallah, Neveen S. and Soliman,	2020	First record of the subfamily	
JBW - done	Encyrtidae	98876		Trjapitzin, V.A.	1998	A new species of encyrtids of the	Entomologicheskoe Obozrenie
JBW - done	Encyrtidae	?????		Trjapitzin & Shuvakhina	2019	Contribution to the Knowledge of	
PMS - done	Eucharitidae	66640		Girish Kumar, P.	2019	Additions to the knowledge of the	Munis Entomology & Zoology
JMH	Eucharitidae	107457		Kumar, P. Girish and Binoy, C.	2019	FIRST REPORT OF THE GENUS	
JMH	Eucharitidae	113728	10.1080/00222933	Heraty, John M. and Baker, Austin	2020	New species of <i>Orasema</i>	
JMH	Eucharitidae	113767	10.3897/jhr.79.560	Heraty, John M. and Mbanya, N.	2020	A new species of <i>Eucharissa</i>	
JMH	Eucharitidae	113952	10.11646/zootaxa.	Baker, Austin and Heraty, John M.	2020	The New World ant parasitoid	
RLK	Eulophidae	107671		Cassar, Thomas and Askew, Richard	2018	A new species of	
done	Eulophidae	121120	10.1134/s00138738	Kostjukov, V.V. and Kosheleva, O.V.	2018	A New Species of the	
PMS - done	Eulophidae	107202	10.1017/s0007485	Borowiec, N and LaSalle, John and	2019	<i>Ophelimus mediterraneus</i>	
PMS - done	Eulophidae	107531		Molina-Mercado, Gloria and	2019	<i>Ophelimus migdanoru</i>m	
PMS - done	Eulophidae	107945		Viggiani, G.	2020	The complex of parasitoids of	
JBW - done	Eulophidae	109727	10.3897/zookeys.9	Song, Hai-Tian and Fei, Ming-Hui	2020	A new species of <i>Oomyzus</i>	
JBW - done	Eulophidae	113666		Jamali, Mohd Majid	2020	New Record of <i>Ionympha</i>	
PMS - done	Eulophidae	113725	10.1080/00222933	Gates, Michael and Chao, Yi-Min	2020	Description of two new	
PMS - done	Eulophidae	113726	10.1080/00222933	Gumovsky, Alex and Bazhenova,	2020	First record of the genus	
JBW - done	Eulophidae	113727	10.1080/00222933	Hansson, Christer	2020	<i>Lasalleistichus</i> a new genus	
done	Eulophidae	113842		Hansson, Christer	2020	The neotropical genus	
RLK	Eulophidae	113844		Majeed, Mahjoora and Jamali,	2020	Taxonomic study of Indian species	
PMS	Eulophidae	114034	10.3897/bdj.8.e59	Hansson, Christer and Schmidt,	2020	A revision of European species of	
done	Eulophidae	114141	10.3897/jhr.80.594	Gates, Michael and Zhang, Miles Y.	2020	The great greenbriers gall mystery	

2020-2023: 1168 taxon names created by 13 curators

Taxon names created by member

Plots axes are number of records by created between 2020-01-01 and 2023-10-20. Click a name to toggle visibility.



Taxon names created summary

13 people created 1168 total records over the timespan.

Major reclassification of Chalcidoidea – phylogenomics

WILEY

Cladistics (2023) 1–30

Cladistics

doi: 10.1111/cla.12561

The Chalcidoidea bush of life: evolutionary history of a massive radiation of minute wasps

Astrid Cruaud^{a,†} , Jean-Yves Rasplus*^{a,†} , Junxia Zhang^{b,c,†} , Roger Burks^c , Gérard Delvare^a , Lucian Fusu^d , Alex Gumovsky^e , John T. Huber^f, Petr Janšta^{g,h} , Mircea-Dan Mitroiu^d , John S. Noyesⁱ, Simon van Noort^{j,k} , Austin Baker^c , Julie Böhmová^g, Hannes Baur^{l,m} , Bonnie B. Blaimerⁿ , Seán G. Brady^o , Kristýna Bubeníková^g, Marguerite Chartois^a , Robert S. Copeland^{o,p}, Natalie Dale-Skey Papilloudⁱ , Ana Dal Molin^q , Chrysalyne Dominguez^c , Marco Gebiola^c , Emilio Guerrieri^{i,r} , Robert L. Kresslein^c , Lars Krogmann^{h,s} , Emily Lemmon^t, Elizabeth A. Murray^u , Sabine Nidelet^a, José Luis Nieves-Aldrey^v , Ryan K. Perry^w , Ralph S. Peters^x , Andrew Polaszekⁱ , Laure Sauné^a, Javier Torréns^y , Serguei Triapitsyn^c , Ekaterina V. Tselikh^z , Matthew Yoder^z , Alan R. Lemmon^z, James B. Woolley^{z,†}  and John M. Heraty*^{c,†} 

Revised taxonomy - completed in UCD@TW

JHR 94: 13–88 (2022)
doi: 10.3897/jhr.94.94263
<https://jhr.pensoft.net>

RESEARCH ARTICLE



From hell's heart I stab at thee! A determined approach towards a monophyletic Pteromalidae and reclassification of Chalcidoidea (Hymenoptera)

Roger Burks¹, Mircea-Dan Mitroiu², Lucian Fusu², John M. Heraty¹, Petr Janšta^{3,4}, Steve Heydon⁵, Natalie Dale-Skey Papilloud⁶, Ralph S. Peters⁷, Ekaterina V. Tselikh⁸, James B. Woolley⁹, Simon van Noort^{10,11}, Hannes Baur^{12,13}, Astrid Cruaud¹⁴, Christopher Darling^{15,16}, Michael Haas⁴, Paul Hanson¹⁷, Lars Krogmann^{4,18}, Jean-Yves Rasplus¹⁴

“Ghost names”

- Orphaned names without author, year or identifier
- Usually duplicates of names in database
- Several sources
 - Host information assigned to names as strings in UCD/London
 - Misspelled names in original UCD
 - Misspelled names in original publication
 - Nomina nuda
 - Others
- Ghost-busting mostly completed, the refractory cases remain



(Ghostbusters logo)



UCD @ TaxonWorks – What's next?



- Images of primary types
- Curation of papers on natural history, biology, faunistics, economic entomology and biological control, etc.
- Roger Burks has produced an excellent public interface to UCD, will be demonstrated by John Heraty on Thursday morning

Thanks!

