

Dark wasps, dark taxa: uncovering the Diversity of Australian *Sierola*

Karl Magnacca, Div. of Forestry & Wildlife, Hawaii, USA



Sierola sp.

photo by Keith Martin-Smith CC-BY 4.0

Sierola distribution 2024

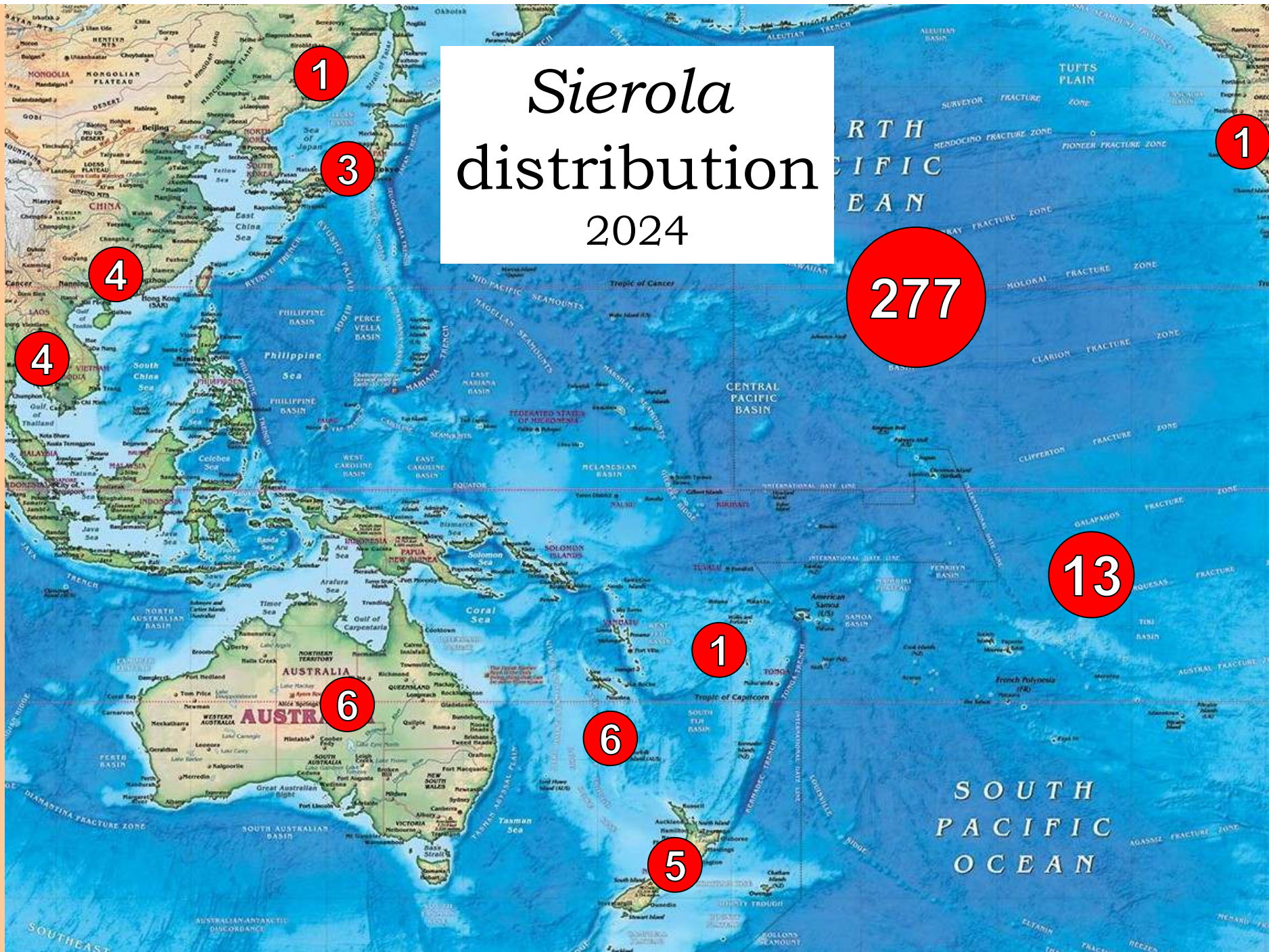


Table 1. Number of specimens (by genus) examined during this study. Number of species in the world and Australia before the present study.

Subfamily	Genus	World species	Australian species	Number of specimens examined
Bethylinae	<i>Eupsenella</i>	4	3	95
	<i>Goniozus</i>	160	7	1,114
	<i>Odontepyris</i>	27	4	1
	<i>Sierola</i>	194	3	1,213
Epyrinae	<i>Allobethylus</i>	7	1	7
	<i>Cephalonomia</i>	35	2	59
	<i>Chilepyris</i>	2	0	2
	<i>Epyris</i>	221	3	448
	<i>Glenosema</i>	14	1	8
	<i>Holepyris</i>	107	2	814
	<i>Lepidosternopsis</i>	7	2	49
	<i>Plastanoxus</i>	8	1	40
	<i>Prorops</i>	3	0	2
	<i>Rhabdepyris</i>	125	18	1,984
	<i>Sclerodermus</i>	73	1	125
Pristocerinae	<i>Apenesia</i>	166	2	1,000
	<i>Dissomphalus</i>	223	0	128
	<i>Parascleroderma</i>	27	0	16
	<i>Pseudisobrachium</i>	155	0	10

Azevedo, 2006
Check List
 2(1)42–44

ANIC



Queensland Museum



Melbourne Museum



South Australia Museum



clypeus form

flat



sharp



weak/angulate



partial revision: no
clypeal carina

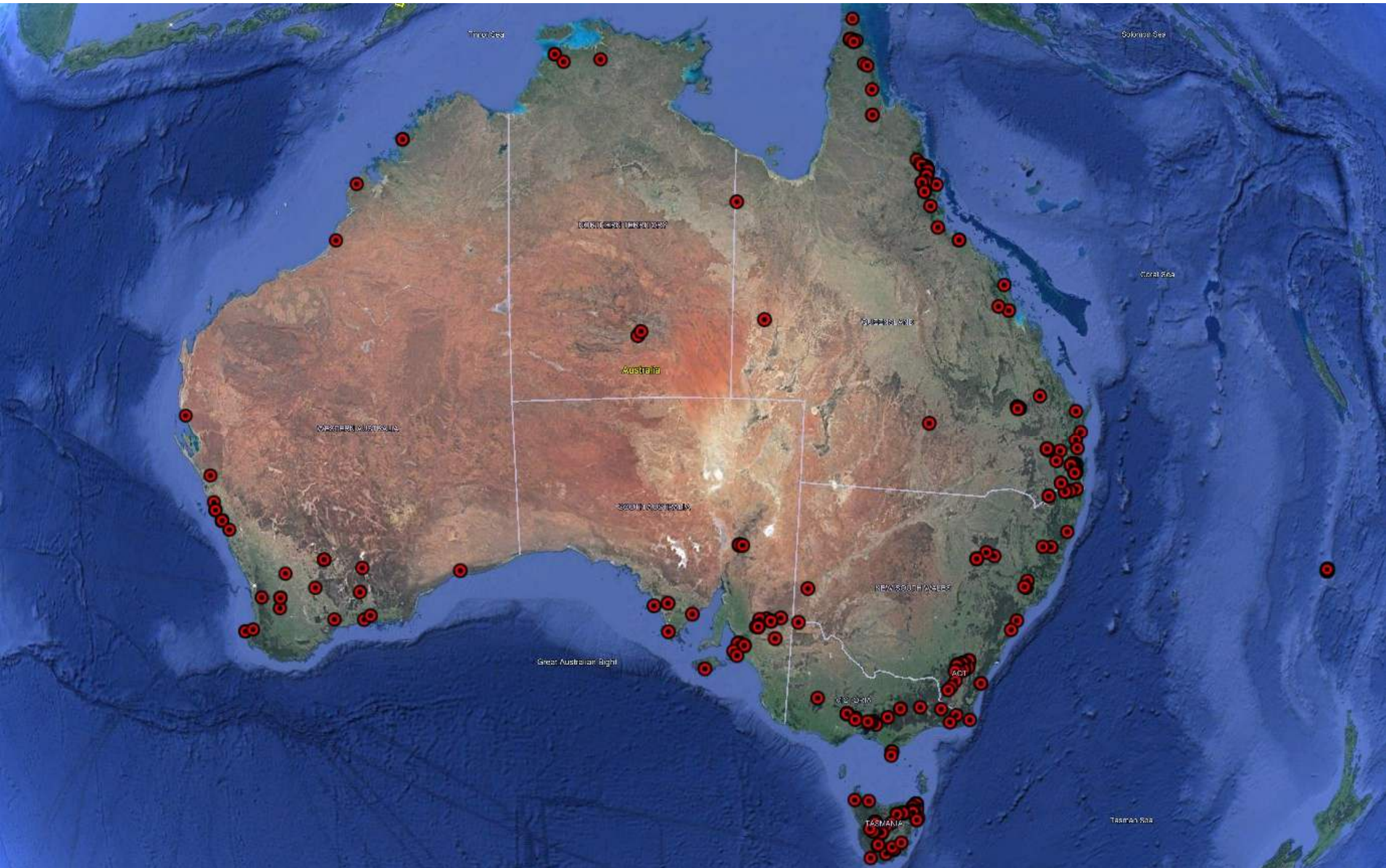


383 specimens

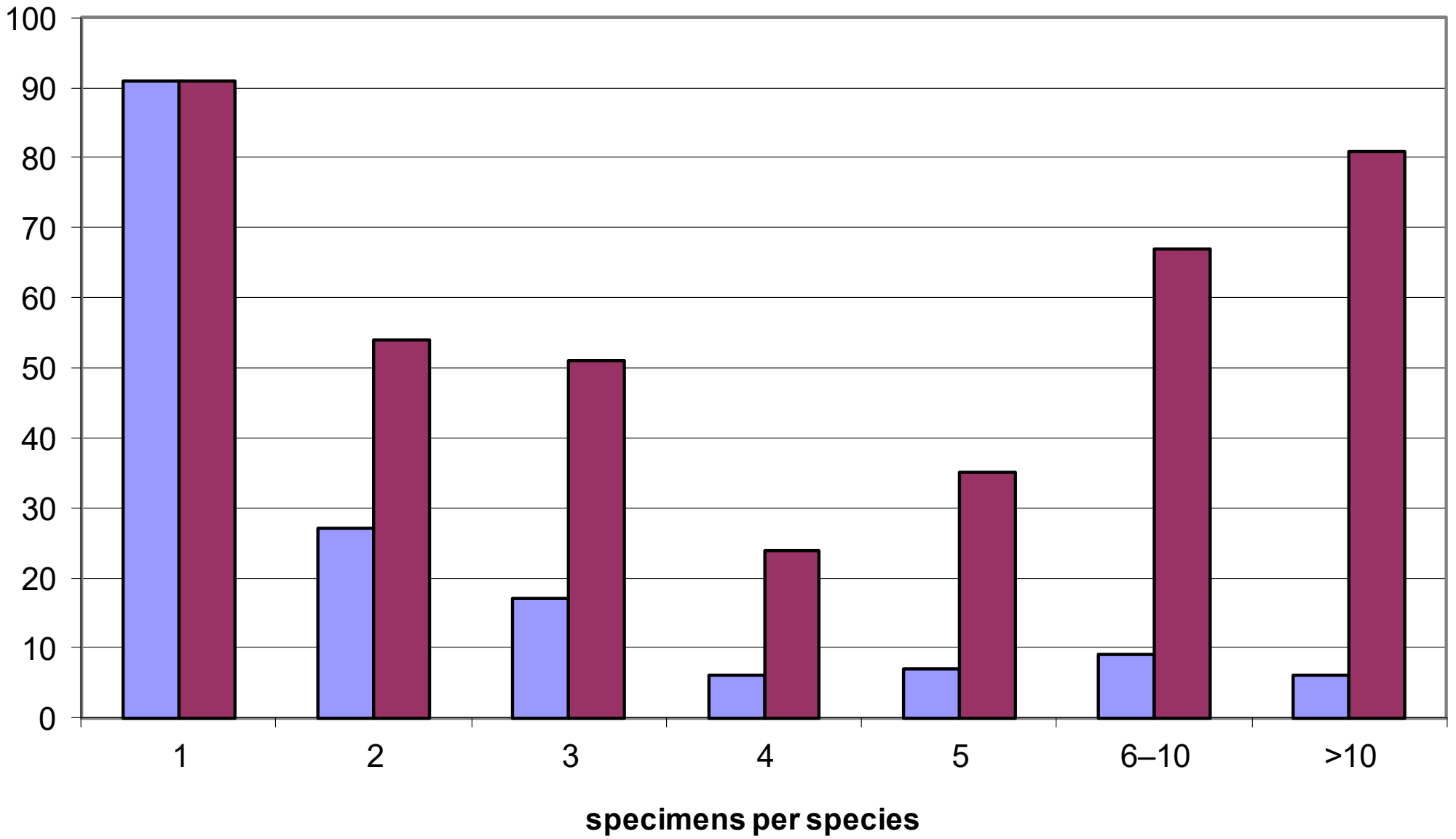


158 new species!

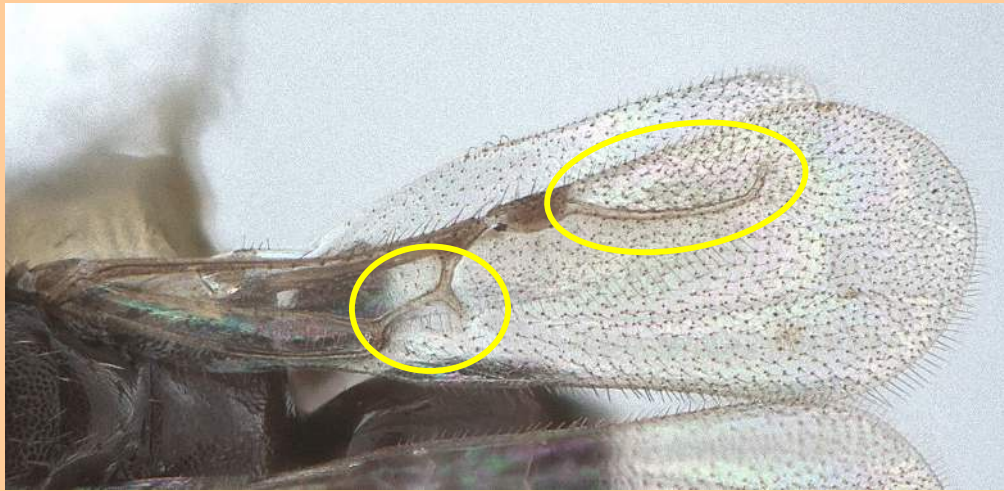




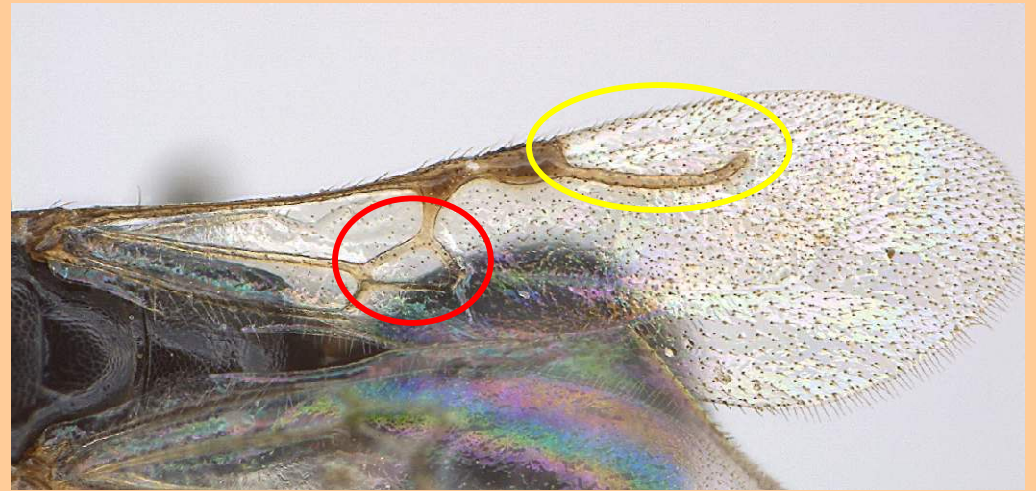
no. species total no. specimens



Goniozus s.s.



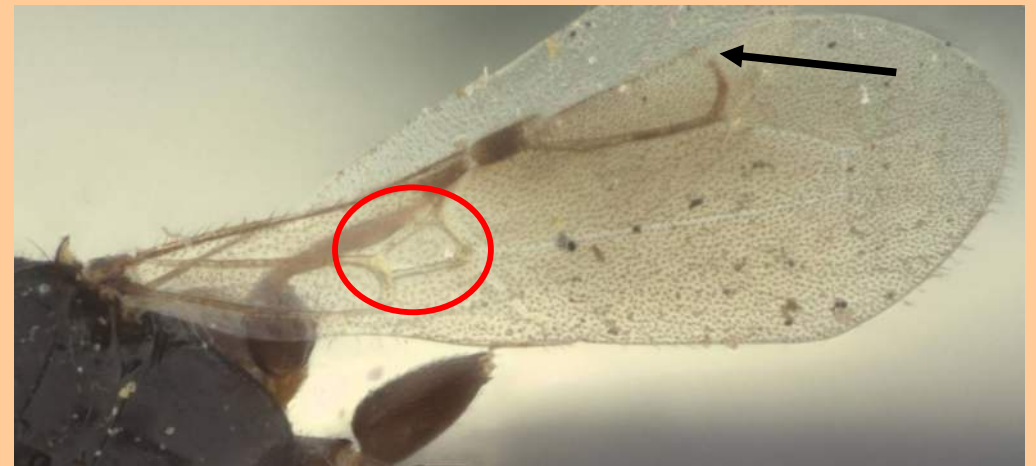
Goniozus (Parasierola)



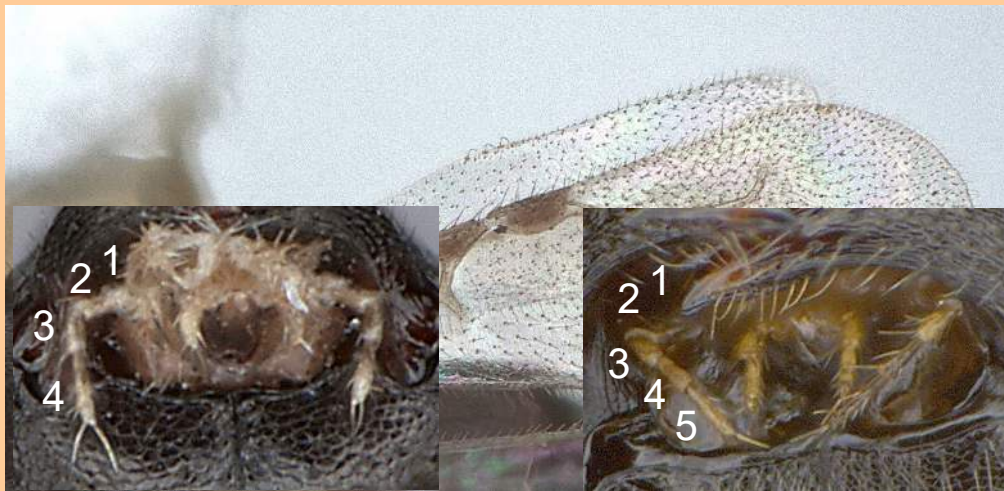
Sierola



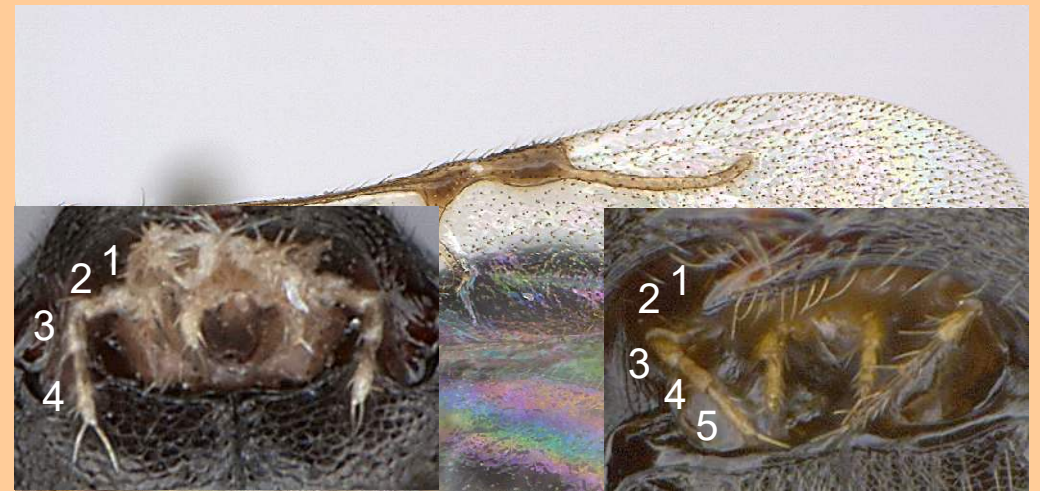
“Goniozus” angulatus



Goniozus s.s.



Goniozus (Parasierola)



Sierola

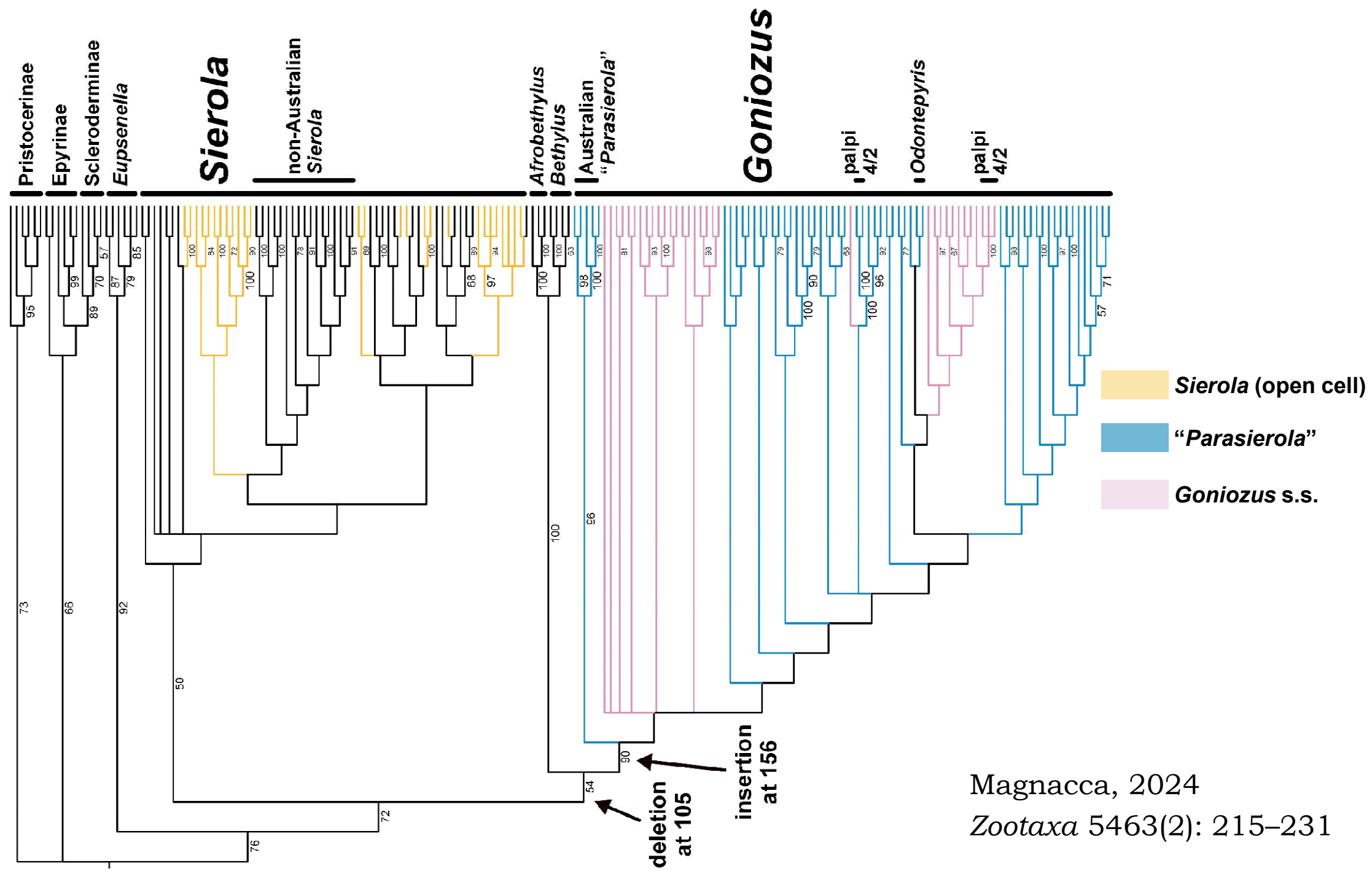


“*Goniozus*” *angulatus*



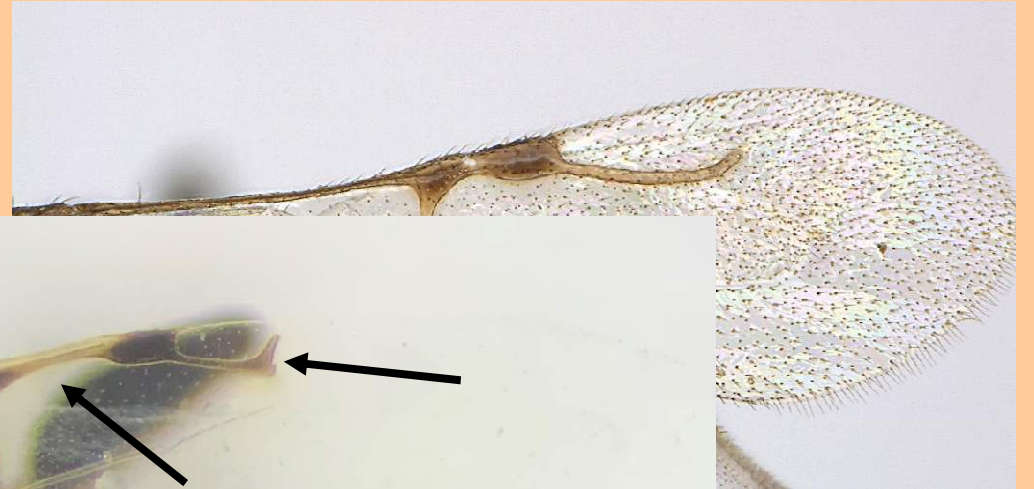
COI “barcode” sequence

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<i>Eupsenella</i> Aus AUSBC271-12	A	T	T	A	A	T	A	A	G	G	G	A	G	T	T	G	G	T	A	C	A	A	T	A	A	A	T	A	T	A	-	-	-	T	A	T	C	C	C	A	A	T	
<i>Eupsenella</i> Aus GMATW1446-16	A	T	T	A	A	T	A	A	A	G	G	G	G	T	T	G	G	A	A	C	A	A	T	A	A	A	T	A	T	A	-	-	-	T	A	T	C	C	A	A	A	A	
<i>Eupsenella</i> Aus GMCWU052-16	A	T	T	A	A	T	A	A	A	G	G	A	G	T	T	G	G	T	A	C	T	A	T	A	A	A	T	A	T	A	-	-	-	T	A	C	C	C	A	A	A	T	
<i>Eupsenella insulana</i> NZ NZHYM587-10	A	T	T	A	A	T	A	A	A	G	G	A	G	T	T	G	G	T	A	C	A	A	T	A	A	A	T	A	T	A	-	-	-	T	A	T	C	C	A	A	A	T	
<i>Sierola brunnea</i> Haw HIHYM003-24	A	T	T	G	G	T	T	C	A	G	G	A	A	C	C	G	G	G	A	C	A	T	T	A	A	A	T	A	T	G	-	-	-	T	A	C	C	C	T	A	A	A	
<i>Sierola berryae</i> NZ NZHYM936-11	G	T	T	G	G	G	T	C	A	G	G	A	A	C	A	G	G	G	A	C	A	T	T	A	A	A	T	A	T	A	-	-	-	T	A	T	C	C	A	A	A	T	
<i>Sierola lucyae</i> NZ NZHYM591-10	G	T	T	G	G	A	T	C	A	G	G	T	A	C	A	G	G	A	A	C	T	T	T	A	A	A	T	A	T	A	-	-	-	T	A	T	C	C	T	A	A	A	
<i>Sierola houdiniae</i> NZ NZHYM592-10	G	T	A	G	G	G	A	C	A	G	G	A	A	C	A	G	G	A	A	C	A	T	T	A	A	A	T	A	T	A	-	-	-	T	A	T	C	C	T	A	A	A	
<i>Sierola larifuga</i> USA CSSDN062-14	G	T	A	A	G	T	T	C	A	G	G	A	A	C	A	G	G	A	A	C	A	T	T	A	A	A	T	A	T	A	-	-	-	T	A	T	C	C	T	A	A	A	
<i>Sierola</i> (open cell) Aus AUSMA313-14	G	T	G	G	G	A	G	C	A	G	G	A	A	C	A	G	G	A	A	C	G	T	T	A	A	A	T	A	T	A	-	-	-	T	A	T	C	C	A	A	C	T	
<i>Sierola</i> (open cell) <i>G. jamiei</i> NZ NZHYM576-10	G	T	A	G	G	T	G	C	G	G	G	G	A	C	G	G	G	A	A	C	A	T	T	A	A	A	T	A	T	A	-	-	-	T	A	C	C	C	T	A	C	T	
<i>Bethylus</i> Can CNSIB472-15	G	G	A	G	A	A	G	G	A	-	-	-	A	C	A	G	G	A	A	C	A	T	T	A	A	A	T	A	T	A	-	-	-	T	A	T	C	C	T	A	C	T	
<i>Bethylus boops</i> Can SMTPR9190-16	G	G	T	G	A	A	G	G	A	-	-	-	T	C	A	G	G	A	A	C	A	A	T	A	A	A	T	A	T	A	-	-	-	T	T	T	C	C	T	A	T	A	
<i>Bethylus Egy</i> GMESO594-14	G	G	G	G	A	A	G	G	A	-	-	-	A	C	A	G	G	G	A	C	T	T	T	A	A	A	T	A	T	A	-	-	-	A	C	T	A	T	C	T	C	T	
<i>Afrobethylus</i> Mad GMMDC1619-15	G	G	T	G	A	A	G	G	A	-	-	-	A	C	A	G	G	A	A	C	A	A	T	T	A	A	T	A	T	A	-	-	-	T	T	T	C	C	T	A	T	A	
<i>Afrobethylus</i> Mad GMMDF1075-15	G	G	T	G	A	A	G	G	A	-	-	-	A	C	A	G	G	A	A	C	A	A	T	T	A	A	T	A	T	A	-	-	-	T	T	C	C	C	T	A	T	A	
<i>Afrobethylus</i> Mad GMMDJ1124-15	G	G	T	G	A	A	G	G	A	-	-	-	A	C	A	G	G	A	A	C	C	A	T	T	A	A	T	A	T	A	-	-	-	T	T	T	C	C	T	A	T	A	
“ <i>Parasierola</i> ” <i>G. nephantidis</i> Ind GBAH9858-15	A	C	A	G	G	A	G	C	A	-	-	-	G	C	A	G	G	A	A	C	A	T	T	A	A	A	T	A	T	A	T	T	T	T	A	T	C	C	A	A	A	T	
“ <i>Parasierola</i> ” Aus GMQQG054-18	A	T	T	G	G	T	G	C	A	-	-	-	G	C	T	G	G	A	A	C	A	T	T	A	A	A	T	A	T	A	T	T	T	T	A	T	C	C	T	A	A	T	
“ <i>Parasierola</i> ” Can CNGRF299-12	T	T	A	G	G	T	G	C	T	-	-	-	T	C	T	G	G	A	A	C	T	T	T	A	A	A	T	A	T	A	T	A	T	T	A	C	C	C	A	A	C	T	
“ <i>Parasierola</i> ” CR GMCAB1290-15	A	C	T	G	G	G	G	C	A	-	-	-	G	C	T	G	G	A	A	C	A	T	T	A	A	A	T	A	T	A	T	T	T	T	A	T	C	C	T	A	A	A	
<i>Goniozus</i> s.s. <i>G. foveolatus</i> USA HIHYM004-24	G	C	C	G	G	A	G	C	A	-	-	-	G	C	T	G	G	A	A	C	C	T	T	A	A	A	T	A	T	A	T	T	T	T	A	C	C	C	T	A	A	C	
<i>Goniozus</i> s.s. USA GMRMH104-14	G	C	T	G	G	G	G	C	A	-	-	-	G	C	T	G	G	A	A	C	T	T	T	A	A	A	T	A	T	A	T	T	T	T	A	C	C	C	A	A	A	C	
<i>Goniozus</i> s.s. <i>G. jacintae</i> NZ NZHYM577-10	A	C	A	G	G	T	G	C	T	-	-	-	G	C	A	G	G	A	A	C	A	T	T	A	A	A	T	A	T	A	T	A	T	T	T	A	T	C	C	T	A	A	T
<i>Goniozus</i> s.s. Ban GMBCA4574-15	A	C	A	G	G	A	G	C	A	-	-	-	G	C	A	G	G	A	A	C	A	T	T	A	A	A	T	A	T	A	T	T	T	T	A	T	C	C	A	A	A	T	
<i>Goniozus</i> s.s. Aus GCQT2560-18	A	C	T	G	G	A	G	C	A	-	-	-	G	C	T	G	G	T	A	C	A	T	T	A	A	A	T	A	T	A	T	T	T	T	A	T	C	C	T	A	A	T	
<i>Odontepyris</i> Ban GMBCA4595-15	T	T	A	G	G	A	G	C	A	-	-	-	G	C	A	G	G	A	A	C	A	T	T	A	A	A	T	A	T	A	T	T	T	T	A	T	C	C	T	A	A	T	
<i>Odontepyris</i> SAf GMSAB1266-13	G	T	A	G	G	A	G	C	T	-	-	-	G	C	C	G	G	A	A	C	A	T	T	A	A	A	T	A	T	G	T	A	T	T	A	T	C	C	T	A	A	C	

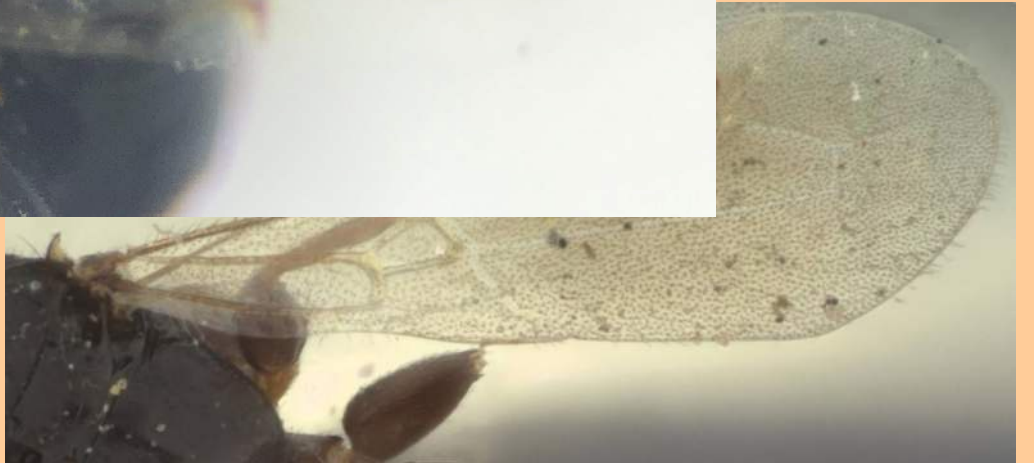


Goniozus s.s.

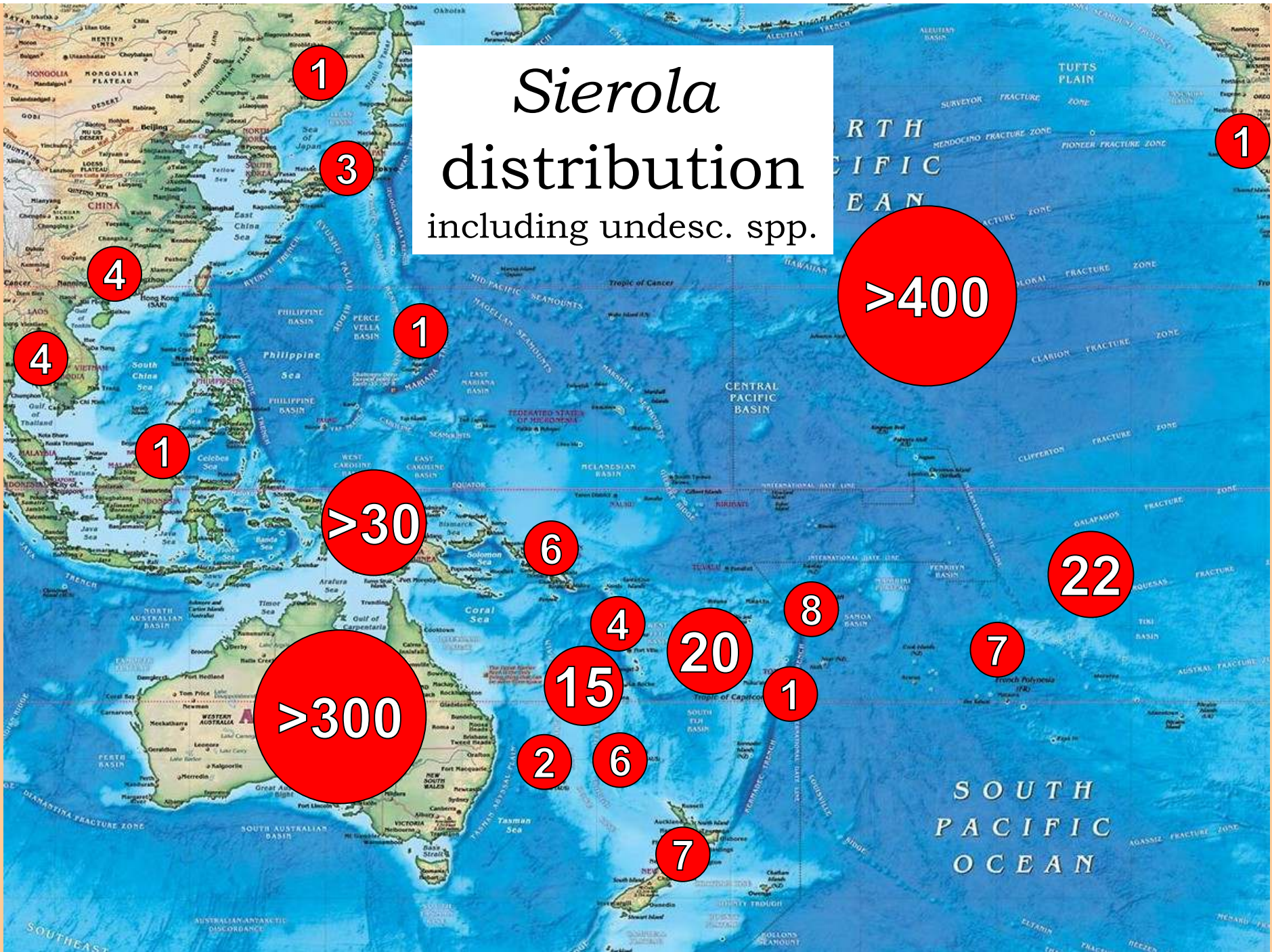
Goniozus (*Parasierola*)



ulatus



Sierola
distribution
including undesc. spp.



contact: Karl Magnacca
knm956@gmail.com
magnacca@hawaii.edu
<https://hawaiianinsects.com>



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