	from Bo	hart 1984 (n includes	umber examinec	body colour pat	tern (#1)					body sculpturing		w	vings		other feat	ures of note	Bohart (1984) comm	nents
Austrogorytes	size (mm)		collecte	d notes Bohart and/or original description of holotype	ΤΙ ΤΙΙ ΤΙΙΙ ΤΙV ΤV	clyper	us	least interocular distance	scutellum	metanotum	propodeal enclosure	forewing colour	hindwing venation (see Figs 1,2)	antennae	hind tarsi		similar to:	significant difference
aurantiacus	LARGE : 18-20	1	1 WA	extensively orange (including all/part propodeum); TI-II narrowly black posteriorly; TIII broadly black basally	??	orange	-	upper frons unusually narrow	small sparse punctures on reticulate background		completely ridged	reddish, a little darker apically	MCU stem short			ocellocular distance c. 1.1 MOD; <i>male: 2 midtibial spurs</i>	<i>ciliatus</i> (extensively orange; large; short hindwing MCU stem)	ridged propodeal enclosure ma fer
bellicosus	10-14	4	29 NSW, AC Vic	CT, yellow bands on TI & TIII only (other terga dark): tibiae mostly red; female: apical third or more of pygidium deep red		yellow		greater than scape more than 1/2 as broad as clypeus	more than 1/2 ridged	roughly punctate & longitudinally ridged	more ridged than areolate	forewing brownish along anterior third		flagellum all dark; male: FXI strongly curved		unusually long hair over much of body	houstoni	po ste div mi
browni	14-15	9	3 WA	all black abdomen after 1st segment		yellow with black rim					smooth but with median groove	forewing brownish in anterior third	MCU stem short			unusual male foretarsus (see Fig 18 Bohart 1984)		IV
cardaleae	SMALL:	2	0 NT	tibiae yellow; posterior yellow bands on TI 8 TII, expanded in lateral third of TII ; yellow lateral spot (in some) and weak posterior		black		greater than scape more than 1/2 as broad	ridged	roughly punctate & longitudinally	irregularly ridged &	forewing nearly clear		male: FXI strongly curved	banded	scutum with light & separated punctation		E
				margin on TIII; large yellow spots on TIV-V legs partly reddish clypeus yello w (except free rim); yellow inne		_	-	as clypeus		ridged	without median groove			male: FI-III equally long			<i>cardaleae</i> (ridged scutellum & metanotum):	
carinatus	9-10	1	1 WA	orbital spot: foretibia partly yellow; mid and hindtibiae basally yellow; orange apical bands on TI-II, broken medially on TII		yellow with black rim			ridged-punctate	roughly punctate & longitudinally ridged	areolate, with median groove	wings stained, more heavily in anterior third		male: FXI curved	banded	fore and midtarsal V unusually flattened and as long as 11-IV together	evansi, rieki, tarsatus (coarse & rather close scutal punctures; strongly banded hindtarsi)	
chrysozonus	13	0	2 QLD	orange & black in appearance; TI & TIII-V broadly orange posteriorly; TII black; yellow clyypeus	v	yellow					completely ridged	forewing brown along anterior third				From Turner: Orange = pronotal collar, tegulis, large transverse spot on metanotum, TI apical half,	<i>ciliatus</i> (size; orange colour)	long MCU stem of hindwing; ridged propodeal
			NSW,	female: pygidial plate orange orange & black in appearance; TI and TIV-VI							mostly smooth	forewing dark in anterior	MCU stem short			TII & TIV broad bands, TVI, femora apices, tibiae, tarsi; long MCU stem of hindwing anterior and lateral ocelli very close together; <i>males with golden fimbrarium SIV-SVI</i>		enclosure
ciliatus	11-15	0	6 QLD, W	mesopleural spot orange-yellow		orange?	ŕ	less than	punctate only or less	roughly punctate &	but with median groove	third	MCO Stem Short		not distinctly	male: distinctive foretibia (black spine) and flattened foretarsus (Fig 15)		
cygnorum	7-8.5	4	1 WA, N	bands (TIII dark in female) yellow clypeus (except free rim); lower orbita spot yellow; scutellar spot orange (not		yellow		scape&pedicel together	than 1/2 ridged	longitudinally ridged		evenly stained			banded	sparsely punctate scutum	<i>rieki</i> (hindtarsi banded; scutum coarsely punctate;	
evansi	9-9.5	5	5 WA, SA Vic	alwaya), example prepetal ridge, bread		yellow with black rim			ridged on periphery, rather smooth & irregularly punctate medially	roughly punctate & longitudinally ridged		wings clear except brownish in cells bordering stigma		FXI curved	banded	metanotum ridged	metanotum ridged).	incompletely ridged scutellum
				<i>male TII</i> pale yellow: clypeus, lower frons, tarsi (mostly), apical bands on TI-V (that on TII				narrow frons: not		roughly punctate &					hindtarsus		hindtarsi)	
exleyae	8	0	2 QLD, NS	W much expanded laterally, that on III weak); TIV-V extensively yellow ; TI tinged orange- red; femora and trochanters mostly orange- red		pale yellow		greater than scape about 1/2 as broad as clypeus	ridged	longitudinally ridged	without median groove	faintly stained		FI yellow	weakly banded but IV & V dark;	scutum polished and with moderate, separated punctures		
fimbriatus	9.5	5	0 NSW, W	 orange apical bands TI-TVII; pronotal ridge orange, divided medially; hind tarsi mostly dark, a bit variegated but not distinctly banded; scape & pedicel mostly orange; 		black or partl orange		greater than scape	ridged-punctate	roughly punctate & longitudinally ridged	irregularly ridged	forewing brownish along anterior third		FI 3x long as broad; FXI curved	mostly dark rather than banded	male: SIII and following with long fimbriarum; scutum coarsely punctate		
				pronotal lobe Male (Turner 1908) yellow= the extreme apex of the scape of the antennae, the pronotum, a	a										(variegated)	TI longer than broad, at apex it is 1/2 (or		
frenchii	9-12	6	4 Vic, NS ACT	V, rather narrow band at the apex TI, II, TIV, TV, & TVI, very narrowly interrupted on the first and fourth, yellow; TIII black tibiae mostly red		black		less than scapal length	punctate only or less than 1/2 ridged	roughly punctate & longitudinally ridged		wings evenly stained;		male: FXI NOT curved (or only weakly so)		less) width of apex of TII & slightly constricted; mesopleuron mostly polished and with practically no ridging male: 2 midtibial spurs	musgravei	
grahami	8.5-9	2	3 ACT	pale yellow clypeus & subantennal triangle; separated transverse yellow spots on TI (variable); narrow yellow band on TII		pale yellow		slightly more than	not distinctly ridged but finely & closely	roughly punctate &	more areolate	orange wing base; wings		simple	not distinctly		<i>musgravei</i> (upper frons, scutum & scutellum finely &	
granam	0.0-9	3	3 A01	somewhat expanded laterally; mid and hind femora distally orange; TIV-V mostly dark (slightly red posteriorly, but not banded)				scapal length	punctate	longitudinally ridged	than ridged	lightly stained		simple	banded		closely punctate: ridged metanotum & mesopleuron)	
houstoni	7-8.5	3	2 WA	scape mostly orange; TI-III extensively orange-red; TIV dark or with a weak band ; TV dark; legs mostly orange (but hindtarsi II- black)		orange		greater than scape more than 1/2 as broad as clypeus	finely ridged-punctate	roughly punctate & longitudinally ridged	coarsely areolate	orange wing base		male: FXI not curved, stout	l orange, II-V black	unusually broad abdominal segment II; scutum moderately punctate		
humphreysi	9.5	0	(with one ackin WA g a	basal clypeal spot is orange-yellow , as is associated orbital spot, scutum laterally , metanotum, scutellum etc; TI-III mostly orange-yellow, but basally		orange-yellov basal spot	w	greater than scape	ridged-punctate	roughly punctate & longitudinally ridged	closely ridged & with median sulcus	dark on anterior third			not distinctly banded	TI broader than long		
interruptus	9	0	1 NSW	black; TIV-V orange-yellow, SII mostly pale yellow: scape & pedicel beneath, transverse yellow bands on TI-IV broken medially and enlarged laterally; mid & hind		pale yellow		about equal to scape	finely & closely ridged, scattered small punctures	roughly punctate & longitudinally ridged	irregularly ridged & distinct median groove	lightly stained		scape & pedicel black above (in female holotype)		mesopleuron partly smooth/shiny (with weak, posterior ridging)		
meesi	8.5	1	0 WA	tibia basally yellow orange-yellow mesopleural spot; orange- yellow scutellum, metanotum, inner orbita		orange to		a little more than scape, but less than	punctate only (no	roughly punctate & longitudinally	ridged-punctate, divided medially	moderately stained on		antennae mostly orange- yellow (but darkened beneath on FV-VIII); males:	strongly	median groove of frons quite deep; scutum		narrower LID, non-
				line & most legs; gaster extensively orange to yellow on TI-V and SI-III; yellow: clypeus, frons along lower inner orbit		orange-yellov		scape&pedicel together	ridges)	ridged	by triangular sulcus strongly ridged,	distal half		flattened beyond FIII, broadened FV-IX, FXI curved	banded	shiny	denticulate beneath) grahami (upper frons, scutum	ridged scutellum mesopleuron more
musgravei	9	0	1 NSW	& below antennae; pronotal lobe black; narrow yellow bands on TI, II, IV & V (interrupted medially on TI) yellow-white: tibia basally, pedicel and FI belo		yellow		about equal to scape	but finely & closely punctate ridged on periphery,	longitudinally strongly ridged	median groove not distincct	lightly stained			indistinctly banded		& scutellum finely ridged & closely punctate), <i>frenchii</i>	punctate than ridged
naumanni	8	0	2 NSW (west)	inner orbital spot; etc; wide, yellow-white posterior bands on TI-V; scutellum medially whitish yellow; TVI red at apex		black		greater than scape&pedicel together	rather smooth & irregularly punctate medially	roughly punctate & longitudinally ridged	slightly oblique ridges & broad median groove	lightly & evenly stained, veins reddish-brown		FI short (1.5 times long as broad); FII and following are red beneath		TI slightly broader than long		
norrisi	8	1	0 WA	yellow mandible, clypeus, lower frons; transverse lateral yellow spot on TI		pale yellow		about equal to scape	coarsely punctate	roughly punctate & longitudinally ridged	areolate	lightly stained		orange pedicel and flagellum, beneath; FI short (1.5 times long as broad); FXI simple	not distinctly banded, IV-V mostly dark			
occidentalis	8.5	1	0 WA	broad orange bands on TI-II, TIV-V; broad orange band on SII; large, orange scutellar spot (TIII black); broad band SII		black		greater than scape	completely & finely ridged	roughly punctate & longitudinally ridged		nearly clear except brown in forewing marginal cell area		FI long (3x long as broad); male: FXI curved	hindtarsi not banded	metanotum, scutellum & mesopleuron ridged		
perkinsi	LARGE 18 (female to 22mm)		3 QLD, NS	W Orange: TI-SI & TIV-SIV; TIII, TIV, TV(except basally black on TIV or TV); TII all black; tarsi. clypeus all yellow;	t ????	yellow		about equal to scape (little less than scape in male; greater than scape in female)	mostly smooth		nearly smooth but with median groove	dark subapical spot reddish with slightly smoky tips	MCU stem short	male: FI (2x long as broad); FXI stoutly curved & distally compressed female: FI 3x long as broad		mesopleuron mostly smooth male: spectacularly modified legs; clypeus apically emarginate;	<i>cilliatus</i> (smooth propodeal enclosure; hindwing MCU stem shorter than cu-a)	
permaculatus	8.5	0	1 WA	clypeus with large, median yellow spot; scutellum mostly yellow; TV-TVI orange- yellow; TI-IV orange-yellow except V-		large yellow median spot		greater than scape	coarsely punctate	roughly punctate & longitudinally ridged becoming	coarsely ridged, well-marked median sulcus	dark, stained brown		F1 long (2.5x long as broad)	banded	banded hind tarsi; LID greater than scapal length		
pretiosus	7.5	1	0 WA	shaped basal dark marks (appears spotted) TI red; TII yellow band medially divided; TIII-TV black; clypeus yellow		yellow		greater than scape more than 1/2 as	more than 1/2 ridged	areolate roughly punctate & longitudinally		evenly stained		male: FI-II subequal in length: FXI not strongly				E
				deep yellow, broad bands on TI-V; clypeus		yellow central		broad as clypeus		ridged	ridged-punctate,			curved flagellum orange toward apex; scape and pedicel			<i>evansi</i> (short FI, metonotum & mesopleuron ridged; banded hind tarsi: etc);	
rieki	8-9	14	4 NSW, N	T yellow centrally (male), but sometimes all black in female; deep yellow scutellar spot <i>female: metanotum often with an orange dot</i>		(may be all black in female)		greater than scape	completely ridged- punctate	longitudinally ridged	without median sulcus	stained, darker anteriorly on distal half		black above: male: Fl short, just 1.3x long as wide (but 1.6x in female)	banded		evansi tarsatus carinatus	scutellum completely ridged
rufidulus	9	0	1 WA	legs almost entirely orange: TI-III and SI-III almost entirely orange; IV-V and most VI black; pronotal lobe orange		mostly orang	e	less than scapal length	ridged-punctate	roughly punctate & longitudinally ridged	obliquely ridged, with definite median groove	lightly stained		FI 2.5x long as broad	banded (black with whitish bands)	legs almost entirely orange, but hind tarsi banded black & white		
spinicornis	11	1	0 WA	orange: clypeus, the scape & pedicel, transverse pronotum line, humeral calluses, tegulis, TI, TII (with large black spot on TII) legs		orange		greater than scape more than 1/2 as broad as clypeus	more than 1/2 ridged	roughly punctate & longitudinally ridged		evenly and lightly stained		'somewhat' banded flagellum male: FI longer than FII: FXI strongly curved		long, slender first abdominal segment, apex TI less than 1/2 width of TII; posterior ocelli nearly twice as far from each other as from the eyes		
				a variable species; clypeus often black (but may be partly or completely yellow); TI-V with bands (yellow t														
soni	7-8.5	18	WA, Via 11 QLD.	 orange-yellow; complete or broken); pronota lobe yellow Original description <i>A. obesus</i>: scape yellow underneath (black above); pronotal collar 	╺ <u>╺</u> ╶	often black (but may be		greater than scape more than 1/2 as	more than 1/2 ridged	roughly punctate & longitudinally	more ridged than			<i>male: FI-III equally long;</i> FXI sharply spiculate beneath at base; strongly	distinctly	scutum with coarse reticulation & scattered small punctures 1 tibial spur in male		
spryi	7-6.5	10	NSW, N		n;	partly of fully yellow)		broad as clypeus	more than 1/2 huged	ridged	areolate	in marginal cell		curved FI 2.3x long as broad	banded	TI as long as broad		
				differs from spryi in "colour of legs and abdomen" (Turner), so these not particularly useful characters														
tarsatus	7-9	10	2 SA, WA	orange bands (may be broken);		male: dark wit spot female: yellor			ridged	roughly punctate & longitudinally ridged	obliquely ridged	dark in distal half of anterior third		FI 1.5x long as broad; FXI curved	strongly banded hindtarsi	SII swollen and somewhat ridged basally	punctures; strongly banded	foretarsus in male is diagnostic
				sometimes and TIV rarely orange-banded; apex of scape & pedicel yellow in front yellow: subantennal area; scutum laterally scutellum; metanotum medial spot;	;									FI mostly yellow			hindtarsi)	
tindalei	9-9.5	1	2 NT	mesopleural spot; etc; narrow apical bands on TI-III, expanded laterally & incised medially; apical bands TIV-TVI ; Orange: SII mostly; bands SIII-VI		yellow		narrow slightly more than scapal length (about equal in female)	punctate only (no ridges) moderate well spaced punctures	roughly punctate & longitudinally ridged	ridged-punctate, without median sulcus			FI short (1.5x long as broad) flagellum slender, somewhat nodular beneath FV-X		scutum coarse, separated punctures mesopleuron polished scapal basin and below with golden hairs male: 2 midtibial spurs mesopleuron polished		
				female: TVI all red; Si-VI all red; TI-II some reddish										FXI simple (not curved)		mesopleuron polished	<i>perkinsi</i> (metanotum more	simple former
turneri	15	1	0 WA	orange: lower face, pronotum, scutellum; propodeum posteriorly; mesopleuron behind pronotal lobe; legs (mostly); wide posterior bands on TIII-IV		? black bu 'lower half o face orange'	f	about equal to scape	mostly smooth	coarse, rough punctures (ridges not obvious)	smooth but with median groove	lightly reddish, a little darker in submarginal and marginal cells	MCU stem short (just 1/2 length of cu-a)			mesopleuron mostly smooth	punctate than ridged; scutellum & mesopleuron mostly smooth; peculiar foretarsal I, hindwing MCU stem shorter than cu-a)	simple femora, much reduced pubescence, nearly simple femora
	1			#1. Some individuals show more or less colour pat documented for <i>A. spryi</i> (Bohart, 1984), but it may				1				1		1			stem shorter than cu-a)	

#1. Some individuals show more or less colour patterning than described for the species. This variability has been documented for A. spryi (Bohart, 1984), but it may also be true of other species. Many of the species descriptions are based on just a few specimens, sometimes just one.

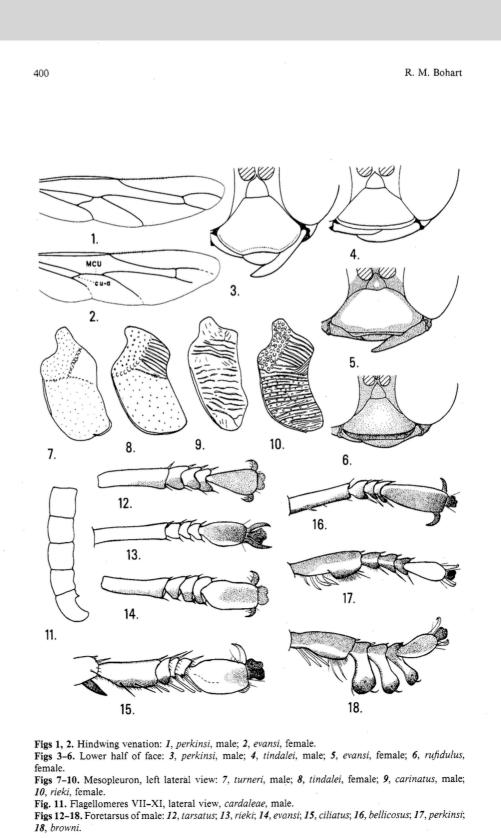
Based upon: Bohart, R.M. 1984. A revision of the genus Austrogorytes Bohart (Hymenoptera: Sphecidae). Australian Journal of Zoology, **32** (391-412); original descriptions of species, as necessary (including Turner, R.E. 1915. Notes on the Australian Crabronidae. Annals and Magazine of Natural History 8 **15 (**62-96); Turner, R.E. 1908. Notes on the Australian fossorial wasps of the family Sphegidae, with descriptions of new species. Proceedings of the Zoological Society of London **1908**: 457-535 Prepared by Kerri-Lee Harris (Feb 2023), for personal use. The table may include errors and omissions. Shared under CC BY-NC-SA agreement. See also <u>southernforestlife.net</u> version 2 (25/2/23)

Austrogorytes cheat sheet

Austrogorytes Bohart, 1967, p. 155. Type-species: Gorytes bellicosus Smith, 1862, by original designation. Diagnosis. Male flagellomeres with tyli beneath most articles; eyes converging below, mandible bidentate on inner margin, female foretarsal rake with 1 or 2 basitarsal setae, female with foreleg arolium enlarged, lateral margin of scutum with oblique carina opposite posterior edge of tegula, prescutellar sulcus foveate, omaulus present, acetabular carina and sternaulus sometimes developed, spiracular groove of propodeum present, hindwing media diverging beyond crossvein *cu-a*, hindwing jugal lobe smaller than outline of tegula, midtibia with 2 spurs or usually in males only 1, female with pygidial plate, male sterna IV-VI usually with a fimbriarum. Geographic range. Widespread in Australia; except Tasmania.

Genus Austrogorytes Bohart

Extracted from Bohart 1984 (page 392)



MARING LEN 21. (Trat 26. 23 25. 30 Figs 19-22. Metanotum and propodeal enclosure: 19, evansi, female; 20, rufidulus, female; 21, houstoni, female; 22, perkinsi, male.
Figs 23-28. Scutellar sculpture: 23, turneri, male; 24, interruptus, female; 25, rieki, male; 26, meesi, male; 27; exleyae, female; 28, evansi, female.
Figs 29-31. Foretarsomeres II-V, ventral view, female: 29, rufidulus; 30, evansi; 31, grahami.
Figs 32-35. Basal and apical antennal articles, lateral view, male: 32, meesi; 33, evansi; 34, perkinsi; 35, houstoni.

406

Extracted from Bohart 1984 (pages 400 & 406)

R. M. Bohart