



Table of Characters for the Capitellidae of SCAMIT Ed. 14 and Others Reported from California

(Arranged in Order of Increasing Thoracic Segments)

Revised based on B. Haggin 2023 Capitellidae review & presentation



Species	# Thoracic Segments	# Thoracic Chaetigers	1st Segment Achaetous	Thoracic Formula	Chaetigers w/ Genital Spines	1st Chaetiger complete / incomplete	Branchiae (*)	Prostomium	Peristomium	Thorax	Abdomen	Comments
<i>Amastigos acutus</i> Piltz, 1977 Type locality - Carpenteria, CA Intertidal/Sandy Beaches	8	8	-	$(8h) / (8h)$	-	Complete	not observed	acute; palpode small; eyes absent	2 eyespots present on anterolateral margin; achaetigerous	1st 2 chaetigers ~ 3X longer than rest; 4-6 hooks/fascicle	~123 segments; pygidium conical; 12-20 hooks/fascicle	Transition to abdomen marked by change from narrow to wide segments, increase in # of chaetae/fascicle, increase in length of hooded hook shafts; hooded hooks with 5 small teeth in 1 row above main fang
<i>Capitella capitata</i> (Fabricius, 1780) Type locality - Greenland Based on Blake (2009) for redescription and distribution restriction	9	9	-	$\sigma / \varnothing (7c+2g) / (7c+2e)$	8-9	Complete	absent	broad, bluntly rounded	eyes absent; achaetigerous	6-10 caps/fascicle	pygidium simple lobe, w/out anal cirri; 2-20 hooks/fascicle	Description listed is of <i>Capitella capitata</i> . Chaetiger 4 widest. MGS - Peristomium stained, 1-5 (sometimes 6) staining prominently, 7-9 staining darkly, abdomen w/ light speckling (LACSD collections do not stain); type species restricted to Arctic/Subarctic distribution
<i>Capitella capitata oculata</i> Hartman, 1961 Type locality - southern California	9	9	-	$\sigma (7c+2g) / (7c+2h)$ $\varnothing (7c+2h) / (7c+2h)$	8-9	Complete	absent	black eyespots present				Not on SCAMIT list but from California few genital spines, brassy-yellow. Originally found hosting a parasitic copepod
<i>Capitella capitata tripartita</i> Hartman, 1961 Type locality - southern California	9	9	-	$\sigma (3c+1c(m)+2m+1m(h)+2g) / (3c+2m+2m(h)+2h)$ $\varnothing (3c+1c(m)+2m+1m(h)+2h) / (3c+2m+2m(h)+2h)$	8-9	Complete	absent	eyespots sometimes present, small				Not on SCAMIT list but from California few genital spines, thick. Originally found hosting a parasitic copepod
<i>Capitella</i> sp LA3 Haggin, 2023 § Type locality - Palos Verdes, CA	9	9	-	$\sigma / \varnothing (4c+3h+2g) / (4c+5h)$	8-9 (1-2 pair)	complete	absent	eyes absent				MGS - lightly staining in 5-6; broad lateral stain patch in 7-8, postchaetal only in 7; 9 and abdomen with postchaetal stain band
<i>Capitella teleta</i> Blake et. al., 2009 Type locality - Woods Hole, MA Lab culture/intertidal-shallow-water	9	9	-	$\sigma (7c+2g) / (7c+2h)$ $\varnothing (7c+2h) / (7c+2h)$	8-9 (w/ 6-8 spines)	Complete	absent	broadly triangular, flattened dorsoventrally; red eyespots present laterally	large subdermal glands visible dorsally; achaetigerous	4-6 caps/fascicle	pygidium w/ 2 rounded lobes; 2-6 hooks/fascicle	ventral groove from chaetiger 5; MGS - Females retain stain on 6-9, w/ distinct speckled band on anterior of 9; males not retaining stain; range restricted to intertidal/shallow subtidal (<30m)
<i>Capitella ovincola</i> Hartman, 1947 Type locality - Monterey Bay, CA 60-80m	9	9	-	$\sigma (5c+2c(m)+2g) / (4c+3c(m)+2h)$ or $\varnothing (5c+2c(m)+2h) / (4c+3c(m)+2h)$	8 (w/ 8-10 spines) - 9 (w/ 6-8 spines)	Complete		depressed conical lobe; eyes absent	small, distinct ring		pygidium a small collar	Not on SCAMIT list but from California; found in clumps of squid eggs
<i>Mediomastus acutus</i> Hartman, 1969 Type locality - Ventura, CA 7-9m	10	10	-	$(4c+3h+3p) / (4c+6h)$	-	Complete	absent	long, pointed, acute; pair of black eyes posterolateral	achaetous	notochaetae paddle-like in 8-10; 5-6 caps/fascicle	3-5 hooks/fascicle	1st 4 chaetigers inflated; MGS - Prostomium thru chaetiger 5 not staining, 6-9 & most of 10 staining intensely; abdomen speckled around parapodia & midventral
<i>Mediomastus ambiseta</i> (Hartman, 1947) Type locality - Corona del Mar, CA Intertidal - 35m	10	10	-	$(4c+6h) / (4c+6h)$	-	Complete	absent	small, conical, w/ round-tip palpode; eyes not apparent		2-10 caps/fascicle	posterior chaetigers may be accompanied by capillaries; 2-10 hooks/fascicle	small, thread-like species; MGS - retains stain on posterior of 6-7, all of 8 and anterior of 9 (strongest posterior 8 & 9)
<i>Mediomastus californiensis</i> Hartman, 1944 Type locality - Tomales Bay, CA Intertidal - 90m	10	10	-	$(4c+6h) / (4c+6h)$	-	Complete	absent	small, w/ round-tip palpode; 2 small eyespots on anterior		5-15 caps/fascicle	100+ abdominal segments; pygidium w/ midventral cirrus; 4-12 hooks/fascicle	MGS - faint band on 5 & 6, distinct band on 7, 8 & posterior of 9
<i>Mediomastus</i> sp A SCAMIT, 2015 § Distribution - San Diego - Goleta, CA 1-30m (silty mud)	10	10	-	$(4c+6h) / (4c+6h)$	-	Complete	unknown	Small lobe w/ palpode; eyespots not observed	achaetous		Pygidium unknown	chaetiger 2 with white pigment band (evident w/out staining); MGS - dorsal patch on posterior prostomium & peristomium; 1 & 2 non-staining; posterior thorax darkly staining; abdomen w/ intersegmental stain band
<i>Mediomastus</i> sp 5 Harris, 2020 § Type locality - San Diego Bay	10	10	-	$(4c+6h) / (4c+6h)$	-			eyespots not observed				need whole animal to distinguish from <i>Mediomastus ambiseta</i>
<i>Neomediomastus glabrus</i> (Hartman, 1960) Type locality - Santa Catalina Basin, CA >1000m	10	10	-	$(6c+4h) / (6c+4h)$	-	Complete	absent	triangular w/ broad base; w/out palpode; eyes absent		6-14 caps/fascicle	notopodia w/ digitate lobe; 5-11 hooks/fascicle	MGS - thorax with bands developing to various degrees on anterior 1/2 of segments from chaetiger 4, 10 & 11 most intense; abdomen speckling laterally

Species	# Thoracic Segments	# Thoracic Chaetigers	1st Segment Achaetous	Thoracic Formula	Chaetigers w/ Genital Spines	1st Chaetiger complete / incomplete	Branchiae (*)	Prostomium	Peristomium	Thorax	Abdomen	Comments
<i>Decamastus gracilis</i> Hartman, 1963 Type locality - Redondo Cyn, CA 113-755m	10	10	-	(10c) / (8c+2e)	-	Complete	absent	short, triangular; eyes absent	fused to 1st chaetiger	5-7 smooth, 8- 10 w/ deep furrows, biannulate, posterior 1/2 glandular; 8-10 caps/fascicle	4-12 hooks/fascicle	MGS - Prostomium staining; last 2-3 thoracic chaetigers w/ encircling speckled bands; abdomen w/ stain concentrating of intersegmental grooves; high variability in MGS reaction
<i>Heteromastus filiformis</i> Cmplx Type locality - Port Vendres, France Neotype locality - Alexandria, Egypt	11	11	-	(5c+6h) / (5c+6h)	-	Complete	present; short, broadly rounded lamellae	small, conical; eyes absent		(4)12-18 caps/fascicle	120-140 chaetigers; pygidium w/ single digitate caudal cirri; (4)8-(7)14 hooks/fascicle	Description is from Hutchings & Rainer, 1982 for the neotype of <i>Heteromastus filiformis</i> . MGS - Prostomium & peristomium not staining; thorax solid green w/ 5-9 most intense; abdominal segments w/ band of speckles on posterior 1/2 and pair of ventral longitudinal lines
<i>Heteromastus</i> sp LA3 Haggin, 2023 § Type locality - Palos Verdes, CA	11	11	-	(5c+6h) / (5c+6h)	-	Complete	present; short, broadly rounded lamellae					provisional name for NEP <i>Heteromastus filiformis</i>
<i>Heteromastus filobranchus</i> Berkeley & Berkeley, 1932 Type locality - Vancouver Is., British Columbia, Canada 10-80m	11	11	-	(5c+6h) / (5c+6h)	-	Complete	present; palmate (up to 15 filaments)	small, conical; eyes absent	areolated	1st 4 chaetigers areolated; 1&2 uniannulate, rest biannulate	pygidium w/ terminal filament	5 pair of nephridial pores in intersegmental grooves of thoracic segments 6-11; MGS - Peristomium & thorax staining uniformly green; anterior abdomen w/ speckling around podial lobes
<i>Heteromastus</i> sp LH1 Harris, 20?? § Type locality - Newport Canyon, CA	11	11	-	(5c+6h) / (5c+6h)	-	complete	present, filamentous (up to 8 filaments)					
<i>Heteromastus</i> sp MEC1	11	11	-	(5c+6h) / (5c+6h)								
<i>Barantolla americana</i> Hartman, 1963 Type locality - Monterey Bay, CA 260-976m	11	11	-	(6c+1m+4h) / (8c+3h)	-	Complete	not observed	small, globular palpode; eyes absent				Not on SCAMIT list but from California
<i>Barantolla</i> sp	11	11	-	(6c+1m+4h) / (6c+1m+4h)	-	Complete	either					
<i>Notomastus hemipodus</i> Hartman, 1945 Type locality - Beaufort, North Carolina Intertidal - shallow subtidal	11	11	-	(11c) / (0+10c)	-	Incomplete (notos only)	present, in posterior abdomen as bilobed epithelial extensions to the notopodia	elongate, triangular, somewhat depressed lobe, w/ slender palpode; 2 minute dark red eyespot	epithelium strongly tessellated	1st 5 chaetigers strongly tessellated	12-20 hooks/fascicle	4 pairs of nephridial pores found in intersegmental grooves of thoracic segments 8-12; MGS - Dorsal oval on peristomium & chaetigers 1-6 light green, darker on 7-10, Abdomen with paired ventral longitudinal bands Amphiamerican distribution (0.5 - 427m)
<i>Notomastus latericeus</i> M. Sars, 1851 Type locality - Norway	11	11	-	(11c) / (11c)	-	Complete	rudimentary, small notopodial lobes and pointed neuropodial lobes	broadly conical, tip blunt; eyespot present		epithelium distinctly areolated thru chaetiger 8		7 or more nephridial pores from 2nd thoracic segment; MGS - 8-10 darkest in thorax, 1 pair of dorsal spots & double stripes encircle abdominal segments
<i>Notomastus</i> sp LA4 Haggin, 2023 § Type locality - Palos Verdes, CA	11	11	-	(11c) / (11c)	-	Complete	small simple lobes	eyespot present			with sharply conical neuropodial lobes	provisional name for NEP <i>Notomastus latericeus</i>
<i>Notomastus lineatus</i> Claparède, 1869 Type locality - Gulf of Naples, Italy	11	11	-	(11c) / (11c)	-	Complete	neuropodia superiorly inflated into foliaceous lamellae	palpode elongate; eyes present		epithelium areolated thru 6 and inflated in 4-6		3 pair of nephridial pores in intersegmental grooves of thoracic segments 8-11; MGS - abdomen without ventral racing stripes
<i>Notomastus</i> sp LAS Haggin, 2023 § Type locality - Palos Verdes, CA	11	11	-	(11c) / (11c)	-	complete		eyespot not observed			neuropodial lobes conical, rounded	provisional name for NEP <i>Notomastus lineatus</i>

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<i>Notomastus magnus</i> Hartman, 1947 Type locality - Tomales Bay, CA Intertidal	11	11	-	(11c)/(11c)	-	Complete	conspicuous, tufted, retractile lobes; dark red	short, flattened w/ subglobular palpode; eyes absent	epithelium areolated thruout	epithelium areolated thruout	pygidium a collar-like ring w/out appendages	Nephridial pores from abdominal segments; MGS - Prostomium & thorax uniformly green, stronger on posterior of last thoracic segment; nephridia of abdomen staining intensely as paired dorsal spots
<i>Notomastus tenuis</i> Moore, 1909 Type locality - San Diego, CA Intertidal	11	11	-	(11c)/(0+10c)	-	Incomplete (notos only)	not observed	conical, depressed, w/out palpode; 2 pair brown eyespots present (easily fades)	epithelium smooth	1st 4 chaetigers slightly inflated; epithelium smooth (may appear bumpy in contracted specimens)	pygidium an elongated cone w/ small marginal papillae; 4-10 hooks/fascicle	5 pairs of nephridial pores found in intersegmental grooves of thoracic segments 5-10; MGS - Peristomium, thorax & abdomen stain light green (5-11 may be slightly darker), prechaetal area of some abdominal segments w/ slightly darker encircling band; California - Washington in sandy beaches, shallow bays and estuaries
<i>Notomastus</i> sp E Harris, 2021 § Type locality - North San Diego Bay, CA 3m	11	11	-	(11c)/(11c)	-	Complete	superior abdominal neuropodial lobes	eyes present		1st 6 chaetiger inflated, epithelium strongly areolated	pygidium simple	nephridial pores present in intersegmental grooves of last 3 thoracic segments. MGS - dark band on 6, medium band on 7 thru anterior 1/2 of 11, thin dorsal (sometimes lateral as well) bands of dark spots on intersegmental areas of abdomen
<i>Notomastus</i> sp LA3 Haggin, 2023 § Type locality - Santa Monica Bay, CA ~350m	11	11	-	(11c)/(11c)	-	complete	palmate, notopodial insertion	eyespot not observed				found during DISCO IDs at NHMLAC
<i>Notomastus</i> sp SD2 Rowe, 1999 § Type locality - B'98, STN 2479 84m	11	11	-	(11c)/(11c)	-	Complete	not observed on 40 chaetiger fragment	eyes absent		epithelium very rugose	notopodia very small, dorsal; large lateral organs; neuropodia inserted dorso-laterally; nunciini w/ no or low hood	nephridial pores difficult to discern, possibly present in last 6 thoracic segments just below notopodia; MGS - thorax staining evenly, abdomen w/ encircling stain band anterior to chaetal fascicle, fading from ventrum by ~6th abdominal chaetiger, dorsally with a postchaetal stain band and a posterior broad patch that becomes speckled by ~18 abdominal chaetiger
<i>Notomastus</i> sp SD3 Rowe, 2004 § Type locality - NE of Anacapa Island, CA 75m	11	11	-	(11c)/(11c)	-	Complete	not mentioned	not mentioned			notopodia very small, dorsal; large lateral organs; neuropodia inserted laterally w/ rounded superior lobe; uncini w/ tightly adhearing hoods	nephridial pores absent in last thoracic segment; MGS - thorax staining evenly thru chaetiger 9, 10 with dark anterior band then light or unstained, 11 with light or unstained anterior and dark posterior band; abdominal chaetigers with dark prechaetal band dorsally, a postchaetal dot and a posterior "U" patch, no stain ventrally; collected with small <i>Aphelochaeta</i> , <i>Questa</i> , <i>Oligochaetes</i> and <i>Acrocirridae</i>
<i>Notomastus</i> sp SF1 Norris, 2008 §	11	11	-	(11c)/(0+10c)	-	Incomplete (notos only)	not mentioned	palpode present, red eyespots present				MGS stain bands on chaetigers 9-11, then dorsally on chaetigers 19-45+
<i>Notodasus oraria</i> (McCammon & Stull, 1978) Type locality - Palos Verdes, CA 30-180m	11	11	-	(11c)/(11c)* ^{(1)(2)(c)} / _{(1)(2)(e)(m))}	-	Complete	complexly palmate	small, triangular, palpode short; lateral eyes present	collar-like, obscuring most of prostomium	broadest at 5, tapers abruptly at 10-11	1st segment w/ cap. Notos & caps, mixed or hook Neuros; 18-80 hooks/fascicle	transition to abdomen marked by abrupt shortening of abdominal segments; MGS - posterior of 7, 8-10 & anterior of 11 moderately stained, 12-13 dark
<i>Dodecamastus mariaensis</i> Blake, 2000 Type locality - Santa Maria Basin, CA 585m	12	12	-	(10c+2h)/(10c+2h)	-	Complete	present; arborescent, w/ numerous filaments	short, broadly rounded, recessed into peristomium		crowded, biannulate	2x long as thoracic segments; 15-20 (100+ posterior) hooks/fascicle; pygidium unknown	MGS - prostomium, peristomium & 1 chaetiger staining w/ reticulated pattern, next 10 staining uniformly, chaetiger 12 staining intensely; abdomen w/ dense speckling surrounding chaetal flanges, branchial segments not staining
<i>Leiochrides hemipodus</i> Hartman, 1960 Type Locality - San Pedro Basin, CA	12	12	-	(12c)/(0+9c+1e+1h)	-	Incomplete (notos only)	present; 3-12 long, filiform, non-retractile lobes in abdomen, palmate	short, bluntly rounded; eyes absent		anterior 5 chaetigers can be inflated		MGS - dense speckled pattern on all thoracic chaetigers, 6 w/ smooth band on anterior border; prostomium, peristomium & abdomen not staining
<i>Leiochrides</i> sp A Harris, 1985 § Type locality - San Pedro Basin, CA	12	12	-	(12c)/(0+9c+2h)	-	Incomplete (notos only)						

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<i>Scyphoproctus oculus</i> Reish, 1959 Type locality - Newport, CA 26m	12	11	+	(-)+ ^(11c) / _(11c)	-	Complete	absent	broadly rounded; eyespot present		smooth, strongly biannulate	4 pre-pygidial segments with notopodial spines; pygidium an anal plaque, circle-shaped w/ 5 sets of spines on margin, 2 short cirri	groove incomplete between peristomium and achaetous segment; lateral organs present from achaetous segment;
<i>Dasybranchus glabrus</i> Moore, 1909 Type locality - San Diego Bay, CA	13	13	-	^(13c) / _(13c)	-	Complete	present posteriorly, retractile; 2-3 short, hollow, sausage-shaped filaments	bluntly rounded; eyes absent	long, deeply biannulate, collar-like	firm, smooth, uniannulate w/ deep intersegmental furrows	157 segments, short, crowded; rami nearly continuous in anterior abdomen	Lateral sense organs slit-like pores near posterior of segment
<i>Dasybranchus</i> sp SD1 Rowe, 2004 § Type locality - ??, 100m	13	13	-	^(13c) / _(13c)								
<i>Anotomastus gordiodes</i> (Moore, 1909) Type locality - San Diego Shallow water	17-18	17-18	-	^(17-18c) / _(0+15-16c+1m)	-	Complete (Incomplete - Notos only)	present posteriorly; tufted, w/ 8-10 (6-12) short filaments	minute, blunt palpode (elongate & broadly rounded, lacking a true palpode); eyes present (may be faded)		smooth	95+ segments; 12-32 hooks/fascicle; pygidium w/ 1 pair long filaments ventrally & 4-5 slender filaments on the side	lateral sense organs from the peristomium; nephridial pores present in posterior thorax

Key to Thoracic Formulas

achaetous segment + ^(thoracic notopodia)/_(thoracic neuropodia) + ^(abdominal notopodia)/_(abdominal neuropodia)

c=capillary, h=hooded hooks, e=either, m=mixed fascicle, g=genital spines, s=spatulate, p=paddle-like, (-)=achaetous segment present, 0=without chaetae