

Key to the Species of *Anamixis*

(Except *A. stebbingi**)

1. Article 2 of gnathopod 2 with 3 or more long setae on anterior margin (1).....2
1. Article 2 of gnathopod 2 lacking long setae on anterior margin3
2. Gnathopod 1 geniculate(2) reduced in size, but of normal proportions for genus, articles distinct; gnathopod 2, coxa produced into a sharp process midapically(3), article 2 with numerous long setae on anterior margin*A. aldabra* n. sp.
2. Gnathopod 1 greatly reduced, barely visible as a shriveled appendage, articles indistinct(4); gnathopod 2, coxa rounded midapically, article 2 with 3 long setae on anterior margin*A. jebbi* n. sp.
3. Carpal lobe of gnathopod 2 with thumb-like process (6).....4
3. Carpal lobe of gnathopod 2 lacking thumb-like process(7).....6
4. Gnathopod 1, articles 5 and 6 with 2 and 1 long apical setae respectively (8).....*A. mahe* n. sp.
4. Gnathopod 1, articles 5 and 6 lacking long apical setae (10).5
5. Coxa 4, ventral margin convex;(11) gnathopod 1, article 5 longer than article 6, apex dialated;(12) gnathopod 2, medioproximal border of carpus smooth (14).....*A. nedcampi* n. sp.
5. Coxa 4, ventral margin concave(15); gnathopod 1, article 5 longer than article 6 (16), apex upturned; gnathopod 2, medioprroximal border of carpus denticulate (17)*A. barnardi*

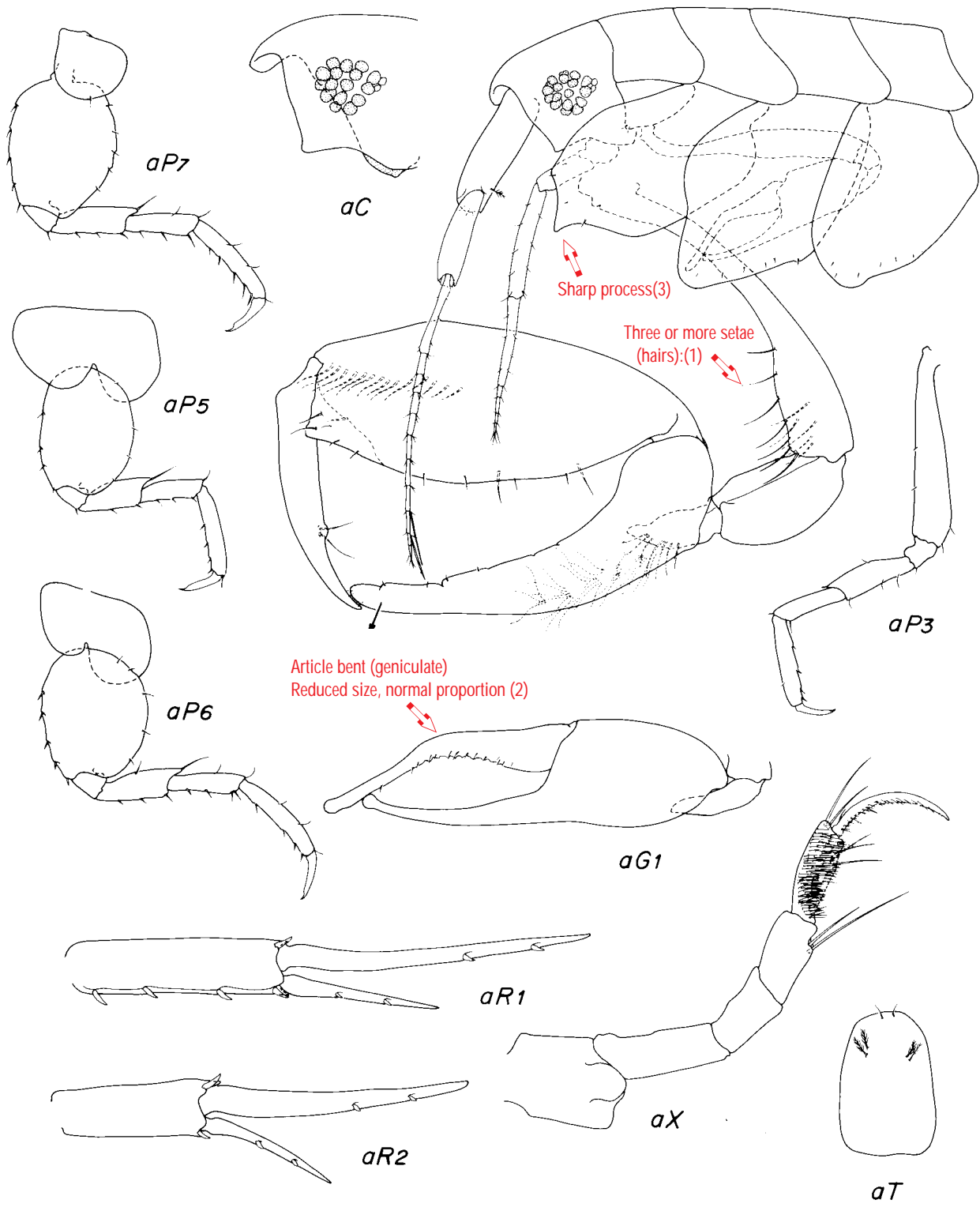
6. Gnathopod 1, articles 5 and 6 each with long terminal seta(19), or article 6 with terminal spine (20).....7
6. Gnathopod 1, articles 5 and 6 lacking terminal ornamentation10
7. Gnathopod 1, articles 5 and 6 with long terminal seta, 0.5 times the length of each article (19).....8
7. Gnathopod 1, article 5 lacking ornamentation, article 6 with terminal spine, 0.3 times the length of article 5 (20)*A. pacifica*
8. Lateral margins of head rounded, ventral keel sharp ..9
8. Lateral margins of head excavate(21); ventral keel truncate(22)*A. vanga n. sp.*
9. Anterior margin of head oblique, lacking any defining process(24); anterior margin of ventral keel with small teeth(25); article 5 of gnathopod 2 elongate, 3.0 - 3.1 times longer than wide(26), inner margin of dactyl smooth*A. hanseni*
9. Anterior margin of head transverse, defined by cusp at anteroventral corner(28); anterior margin of ventral keel smooth(29); article 5 of gnathopod 2 not elongate, 2.1 - 2.2 times longer than wide(30); inner margin of dactyl tuberculate (31)*A. cavatura n. sp.*
10. Head enlarged, anteroventral corner defined by large process(33); first peduncular segment of antenna 1 enlarged; palp article 4 of maxilliped elongate, 1.9 times length of article 3 (34)11
10. Head not enlarged, anteroventral corner defined by small cusp or process; palp article 4 of maxilliped, 1.1 -1.8 times the length of article 3 (35).....13

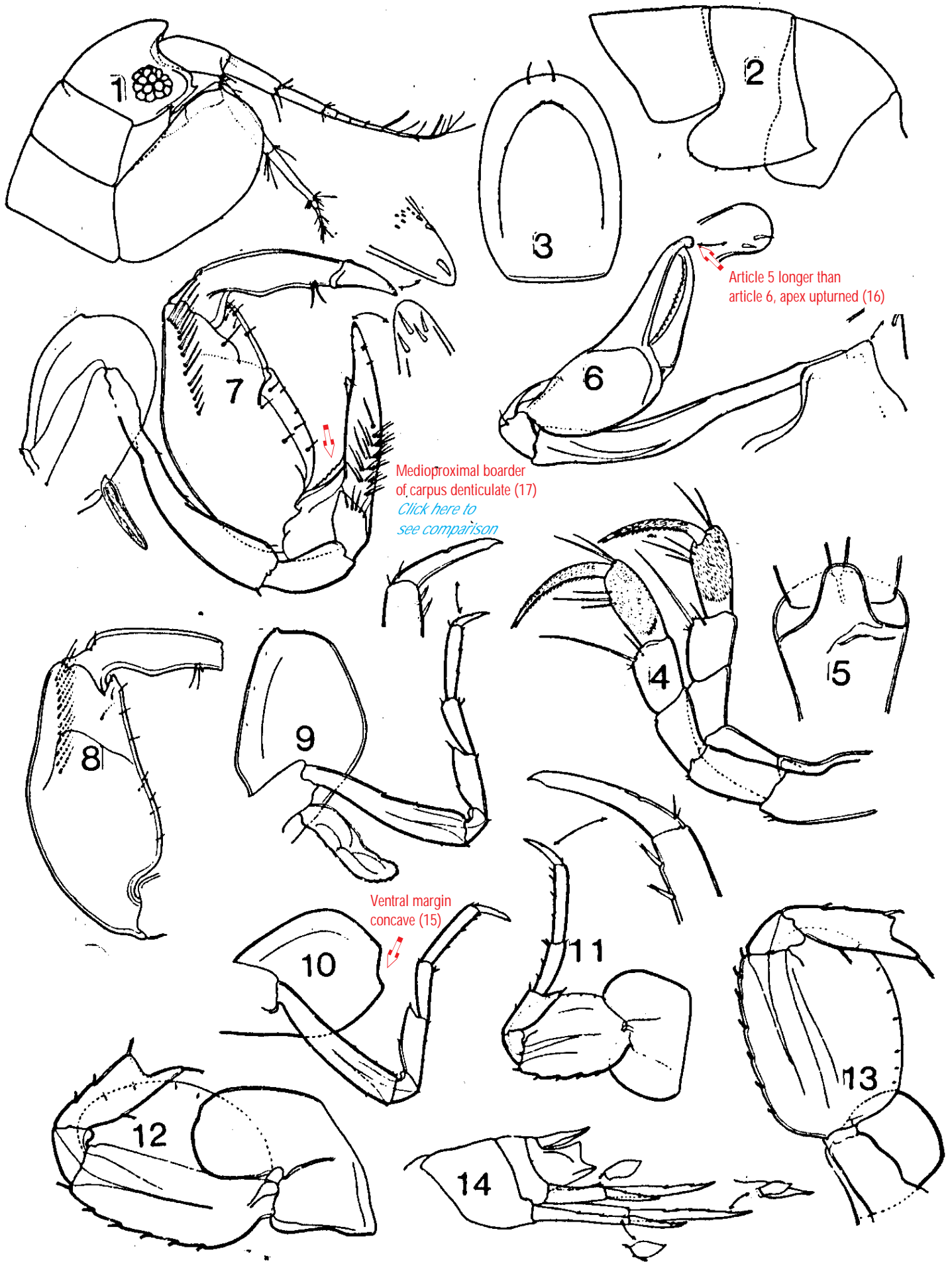


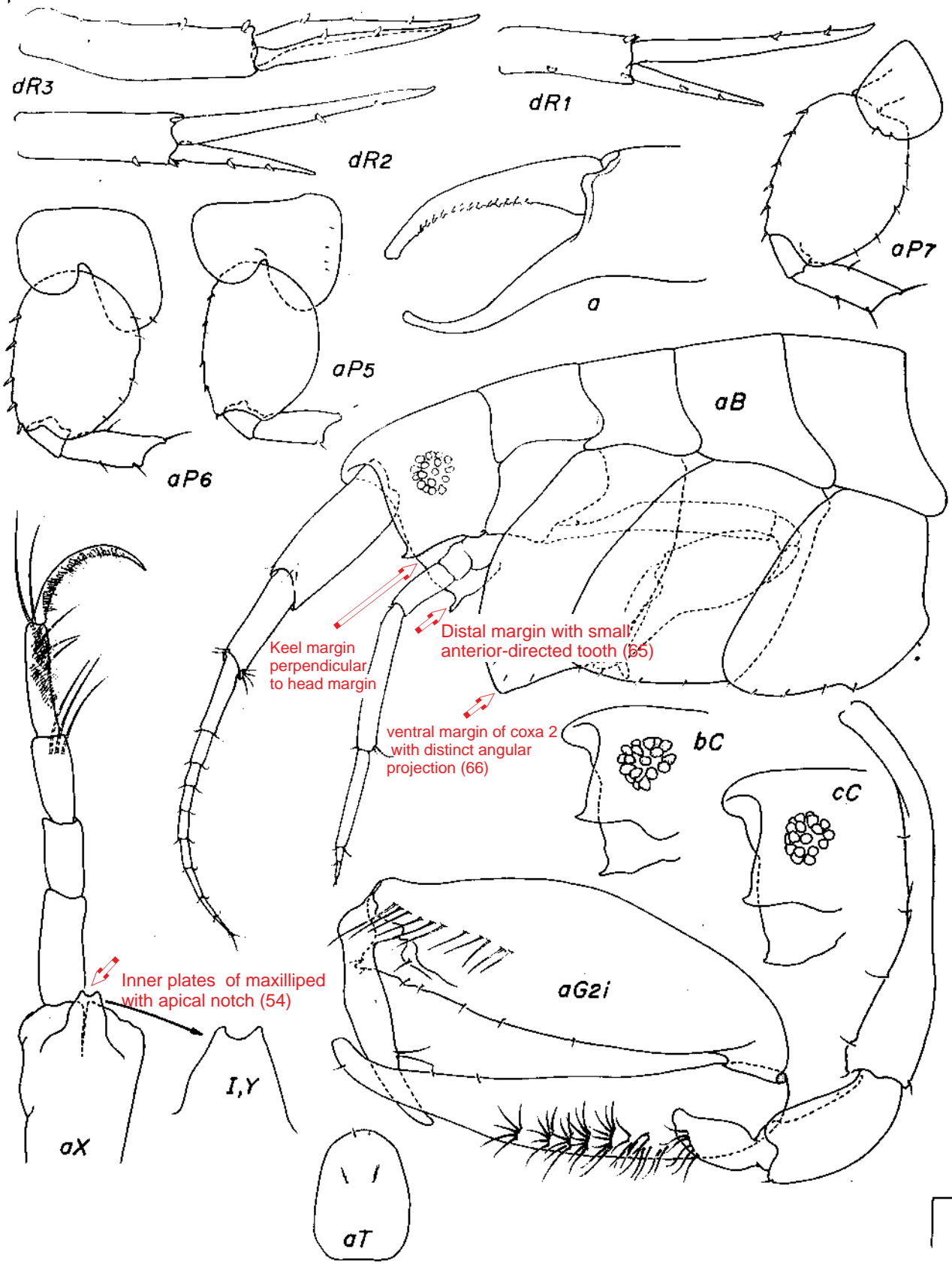
11. Ventral keel a wide triangular process(36); gnathopod 2, coxa immense, greatly exceeding coxa 3-4 in size(37), carpal lobe less than one-half of propodus(38), hindmargin of propodus oblique with numerous serrations or teeth12
11. Ventral keel sabre-shaped, extending well below ventral margin of head;(40) gnathopod 2, coxa narrow, smaller than 3 or 4 (41), carpal lobe reaching end of propodus, hindmargin of propodus straight, palm with 3 major teeth(42).....*A. excalibur* n. sp.
12. Gnathopod 2: carpal lobe serrate(44); propodus with large cusped basomedial process(45); hindmargin of propodus with small serrations(46); dactyl with 2 processes on inner margin(47), apex excavate(48)*A. papuaensis* n. sp.
12. Gnathopod 2: carpal lobe smooth(50); propodus lacking basomedial process; hindmargin of propodus with 5 major teeth(51); inner margin of dactyl smooth, apex bifid(52).....*A. falarikia*
13. Gnathopod 2: carpal lobe straight, blunt, reaching to end of propodus(53a); propodus rectilinear(53b), hindmargin straight, unarmed; inner margin of dactyl unarmed. Inner plates of maxilliped with apical notch (54) or indentation(55)14
13. Gnathopod 2: carpal lobe either long and recurved, or if short, blunt(56); propodus not rectilinear, hindmargin with oblique palm(57), with teeth or excavations(58); inner margin of dactyl armed. Inner plates of maxilliped apically rounded16
14. Antenna 2 shorter than 1(59); coxa 3, ventral margin tapering posteriorly, anterior margin expanded(60); ventral keel small, anterior margin oblique, posterior margin defined by ventral tooth(61)*A. kateluensis* n. sp.
14. Antenna 2 subequal to 1(63); coxa 3, ventral margin quadrate, anterior margin straight; ventral keel a broad process, ventral margin projecting well below ventral margin of head(64)15

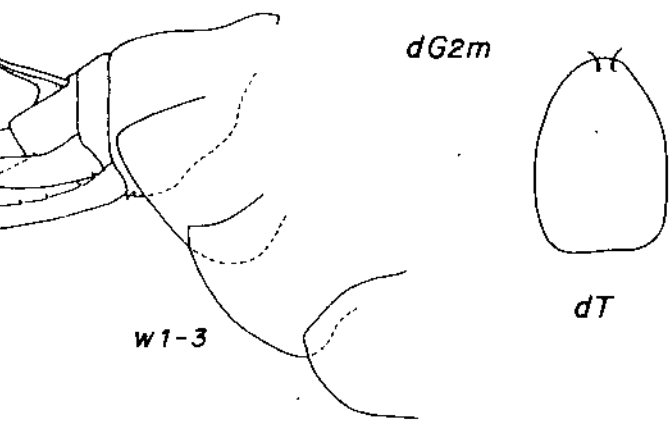
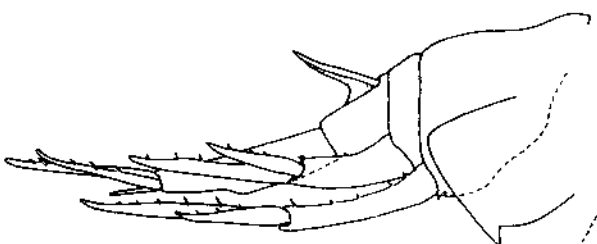
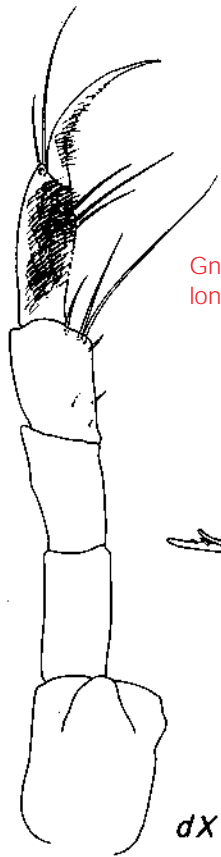
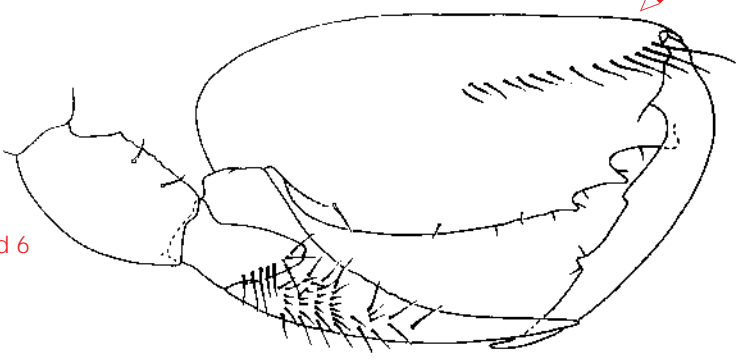
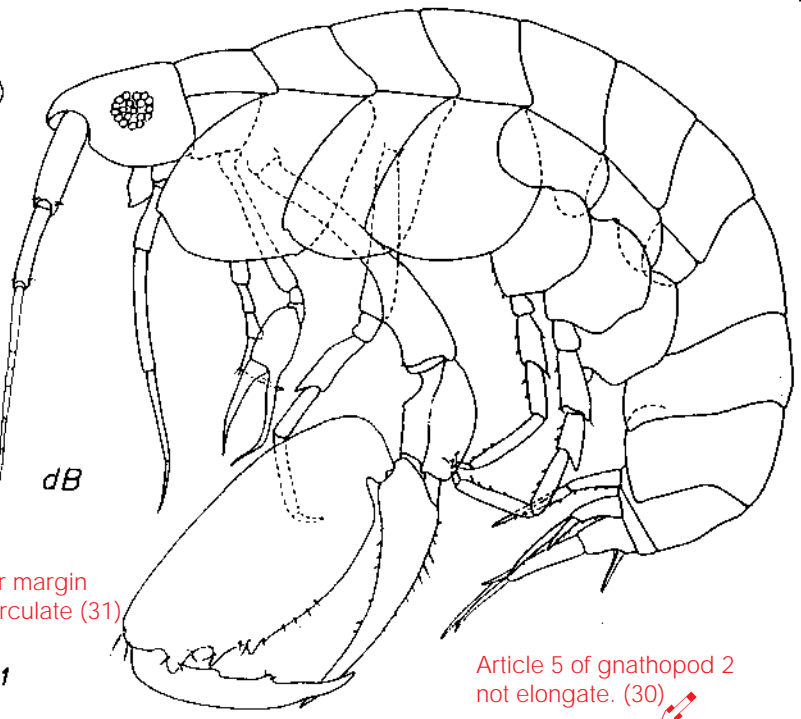
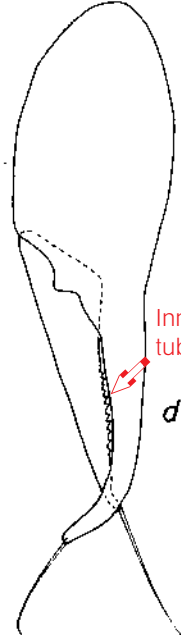
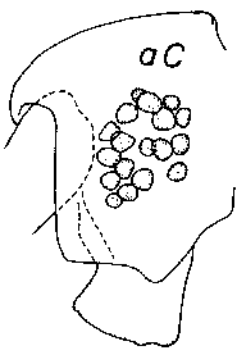
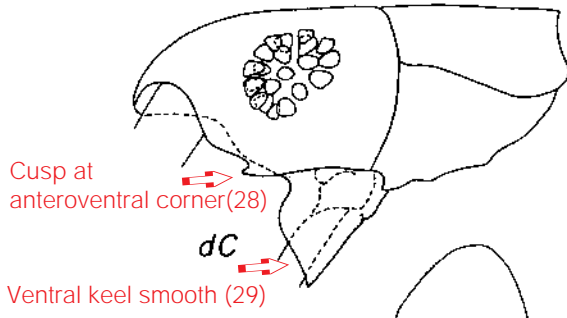
15. Entire anterior margin of ventral keel perpendicular and parallel to anterior margin of head, distal margin with small anterior-directed tooth(65); ventral margin of coxa 2 with distinct angular projection(66)*A. bazimut* n. sp.
15. Anterior margin of ventral keel tapering posteriorly into a ventrally projected triangular tooth(64); ventral margin of coxa 2 with slight midventral angle (68).....*A. moana* n. sp.
16. Ventral keel large, sharp bearing 3 small anterior ventral teeth(70); gnathopod 2, carpal lobe short and blunt, hindmargin of propodus tapering with 2 major and 2 minor teeth(57), inner margin of dactyl with 2 processes, the innermost serrate, the outermost with paired setae.(58)*A. ningaloo* n. sp.
16. Ventral keel small, truncate; gnathopod 2, carpal lobe long, recurved, hindmargin of propodus convex, with 1-2 minor cusps, inner margin of dactyl evenly tuberculate.(72)*A. yareega*

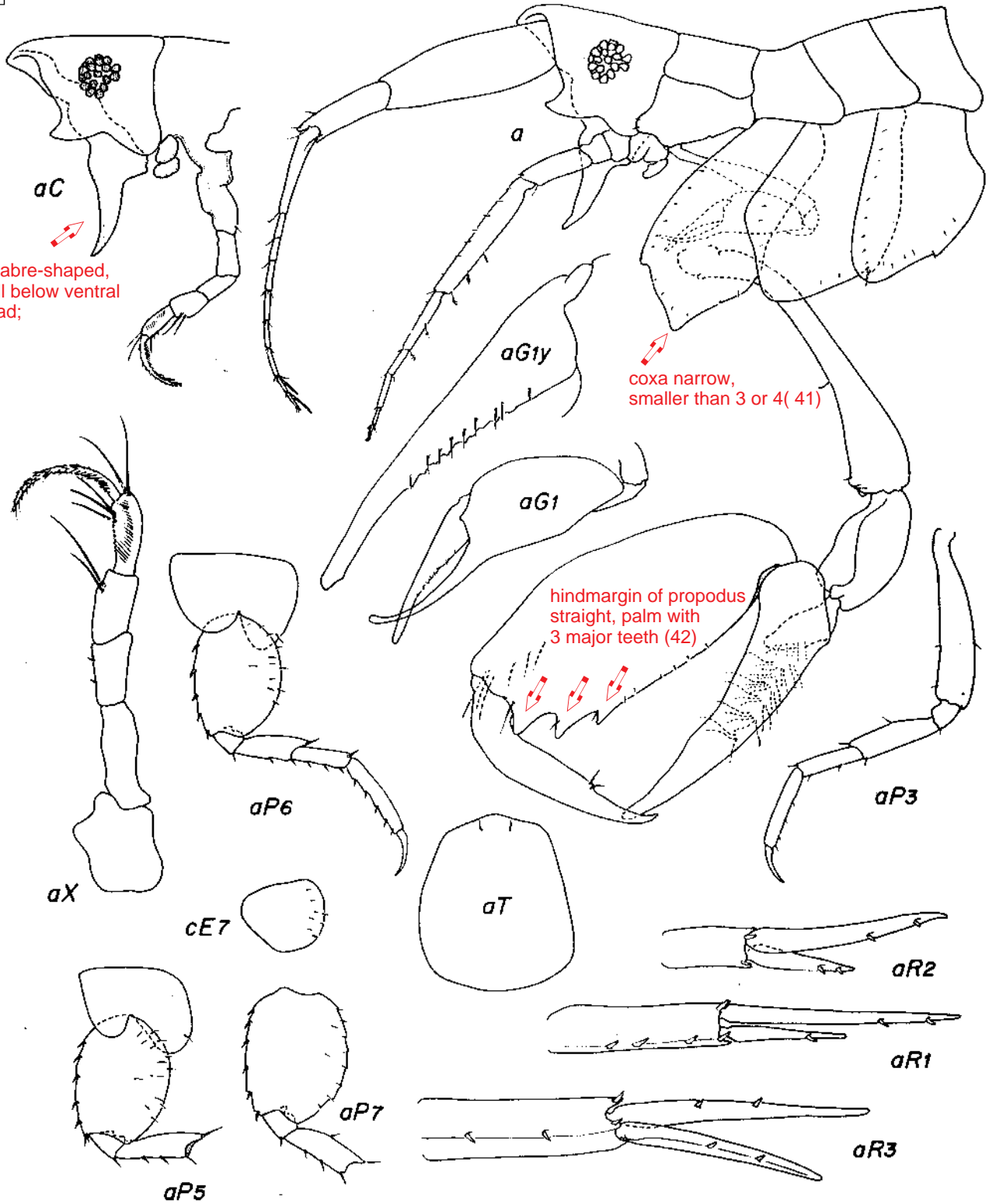
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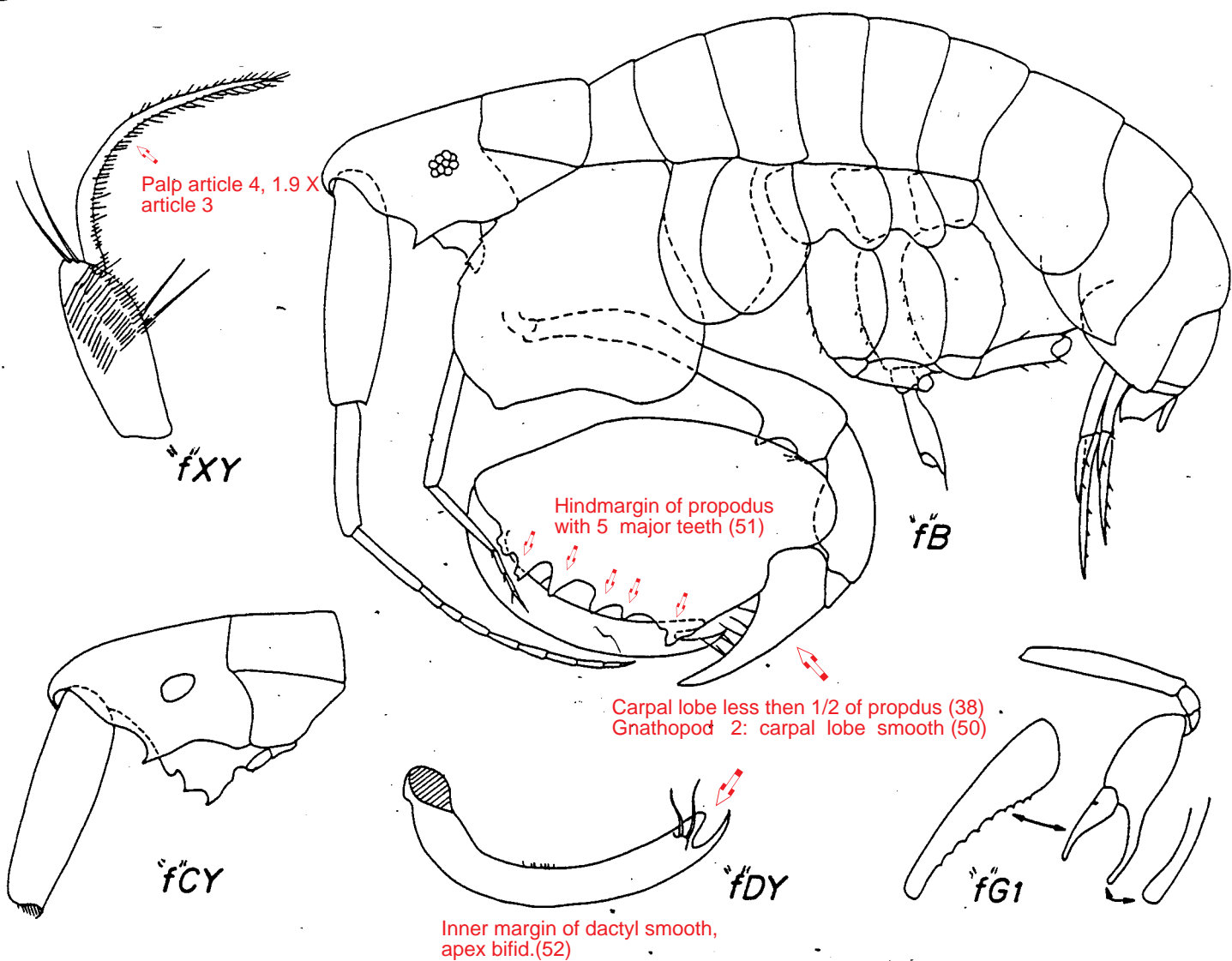




Ventral keel sabre-shaped,
extending well below ventral
margin of head;

coxa narrow,
smaller than 3 or 4 (41)

hindmargin of propodus
straight, palm with
3 major teeth (42)



Palp article 4, 1.9 X article 3

fXY

Hindmargin of propodus with 5 major teeth (51)

fB

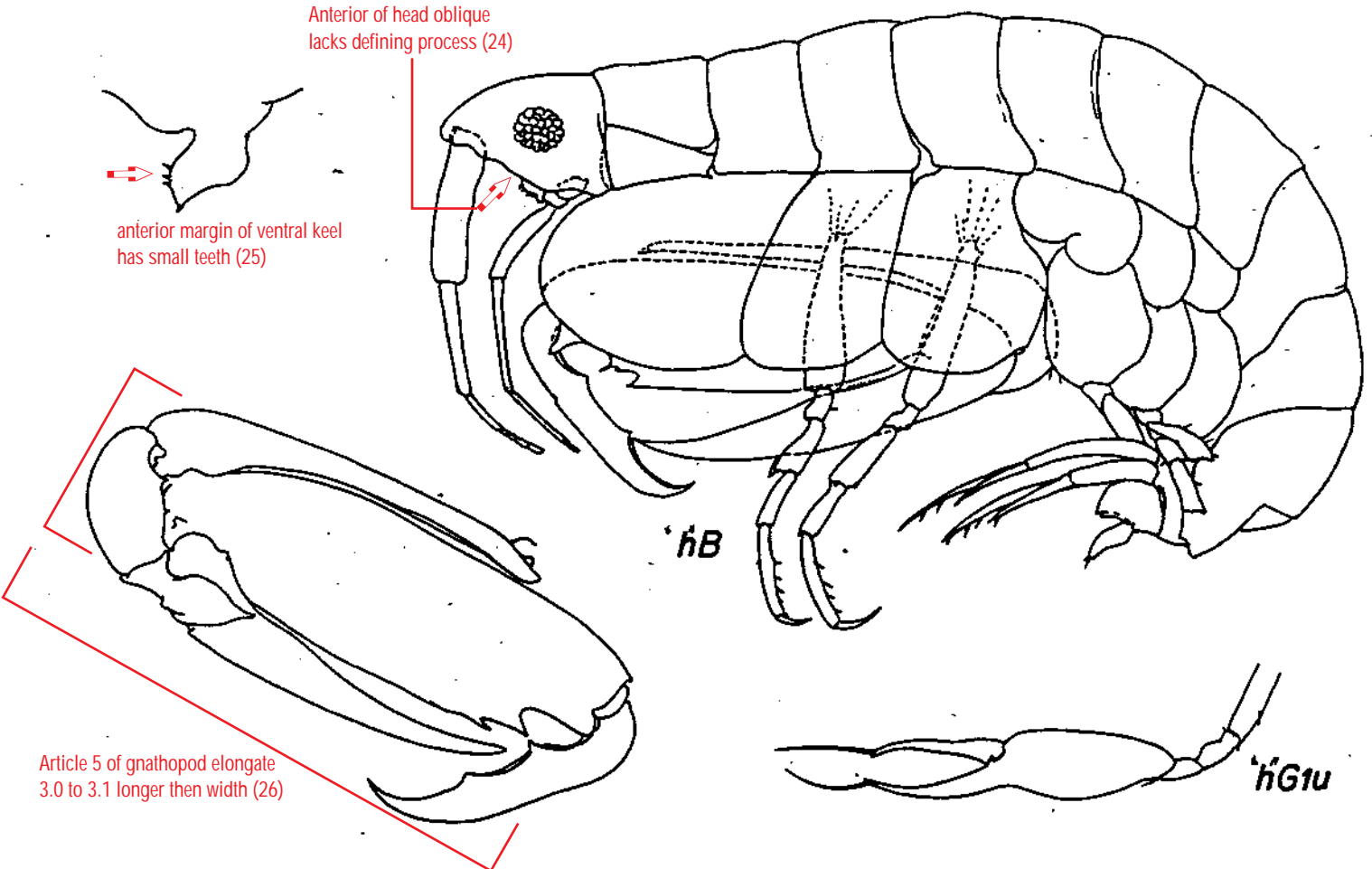
Carpal lobe less than 1/2 of propodus (38)
Gnathopod 2: carpal lobe smooth (50)

fCY

fDY

Inner margin of dactyl smooth, apex bifid.(52)

fG1



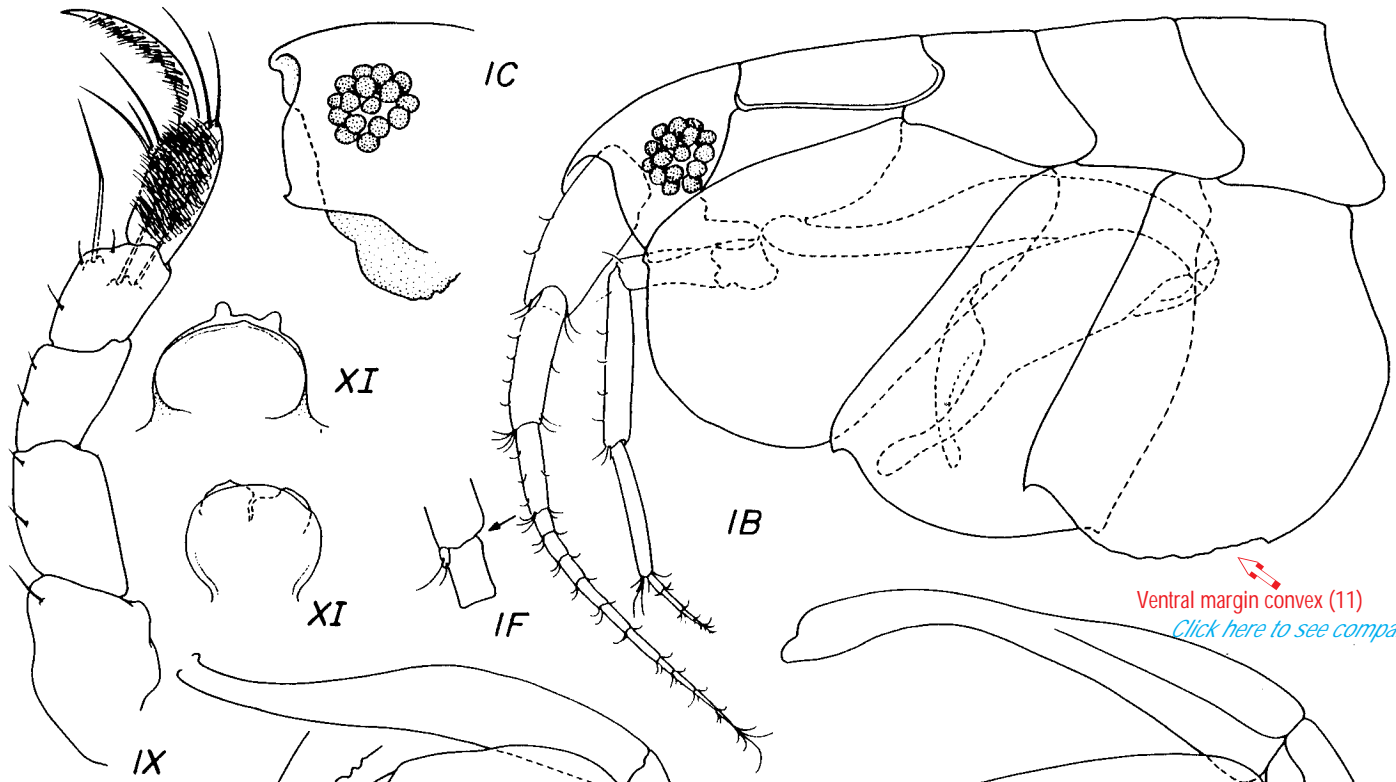
Anterior of head oblique
lacks defining process (24)

anterior margin of ventral keel
has small teeth (25)

hB

hG1u

Article 5 of gnathopod elongate
3.0 to 3.1 longer than width (26)

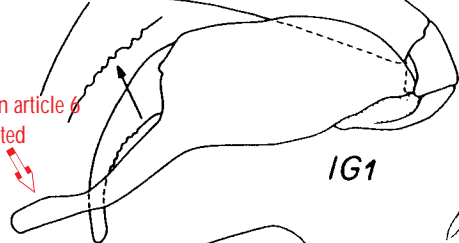


Ventral margin convex (11)
[Click here to see comparison](#)

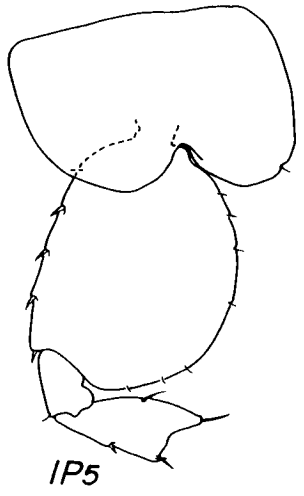
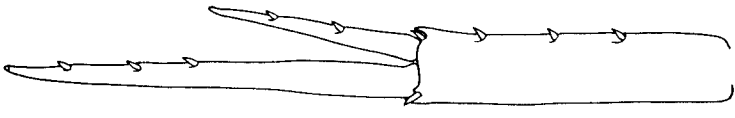
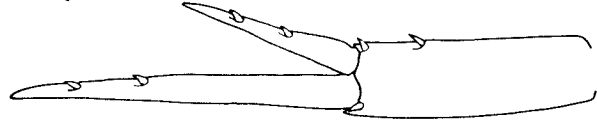
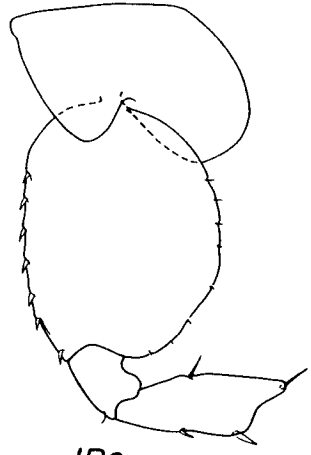
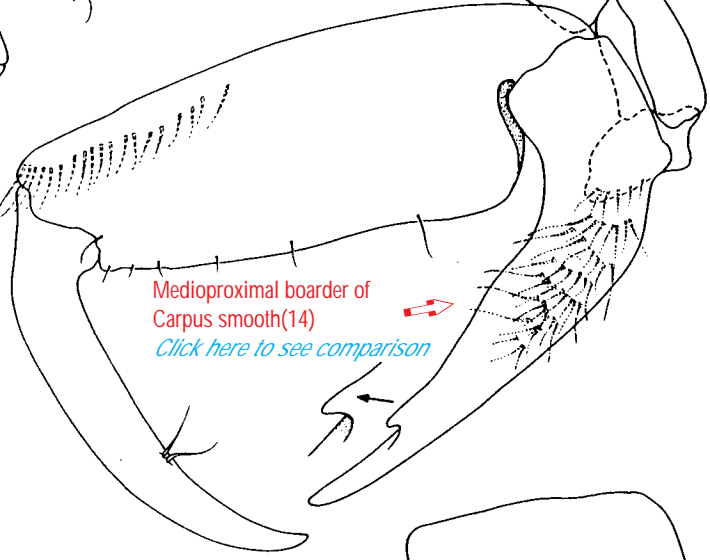
Article 5 longer than article 6
 apex article 5 dilated

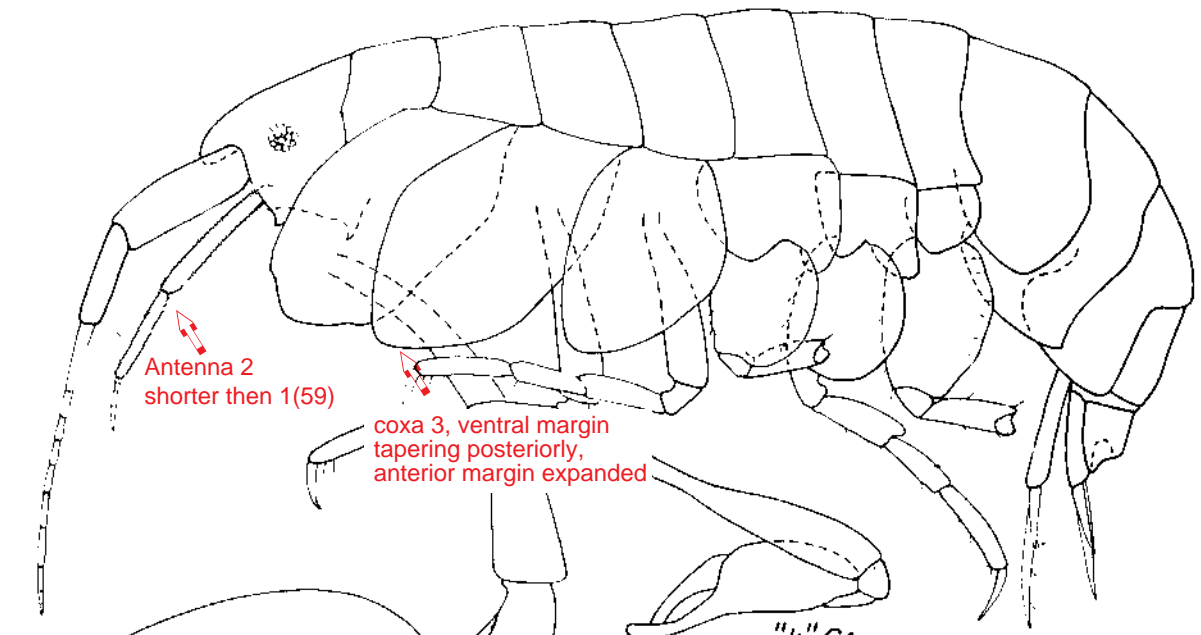


Article 5 and 6 Lack
 long setae (10)
[Click here to see
 comparison](#)



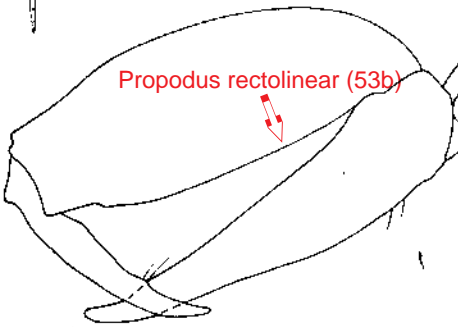
Medioproximal boarder of
 Carpus smooth (14)
[Click here to see comparison](#)





Antenna 2 shorter than 1 (59)

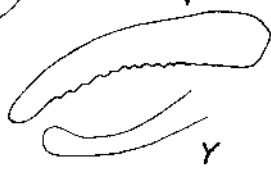
coxa 3, ventral margin tapering posteriorly, anterior margin expanded



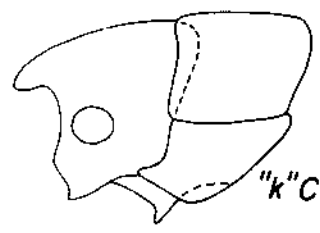
Propodus rectilinear (53b)



"k" G1



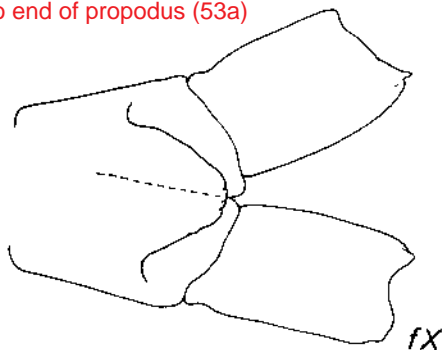
Y



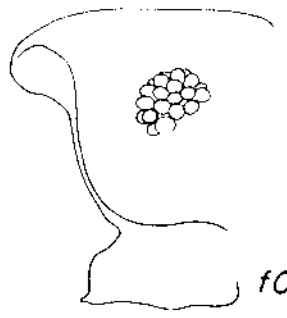
"k" C

Gnathopod 2 carpal lobe straight, blunt, reaching to end of propodus (53a)

Inner plate indented (55)



fX

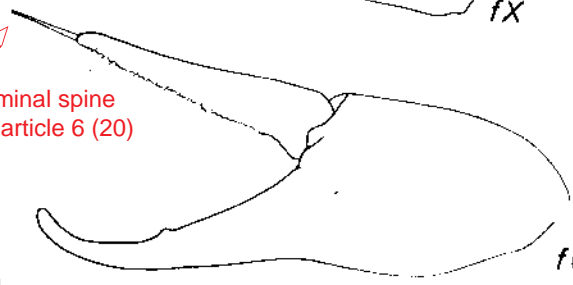


fC

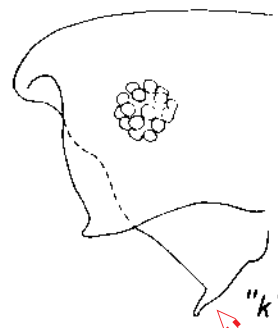


X

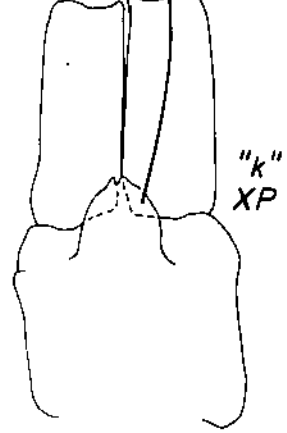
Terminal spine .3X article 6 (20)



fG1

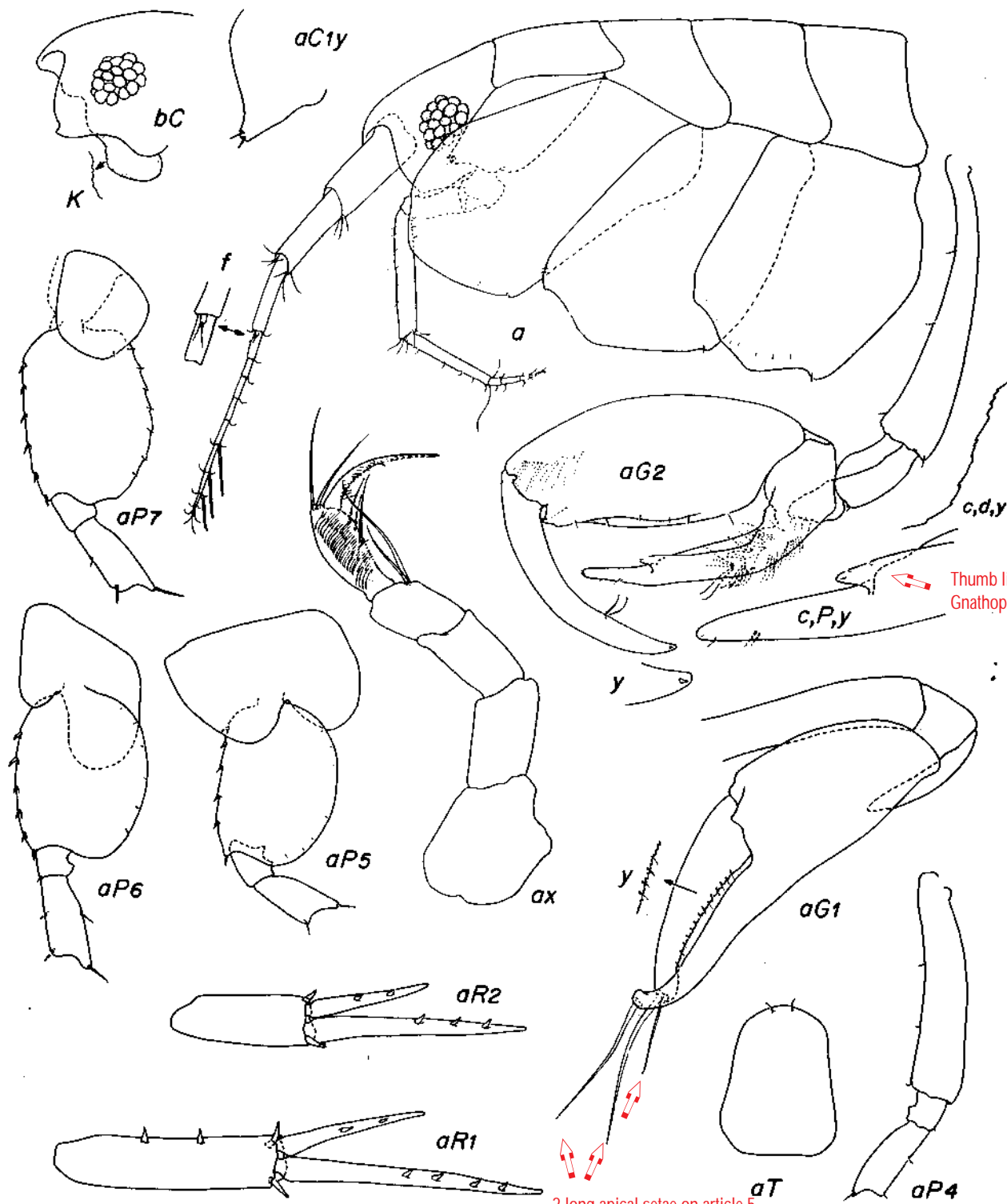


"k" C



"k" XP

Posterior margin of keel defined by ventral tooth (61)



Thumb like process on
Gnathopod 2 (6)

2 long apical setae on article 5
and one long apical seta on article 6 (8)

Head enlarged, anteroventral corner defined by larger processes (33)

Coxa 2 immense, greatly exceeding coxa 3-4 in size (37)

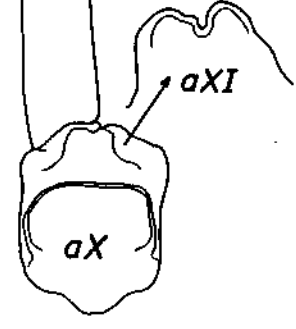
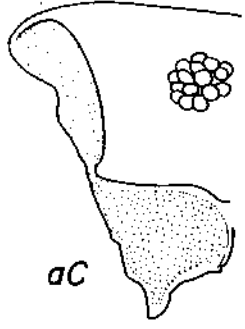
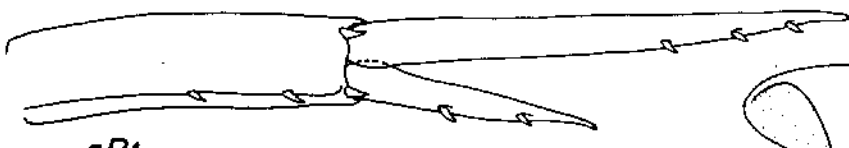
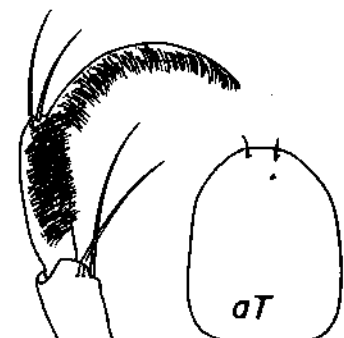
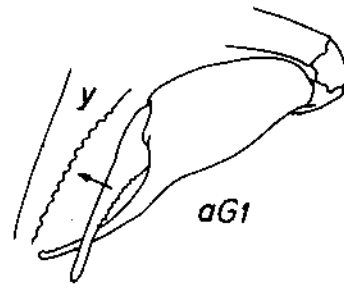
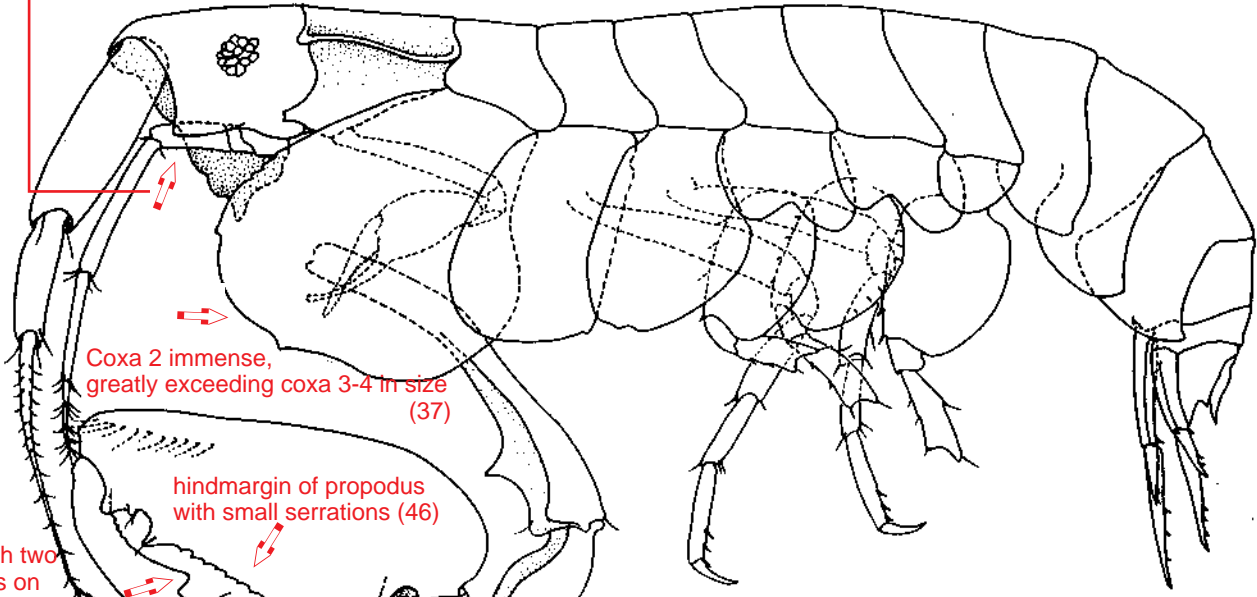
hindmargin of propodus with small serrations (46)

Dactyl with two processes on inner margin (47)

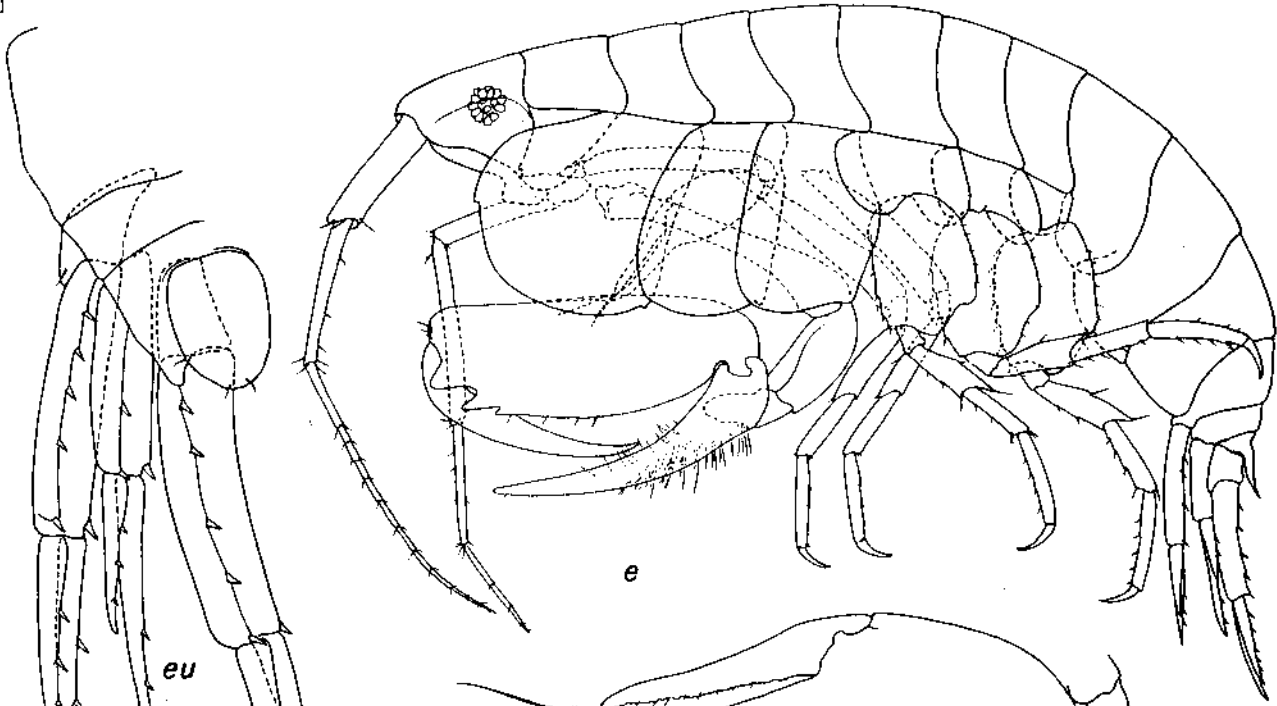
Apex excavate (48)

carpal lobe less than one-half of propodus (38)
Carpal lobe serrate (44)

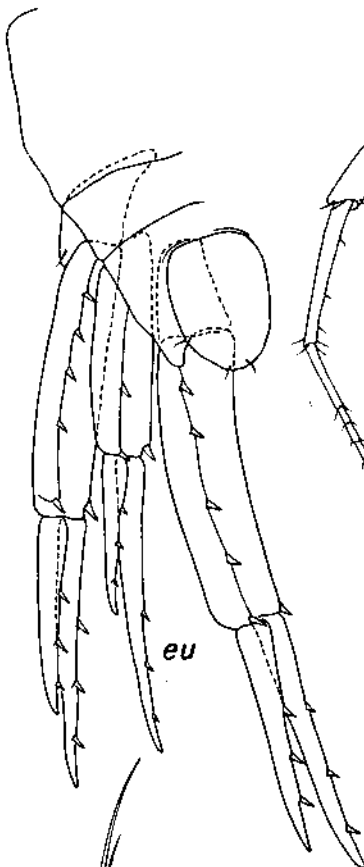
Gnathopod 2: propodus with large cusped basomedial process (45)



Ventral keel a wide triangular process (36)



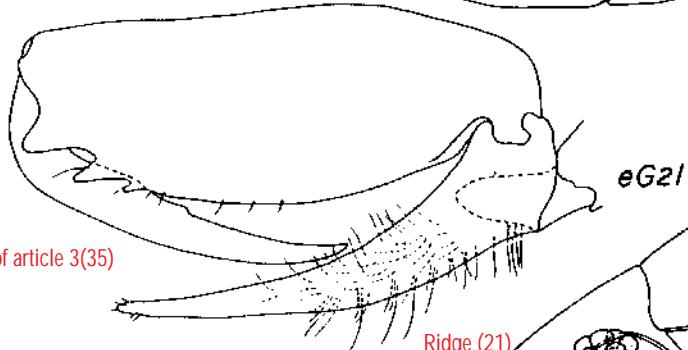
e



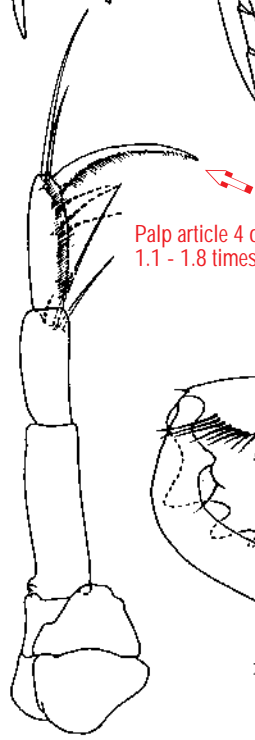
eu



eG1



eG2i



ex

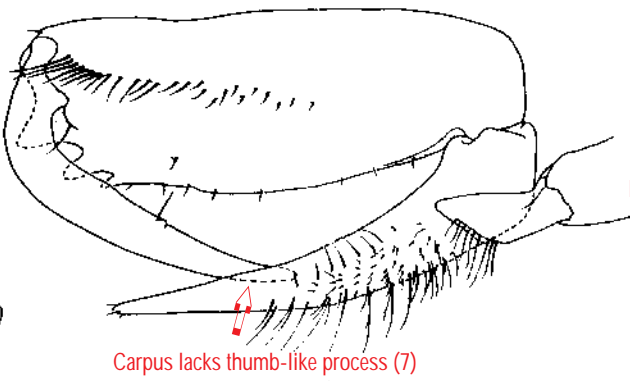
Palp article 4 of maxilliped
1.1 - 1.8 times the length of article 3(35)

Ridge (21)

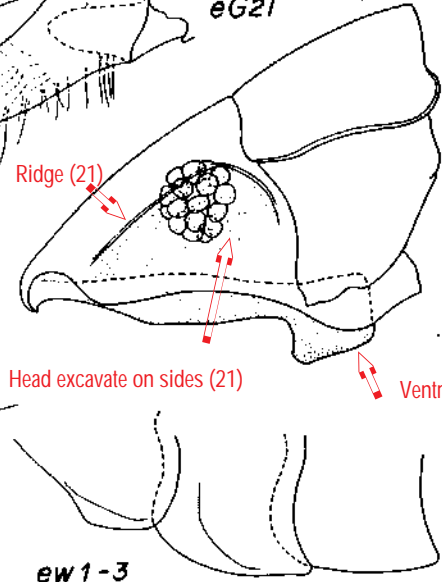
Head excavate on sides (21)

Ventral keel truncate(22)

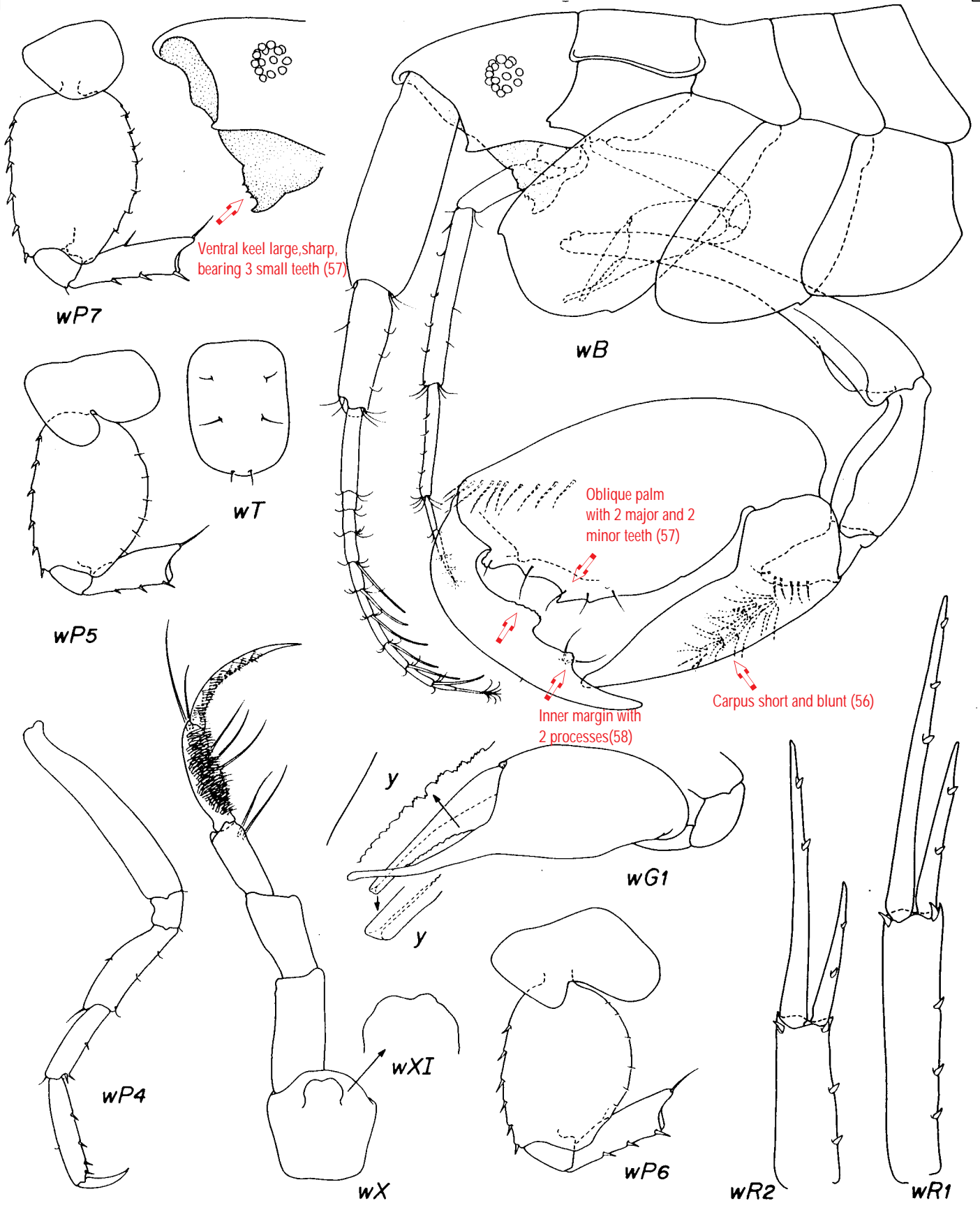
Carpus lacks thumb-like process (7)



eG2i



ew1-3



Ventral keel large, sharp,
bearing 3 small teeth (57)

Oblique palm
with 2 major and 2
minor teeth (57)

Inner margin with
2 processes (58)

Carpus short and blunt (56)

WP7

WB

WP5

WT

WP4

WXI

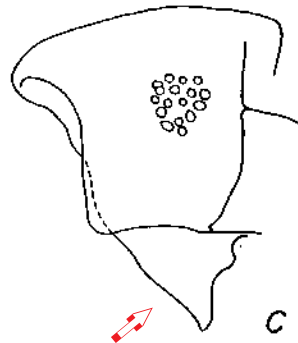
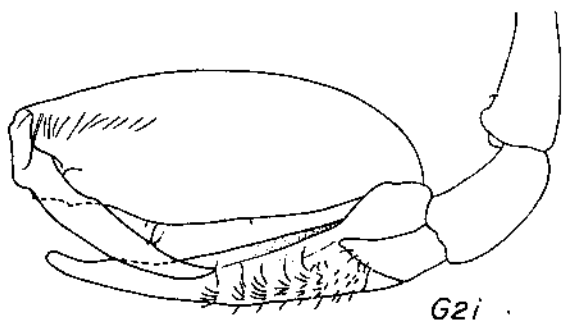
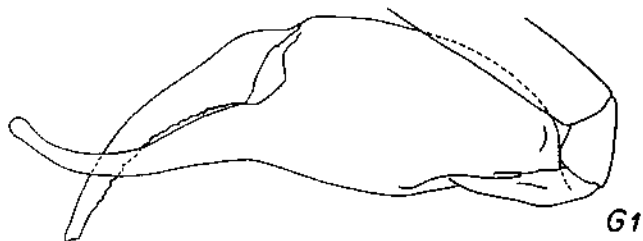
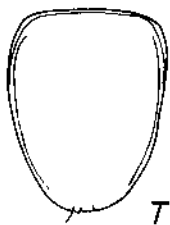
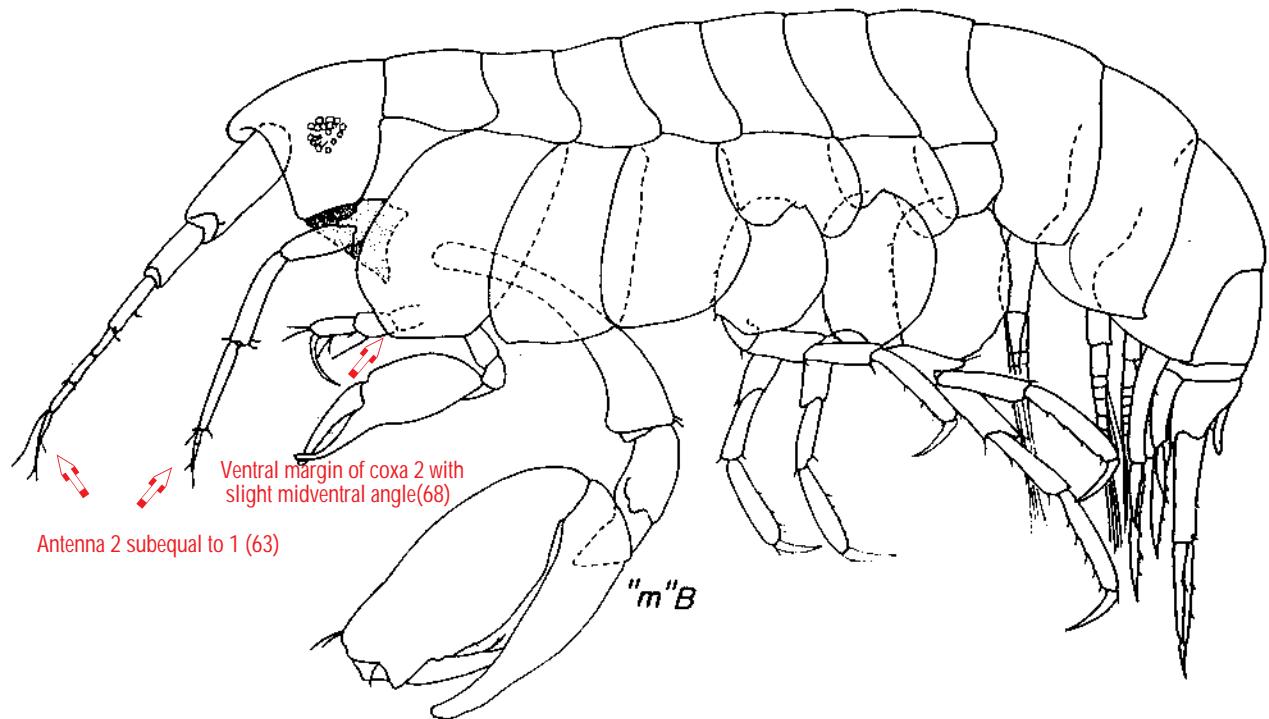
WX

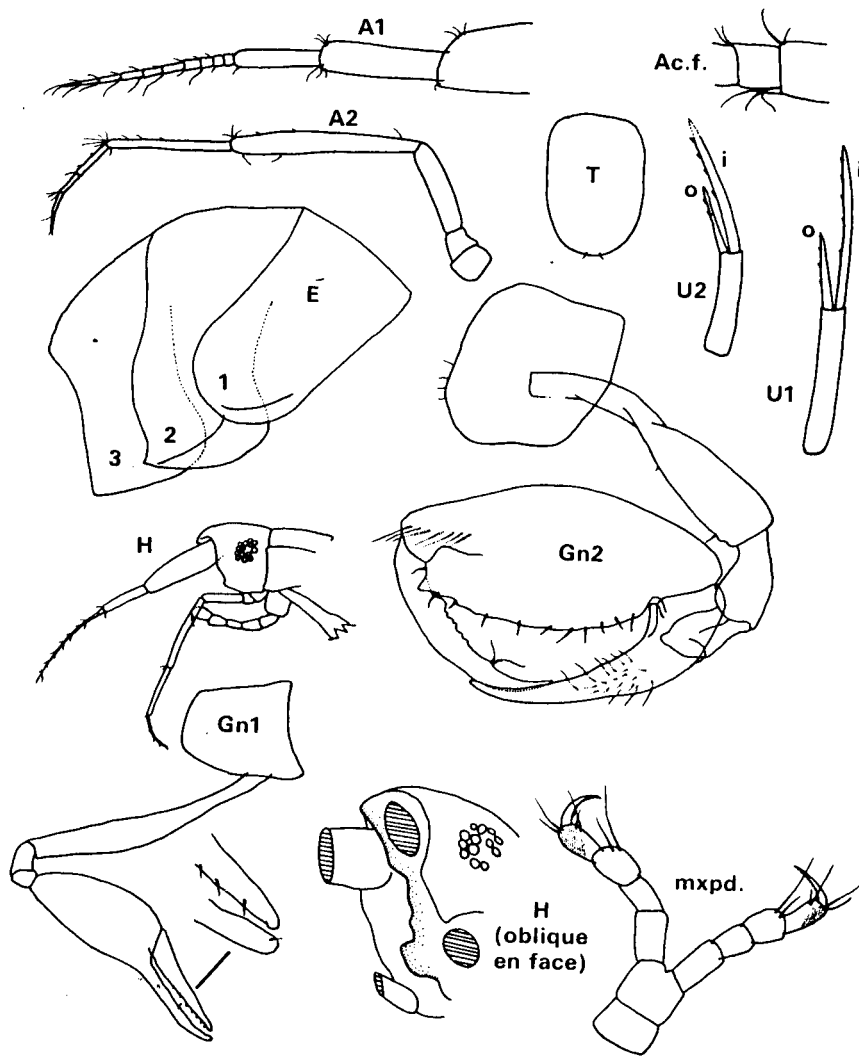
wG1

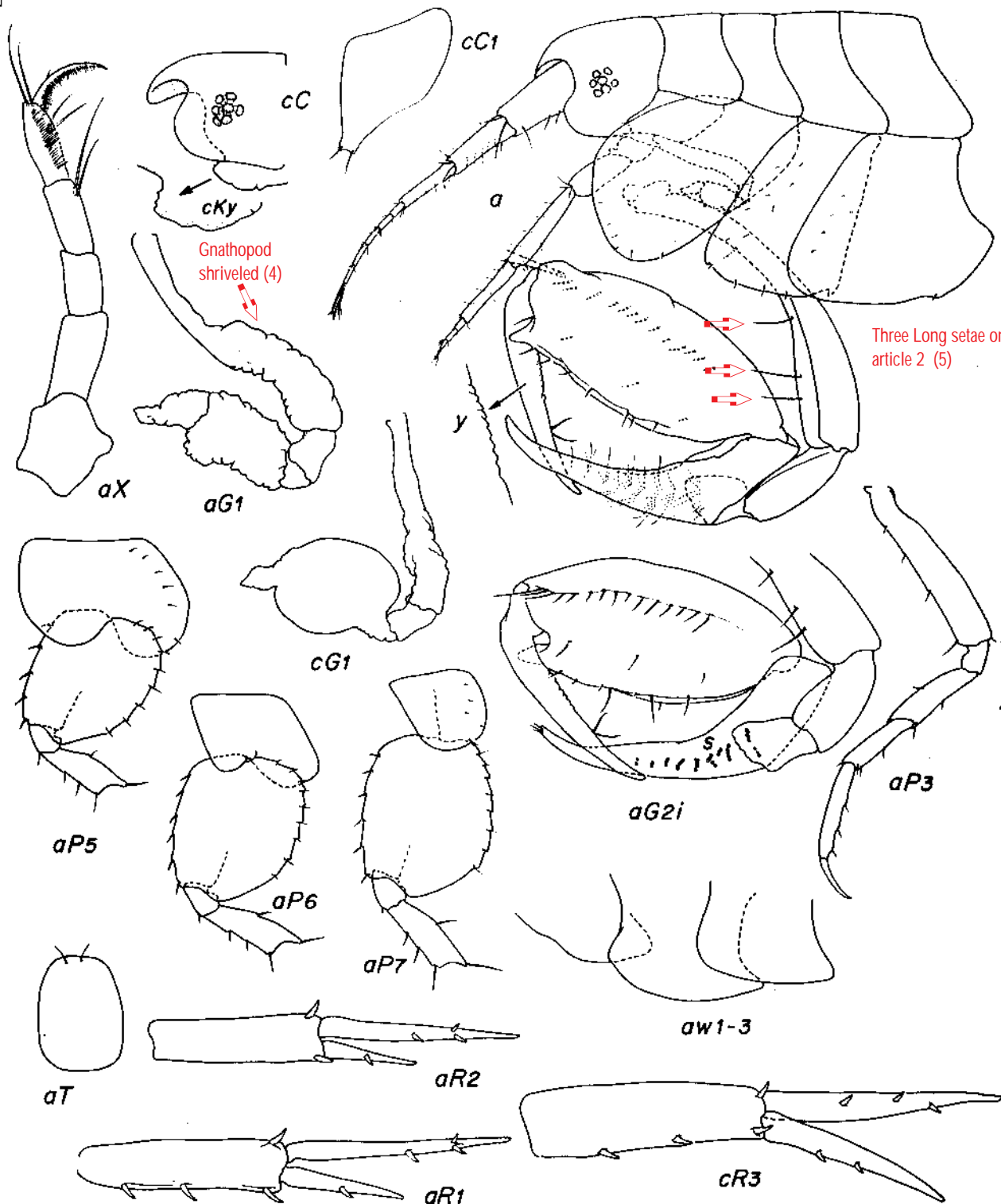
WP6

WR2

WR1







Gnathopod shriveled (4)

Three Long setae on anterior margin article 2 (5)