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 margin ........................................3

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 shrunken 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, medioproximal 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 ornamentation ........................................................................ 10

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. hansenii

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; gnathopod 2, coxa immense, greatly exceeding coxa 3-4 in size, carpal lobe less than one-half of propodus, hindmargin of propodus oblique with numerous serrations or teeth

11. Ventral keel sabre-shaped, extending well below ventral margin of head; gnathopod 2, coxa narrow, smaller than 3 or 4, carpal lobe reaching end of propodus, hindmargin of propodus straight, palm with 3 major teeth

12. Gnathopod 2: carpal lobe serrate; propodus with large cuspate basomedial process; hindmargin of propodus with small serrations; dactyl with 2 processes on inner margin, apex excavate

12. Gnathopod 2: carpal lobe smooth; propodus lacking basomedial process; hindmargin of propodus with 5 major teeth; inner margin of dactyl smooth, apex bifid

12. Gnathopod 2: carpal lobe long and recurved, or if short, blunt; propodus not rectilinear, hindmargin with oblique palm, with teeth or excavations; inner margin of dactyl armed. Inner plates of maxilliped apically rounded

13. Gnathopod 2: carpal lobe straight, blunt, reaching to end of propodus; propodus rectilinear, hindmargin straight, unarmed; inner margin of dactyl unarmed. Inner plates of maxilliped with apical notch or indentation

13. Gnathopod 2: carpal lobe either long and recurved, or if short, blunt; propodus not rectilinear, hindmargin with oblique palm, with teeth or excavations; inner margin of dactyl armed. Inner plates of maxilliped apically rounded

14. Antenna 2 shorter than 1; coxa 3, ventral margin tapering posteriorly, anterior margin expanded; ventral keel small, anterior margin oblique, posterior margin defined by ventral tooth

14. Antenna 2 subequal to 1; coxa 3, ventral margin quadrate, anterior margin straight; ventral keel a broad process, ventral margin projecting well below ventral margin of head

A. excalibur n. sp.
A. papuaensis n. sp.
A. falarikia
A. kateluensis n. sp.
A. katepuensis n. sp.
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

* not included due to unavailable character data.
Three or more setae (hairs): 1

Article bent (geniculate)
Reduced size, normal proportion: 2

Sharp process: 3
Ventral margin concave (15)

Medioproximal boarder of carpus denticulate (17)

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Article 5 longer than article 6, apex upturned (16)
Inner plates of maxilliped with apical notch (54)
Distal margin with small anterior-directed tooth (55)
Ventral margin of coxa 2 with distinct angular projection (66)
Keel margin perpendicular to head margin
Inner plates of maxilliped with apical notch (54)
Gnathopod 1 articles 5 and 6 long terminal setae (19)

Cusp at anteroventral corner (28)

Ventral keel smooth (29)

Article 5 of gnathopod 2 not elongate. (30)

Inner margin tuberculate (31)

Gnathopod 1 articles 5 and 6 long terminal setae (19)
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)
Carpal lobe less than 1/2 of propodus (38)

Gnathopod 2: carpal lobe smooth (50)

Hindmargin of propodus with 5 major teeth (51)

Palp article 4, 1.9 X article 3

Inner margin of dactyl smooth, apex bifid (52)
Anterior of head oblique lacks defining process (24)

anterior margin of ventral keel has small teeth (25)

Article 5 of gnathopod elongate 3.0 to 3.1 longer than width (26)
Article 5 and 6 Lack long setae (10)

Click her to see comparison

Ventral margin convex (11)

Click here to see comparison

Medioproximal boarder of Carpus smooth(14)

Click here to see comparison

Artice 5 longer then article 6
apex article 5 dialated

Click here to see comparison

Click her to see comparison
Terminal spine
.3X article 6 (20)

Antenna 2
shorter than 1 (59)

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

Propodus rectilinear (53b)

Coxa 3, ventral margin
tapering posteriorly,
 anterior margin expanded

Inner plate indented (55)

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 lager processes (33)

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

Ventral keel a wide triangular process (36)

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

Carpal lobe serate (44)

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

Dactyl with two processes on inner margin (47)

Apex excavate (48)

Hindmargin of propodus with small serrations (46)

A

Ventral keel a wide triangular process (36)
Palp article 4 of maxilliped 1.1 - 1.8 times the length of article 3

Carpus lacks thumb-like process
Carpus short and blunt (56)

Inner margin with 2 processes (58)

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

Ventral keel large, sharp, bearing 3 small teeth (57)
Antenna 2 subequal to 1 (63)

Ventral margin of coxa 2 with slight midventral angle (68)

Ventral margin of keel projecting well below ventral margin of head (64)
Gnathopod shriveled (4)

Three Long setae on anterior margin article 2 (5)