

Supplementary Material

A. Physical characteristics for the different Philippine lakes included in this study.

Island	Lake	Coordinates (N,E)	Depth (m)	Altitude (m asl)	Area (ha)	Collecting dates
Luzon	Paoay	18°7'16.2474, 120°32'25.728	3-5	19	387.5	Apr.-Sep. 2006
	Laguna de Bay	14°23'7.6812, 121°17'4.9698	2.8	11.5	90,000	Apr.-Sep. 2006
	Tadlak	14°10'57.3528, 121°12'23.3244	58	-2	25.1	16 Oct. 2011
	Caliraya	14°18'11.3178, 121°31'46.3116	DD	289	719.2	13 Aug. 2011
	Lumot-Mahipon	14°15'20.934, 121°32'49.0884	DD	293	317.7	13 Aug. 2011
	Pandin	14°7'0.0006, 121°22'0.0012	62	225	20.9	20 May 2011
	Bunot	14°4'59.9982, 121°20'59.9994	23	153	30.5	20 May 2011
	Yambo	14°11'66.667, 121°36'66.667	40 (max)	225	30.5	20 May 2011
	Mohicap	14°7'22.53, 121°20'2.4318	30 (max)	99	22.9	21 May 2011
	Sampaloc	14°7'90, 121°33'00	25	134	96.6	21 May 2011
	Palakpakin	14°6'40.2798, 121°20'19.8378	8	136	47.9	21 May 2011
	Taal	13°56'54.999, 121°0'26.9994	90	2.5	24,356.4	Jan.-Dec. 2008
	Buhi	13°27'24.9984, 123°30'51.0012	7	88	1704	4 Sep. 2011
	Bato	13°19'54.9984, 123°21'32.0004	4.5	10	10,500.9	5 Nov. 2011
	Baao	13°27'49.5138, 123°18'57.5388	2.5	4	1633.6	5 Nov. 2011
Cebu	Danao	10°40'35.274, 124°20'34.299	0.91 - 54.9	5	649	20 Oct. 2011
Leyte	Danao	10°52'5.001, 124°51'20.9988	80	635	140	20 Oct. 2011
Mindoro	Naujan	13°10'10.9992, 121°20'54.9996	19	20	14,568	17 Sep. 2011
Mindanao	Lahit	6°15'6.9978, 124°42'54	DD	666	17.2	27 Oct. 2006
	Mainit	9°26'2.0004, 125°31'59.9982	128	42	17,060	28 Nov. 2011
	Sebu	6°13'27.0006, 124°42'11.9988	5	696	354	28 Oct. 2006
	Siloton	6°13'33.1896, 124°43'51.657	DD	664	64.8	27 Oct. 2006

B. List of morphological characters included in the phylogenetic analysis.

Antennule

1. A1, anterior spinules present on segments: (0) 1, 4-5, 7-13; (1) 1, 4-5, 7-13, or 1, 4-5, 7-14 (Fig. 3A, arrowed).

Antenna

2. Number of setae on endopodite 2 (third segment) (Fig. 3C): (0) 9; (1) 8; (2) 7.

Mesocyclops ogunnus in which intraspecific variability includes 9, or 8, or 7-setae state, is assigned '?'

Spinule pattern on caudal surface of coxobasis:

3. Spinules near implantation of medial setae (group „f cf. Fig. 3C): (0) tiny in field/row; (1) large in row.

4. Spinules near distal margin (group „g cf. Fig. 3C): (0) absent; (1) present or absent; (2) present.

5. Spinules in longitudinal row near lateral margin (group „e cf. Fig. 3C): (0) slightly increasing (longest/smallest =/ $<$ 2); (1) strongly increasing (longest/smallest =3-4)

Mouthparts

6. Transverse field/row of spinules or hair between epistoma and distal fringe hair (Fig. 3F, arrowed): (0) absent; (1) present.

7. Maxillulary palp (Fig. 4C): (0) bare; (1) with large spinules.

Leg 4

8. Coxopodite, caudal surface, spinules near proximal margin (Fig. 5C, arrowed): (0) equal; (1) sometimes equal sometimes unequal; (2) unequal.

9. Enp3 medial spine, lateral margin with: (0) many spinules ($>$ 10); (1) few or many; (2) few ($<$ or =10).

Seminal receptacle

10. Transverse duct-like structures medially meet (Fig. 2B, arrowed): (0) before copulatory pore (*joint-canal* present); (1) before or next to copulatory pore; (2) next to copulatory pore *joint-canal* absent).

Somites, surface ornamentation

11. Pediger 5, hair or spinules: (0) present on lateral surface (Fig. 2A); (1) present on lateral and dorsal surfaces.

12. Number of pores posteriorly to P6, on laterodorsal surface of genital double-somite (Fig. 2C and 2D arrowed): (0) 6; (1) 6 or 8; (2) 8.

13. Anal somite, proctodeum, tiny spinules in anterior half: (0) absent; (1) present (Fig. 2E-G).

14. Anal somite, proctodeum, long distal hair/spinules: (0) absent; (1) present (Fig. 2E and 2F arrowed).

Caudal rami

15. Pilosity on medial margin: (0) absent (Fig. 2E); (1) hair present anteriorly to implantation of lateral seta (Fig. 7A).

16. Spinules at insertion of lateral (II) caudal seta (Fig. 2E, arrowed): (0) present; (1) present or absent; (2) absent.

17. Spinules at insertion of lateralmost terminal (III) caudal seta (Fig. 2E, arrowed): (0) present; (1) absent.

P1-P4

18. Long laterofrontal spinules of the basipodite present in (0) P1-P4; (1) P1-P4 or at least in two of P1-P3; (2) at least in two of P1-P3; (3) at least in two of P1-P3, or absent; (4) absent.

Notes: In *M. ogunnus* spinules appear on P1-P4 or P1-P3 or P2-P3. In other species if spinules are present on P2-P3, they are also present on P1.

C. Character matrix.

	111111111
	0123456789012345678
ROBE	000000002210000004
THER	0021100010210000214
AFFI	0020101002200000101
WOUT	0120111021100100212
GEMI	0021000000000101000
MICR	0020000021000101102
OGUN	00?1000110210100101
FRIE	0020000021010100002
DISS	0120101020002100002
FRAN	0010001021010100202
PARE	0020201022010100202
AUGU	0120101020001110001

Hennig86 counts first character as 0, so to keep the same character numbering in the character matrix and list of characters, we added a dummy character with state 0 in all species.