

Correction to: Zooplankton secondary production: main methods, overview and perspectives from Brazilian studies

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Published online: 30 September 2020

The Author(s) 2020

Correction to: Int Aquat Res

[https://doi.org/10.22034/IAR\(20\).2020.1897659.1037](https://doi.org/10.22034/IAR(20).2020.1897659.1037)

The original version of this article unfortunately contained some mistakes.
The correction to all is given below.

In original paper (page 89), the following formula is corrected as follows:

$$(1) G=0.445e^{0.111*T}$$

$$(2) \text{Log}_{10}.G=0.0246*T - 0.2962*\text{Log}_{10}.C - 1.1355$$

$$(3) \text{Log}_{10}.G=0.0208*T - 0.3221*\text{Log}_{10}.C - 1.1408$$

$$(4) \text{Log}_{10}.G= a*T - b*\text{Log}_{10}C - c*\text{Log}_{10}\text{Chlo-a} + d$$

In page 94, Fig. 2 is changed in larger size as follows:

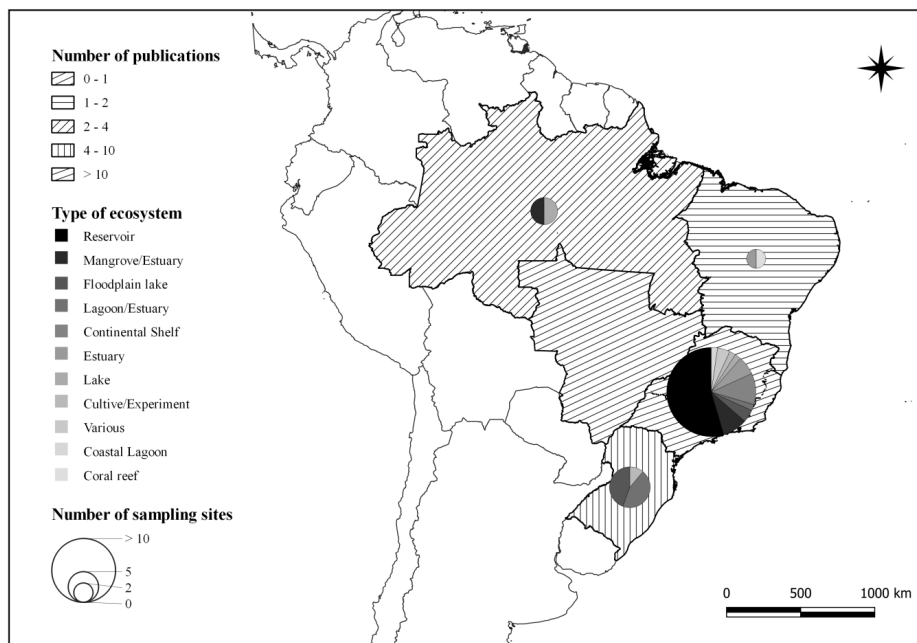


Fig. 2. Number of publications on zooplankton secondary production in Brazilian regions among different ecosystem types and sampling sites.

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In page 91, Table 2 is corrected here:

Table 2. List of Secondary Production studies published in Brazil from 1984 to 2019 and respective information. References in bold were not accessed directly and, when possible, the information was obtained from abstract, keywords, title or in other studies. Ecological Approach: 1 – Elucidation of energy or material transfers within communities and ecosystems; 2 – Rational management of aquatic resources; 3 – Detection of the effects of pollution; 4 – Formation of general theories of biological productivity; 5 – Methodological; Max SP – Maximum Secondary production; Min SP – Minimum secondary production; R – Rotifera; Cla – Cladocera; Cop – Copepoda; * Approximated values extracted from graphics; ** Values to each enzymatic methods respectively; *** Values obtained from Melão, M.G.G., 1999 and/or Santos-Wisniewski, M.J. & Rocha, O., 2007; **** Values obtained from abstract. NA – information not available.

Authors	Year	Type	Environment	Ecosystem	Region	Approach	Biodiversity level	Study group	Measure	Species	Max SP (mgDWm ⁻³ day ⁻¹)	Min SP (mgDWm ⁻³ day ⁻¹)	Max SP (mgCm ⁻³ day ⁻¹)	Min SP (mgCm ⁻³ day ⁻¹)
Rocha, O. & Matsumura-Tundisi, T.	1984	Paper	Freshwater	Reservoir	Southeast	4	Population	Copepoda	Not informed	1	NA	NA	45.15	<1.0*
Matsumura-Tundisi, T. & Tundisi, J.G.	1986	Congress abstracts / annals	Freshwater	Lake	Southeast	4	NA	NA	NA	NA	NA	NA	NA	NA
Araujo, M.A. & Pinto-Coelho, R.M.	1988	Paper	Freshwater	Reservoir	Southeast	1	Community	Mesozoop	Pourriot & Champ, 1982	>3	NA	NA	160.29	55.31
Okano, Y.W.	1994	Thesis	Freshwater	Reservoir	Southeast	4	Population	Rotifera	Winberg et al., 1965	NA	NA	NA	0.036***	NA
Araujo, M.A.; Coelho, R.M.P.	1995	Thesis	Freshwater	Reservoir	Southeast	1	Community	Mesozoop	Winberg et al., 1965	>3	NA	NA	212.5	22.8
Tundisi, J.G. & Matsumura-Tundisi, T.	1995	Book chapter	Freshwater	Reservoir	Southeast	4	Population	Copepoda	NA	1	NA	NA	6.26***	NA
Melão, M.G.G.	1997	Thesis	Freshwater	Reservoir	Southeast	4	NA	NA	NA	NA	NA	NA	NA	NA
Rodriguez, M.P.	1997	Thesis	Freshwater	Reservoir	Southeast	4	Population	Rotifera	NA	2	NA	NA	0.054***	NA
Ara, K.; Tommasi, L.R. ³	1998	Thesis	Transitional	Lagoon /Estuary	Southeast	4	Community	Copepoda	NA	>3	NA	NA	NA	NA
Santos-Wisniewski, M.J.; Rocha, O.	1998	Thesis	Freshwater	Reservoir	Southeast	4	Community	Copepoda /Cladocera /Rotifera	NA	NA	NA	NA	NA	NA
Melão, M.G.G., 1999	1999	Book chapter	Freshwater	Reservoir	Southeast	4	Community	Copepoda /Cladocera /Rotifera	Emondson, 1965; Winberg et al., 1965	>3	3.64	0.31	NA	NA
Castilho-Noll, M.S.M & Arcifa, M.S.	2000	Paper	Freshwater	Coastal lagoon	Southeast	4	Population	Rotifera	Rigler & Downing, 1984	1	152	8	NA	NA
Maia-Barbosa, P. M.	2000	Thesis	Freshwater	Lake	North	4	Community	Cladocera	Hart, 1987	5	7.48	2.72	NA	NA
Melão, M.G.G. & Rocha, O.	2000	Paper	Freshwater	Reservoir	Southeast	4	Community	Copepoda /Cladocera /Rotifera	Edmondson, 1965; Winberg et al., 1965	>3	9.6	0.2	NA	NA
Ara, K.	2001	Paper	Transitional	Mangrove /Estuary	Southeast	4	Population	Copepoda	Lopez, 1992; Hirst & Sheader, 1997	1	<12.0*	<0.1*	<0.6*	<0.1*
Ara, K.	2001	Paper	Transitional	Mangrove /Estuary	Southeast	4	Population	Copepoda	Lopez, 1992; Hirst & Sheader, 1997	1	<10.0*	<0.5*	5.354	0.357
Ara, K.	2002	Paper	Transitional	Mangrove /Estuary	Southeast	4	Population	Copepoda	Hirst & Sheader, 1997	1	<2.0*	<0.1*	1.115	0.0002
Pérez-Rodríguez, M. & Matsumura-Tundisi, T.	2002	Paper	Freshwater	Reservoir	Southeast	4	Population	Rotifera	NA	2	0.1914	<0.01*	NA	NA
Santos-Wisniewski, M.J.; Matsumura-Tundisi, T. & Rocha, O.	2002	Congress abstracts /annals	Freshwater	Reservoir	Southeast	4	NA	NA	NA	NA	NA	NA	NA	NA
Rocha, G.R.A.; Rossi-Wongtschowski, C.L.D.B.; Pires-Vanin, A.M.S. & Jarre-Tschmann, A.J.	2003	Paper	Marine	Continental shelf	Southeast	1	Community	Copepoda /Cladocera /Rotifera	Cole et al., 1988	>3	NA	NA	88.2	39.7

Table 2 continued

Authors	Year	Type	Environment	Ecosystem	Region	Approach	Biodiversity level	Study group	Measure	Species	Max SP (mgDWm ⁻³ day ⁻¹)	Min SP (mgDWm ⁻³ day ⁻¹)	Max SP (mgCm ⁻³ day ⁻¹)	Min SP (mgCm ⁻³ day ⁻¹)
Ara, K.	2004	Paper	Transitional	Mangrove /Estuary	Southeast	4	Community	Mesozoop	Hirst & Lampitt, 1998	>3	6.183	24.156	11.106	2.819
Melão, M.G.G. & Rocha, O.	2004	Paper	Freshwater	Reservoir	Southeast	4	Population	Copepoda	Winberg et al., 1965	2	12.5	0.01	NA	NA
Panarelli, E.A.; Henry, R. ²	2004	Thesis	Freshwater	Reservoir	Southeast	4	Community	Cladocera	NA	NA	NA	NA	NA	NA
Rietzler, A.C.; Rocha, O. & Espindola, E.L.G.	2004	Book chapter	Freshwater	Reservoir	Southeast	4	Community	Copepoda /Cladocera /Rotifera	Edmondson, 1965; Winberg et al., 1965	>3	R-0.93/ Cla-108.00/ Cop-82.70	R-0.02/ Cla-11.30/ Cop-19.30	NA	NA
Casanova, S.M.C.; Henry, R. ²	2005	Thesis	Freshwater	Reservoir	Southeast	4	Community	Rotifera	Winberg et al., 1965	NA	NA	NA	NA	NA
Melão, M.G.G. & Rocha, O.	2006	Paper	Freshwater	Reservoir	Southeast	4	Population	Cladocera	Winberg et al., 1965	1	5.08	0.24	NA	NA
Santos, M.A.F.; Melão, M.G.G. & Lombardi, A.T.	2006	Paper	Freshwater	Cultive /Experiment	Southeast	4	Population	Cladocera	Rigler & Downing, 1984	1	1.3 (ug,DW. Female ⁻¹)	0.6 (ug,DW. Female ⁻¹)	NA	NA
Santos-Wisniewski, M.J & Rocha, O.	2007	Paper	Freshwater	Reservoir	Southeast	4	Community	Copepoda	Winberg et al., 1965	>3	23.61	14	NA	NA
Casanova, S.M.C.; Panarelli, E.A & Henry, R.	2009	Paper	Freshwater	Floodplain lake	Southeast	4	Community	Rotifera	Edmondson & Winberg, 1971	>3	9.36	0.047	NA	NA
Melo-Junior, M. de; Lopes, R.M.	2009	Thesis	Marine	Continental shelf	Southeast	4	Community	Copepoda	Hirst & Bunker, 2003	>3	NA	NA	6.48	0.01
Miyashita, L.K.; Melo-Junior, M. de & Lopes, R.M.	2009	Paper	Marine	Continental shelf	Southeast	4	Community	Copepoda	Huntley & Lopez, 1992	>3	NA	NA	14.3	0.19
Brito, S.L.; Maia-Barbosa, P.M.	2010	Thesis	Freshwater	Reservoir	Southeast	4	Community	Copepoda /Cladocera	Hirst & Lampitt, 1998	>3	5.82	0.01	NA	NA
Negretros, N.F.; Rocha, O.	2010	Thesis	Freshwater	Reservoir	Southeast	4	Community	Rotifera	Hart, 1987	>3	0.0321	0.0143	NA	NA
Panarelli, E. A.; Casanova, S. M.C.; Henry, R.	2010	Paper	Freshwater	Floodplain lake	Southeast	4	Community	Cladocera	Edmondson & Winberg, 1971	>3	33.466	0.0175	NA	NA
Pereira, J.B.; Veja-Pérez, L.A.	2010	Thesis	Marine	Estuary	Southeast	4	Community	Copepoda	Hirst & Bunker, 2003	>3	18.7	0.79	NA	NA
Santos, R.M.; Rocha, O.	2010	Thesis	Freshwater	Reservoir	Southeast	1	Community	Copepoda /Cladocera /Rotifera	Edmondson & Winberg, 1971; Winberg et al., 1965	>3	24.788	1.618	NA	NA
Santos, R.M.; Negretros, N.F.; Silva, L.C., Rocha, O. & Santos-Wisniewski, M.L.J.	2010	Paper	Freshwater	Reservoir	Southeast	4	Community	Cladocera	Winberg et al., 1965	>3	28.6	0.02	NA	NA
Avila, T.R.; Bianchini, A. ¹	2011	Thesis	Transitional	Lagoon /Estuary	South	5	Population	Copepoda	Huntley & Lopez, 1992	1	NA	NA	12.5 /9.2/ 7.9**	<1.0 /<1.0 /2.0**



Table 2 continued

Authors	Year	Type	Environment	Ecosystem	Region	Approach	Biodiversity level	Study group	Measure	Species	Max SP (mgDWm ⁻³ .day ⁻¹)	Min SP (mgDWm ⁻³ .day ⁻¹)	Max SP (mgCm ⁻³ .day ⁻¹)	Min SP (mgCm ⁻³ .day ⁻¹)
Magalhães, A.; Nobre, D.S.B.; Bessa, R.S.C.; Pereira, L.C.C. & Costa, R.M.	2011	Paper	Transitional	Mangrove /Estuary	North	4	Community	Copepoda /Cladocera	Hirst & Shearer, 1997	>3	NA	NA	486.3	0.1
Miyashita, L. K.; Lopes, R. M.	2011	Paper	Marine	Continental shelf	Southeast	4	Community	Mesozoop lankton	López-Urrutia et al., 2003	9	NA	NA	0.007	2.70
Abra, J.; Henry, R.	2012	Thesis	Freshwater	Various	Southeast	4	Community	Rotifera	Edmondson & Winberg, 1971	>3	50.4	0.08	NA	NA
Avila, T.R.; Abel, Machado, A.A.de S. & Bianchini, A. 1	2012	Paper	Transitional	Lagoon /Estuary	South	5	Community	Copepoda /Cladocera	Rigler & Downing, 1984	>3	NA	NA	12.5 /9.2 /7.9**	<1.0 /<1.0 /2.0**
Dias, J.D.; Bonecker, C.C.	2012	Thesis	Freshwater	Floodplain lake	South	4	Community	Copepoda /Cladocera /Rotifera	Huntley & Lopez, 1992	>3	R-0.09/ Cla-0.136 /Cop-1.53	R-0.00048/ Cla-0.00008/ Cop-0.075	NA	NA
Muxagata, E.; Amaral, W.J.A & Barbosa, C.N.	2012	Paper	Transitional	Lagoon /Estuary	South	4	Population	Copepoda	Hirst & Downing, 1984	1	NA	NA	3.65	0.4
Magalhães, A.; Nobre, D.S.B.; Bessa, R.S.C.; Pereira, L.C.C & Costa, R.M.	2013	Paper	Transitional	Mangrove /Estuary	North	4	Population	Copepoda	Hirst & Shearer, 1997	2	NA	NA	2385.41	0.48
Viti, T.; Santos-Wisniewski, M.J.	2013	Thesis	Freshwater	Reservoir	Southeast	3	Community	Cladocera /Rotifera	Edmondson 1971; Winberg et al., 1965	>3	Cla-2.325 /Rot-0.641	Cla-0.0407 /Rot-0.00036	NA	NA
Viti, T.; Wisniewski, C.; Orlando, T.C.; Santos-Wisniewski, M.J. dos	2013	Paper	Freshwater	Various	Southeast	4	Population	Cladocera	Winberg et al., 1965	1	12.1	NA	NA	NA
Dias, J. D.; Bonecker, C.C. & Miracle, M.R.	2014	Paper	Freshwater	Floodplain lake	South	4	Community	Rotifera	Edmondson & Winberg 1971;	>3	0.09	0.0001	NA	NA
Duarte, A.K.; Kinas, P.G.; Muxagata, E.; Odebrecht, C.	2014	Paper	Marine	Continental shelf	South	4	Community	Mesozoop lankton	Hirst & Bunker, 2003	NA	4.24	0.18	0.22	0.01
Figueiredo, L.G.P.; Leitão, S.N.	2014	Thesis	Marine	Coral reef	Northeast	1	Population	Copepoda	Rigler & Downing 1984	3	NA	NA	0.1016	0.0066
Magalhães, G.M.O.; Leitão, S.N.	2014	Thesis	Marine	Estuary	Northeast	3	Community	Copepoda	Hirst & Bunker, 2003	>3	NA	NA	12.25	5.75
Negreiros, N.F.; Rocha, O.	2014	Thesis	Freshwater	Lake	North	4	Community	Copepoda /Cladocera /Rotifera	Edmondson & Winberg, 1971; Winberg et al., 1965	>3	383.758	0.175	NA	NA

Table 2 continued

Authors	Year	Type	Environment	Ecosystem	Region	Approach	Biodiversity level	Study group	Measure	Species	Max SP (mgDW m ⁻³ day ⁻¹)	Min SP (mgDW m ⁻³ day ⁻¹)	
Dias, C.O.; Araujo, A.V.; Vianna, S.C.; Loureiro-Fernandes, L.F.; Paranhos, R.; Suzuki, M.S. & Bonecker, S.L.C.	2015	Paper	Marine	Continental shelf	Southeast	4	Community	Copepoda	Hirst & Shearer, 1997	>3	NA	163.2	0.17
Melo, T.X.; Bonecker, C.C.	2015	Thesis	Freshwater	Cultive /Experiment	South	3	Community	Copepoda /Cladocera /Rotifera	Edmondson & Winberg, 1971; Winberg et al., 1965	>3	0.04649	0.02243	NA
Brito, S.L.; Maia-Barbosa, P.M. & Pinto-Coelho, R.M.	2016	Paper	Freshwater	Reservoir	Southeast	4	Community	Copepoda /Cladocera	Hart, 1987	>3	3.76	0.2	NA
Sueby, K.D.; Avila, T.R.; Dower, J.F.; Bianchini, A.; Figueiredo, G.M.	2016	Paper	Marine	Estuary	Southeast	4	Community	Copepoda /Cladocera	Sastri & Dower, 2009	>3	NA	NA	22 ^{*****}
Araujo, A. V.; Dias, C.O. & Bonecker, S.L.C.	2017	Paper	Marine	Estuary	Southeast	4	Community	Copepoda	Rigler & Downing, 1984	>3	NA	NA	13.5
Dias, J.D.; Miracle, M.R. & Bonecker, C.C.	2017	Paper	Freshwater	Floodplain lake	South	4	Community	Copepoda /Cladocera	Edmondson, 1965; Winberg et al., 1965	>3	3.818	0.0243	NA
Teixeira-Amaral, P.; Amaral, W. J.A.; Ortiz, D. O. de; Agostini, V. O.; Muxagata, E.	2017	Paper	Transitional	Lagoon /Estuary	South	4	Population	Copepoda	Rigler & Downing, 1984	2	NA	NA	19.1
de Melo, T. X.; Dias, J. D.; Simões, N. R. & Bonecker, C. C.	2018	Paper	Freshwater	Floodplain lake	South	4	Community	Copepoda /Cladocera /Rotifera	Edmondson & Winberg, 1971; Winberg et al., 1965	>3	<0.05	<0.01	NA

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