

**First report of anatoxin-a producing cyanobacteria in Australia illustrates need to regularly up-date monitoring strategies in a shifting global distribution.**

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**Table S1.** Microscopy, nested PCR, sequencing and ELISA results of a subset of cyanobacterial bloom samples tested in this study. Symbols; +, faint PCR band; ++, strong PCR band; +++, very strong PCR band; NA, not analysed. Previously reported ATX-a producing cyanobacteria characterised by isolation studies, molecular analysis and/or found to carry ATX-a synthetase gene required for ATX-a production are shown in bold. <sup>a</sup>; cell numbers (cells · mL<sup>-1</sup>)/biovolume (mm<sup>3</sup> · L<sup>-1</sup>) of potential ATX-a producers shown in bold.

Sample number	Year sample collected	Location	PCR result	NCBI BLASTn (% identity to <i>anaC</i> gene)	ELISA (µg · L <sup>-1</sup> )	Microscopy <sup>a</sup>
BGAUM1	2016	Yarrowonga	+	NA	NA	<i>Chrysochlorium ovalisporum</i> , <i>Cyanogranis</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <b><i>Cuspidothrix issatschenkoi</i> (736/0.04)</b>
BGAUM2	2016	Yarrowonga	+	NA	NA	<i>C. ovalisporum</i> , <i>Cyanogranis</i> , <i>Planktolyngbya</i> , <i>Snowella</i> , <i>Aphanocapsa</i> , <i>Pseudanabaena</i> , <b><i>C. issatschenkoi</i> (326/0.01)</b> , <b><i>Dolichospermum</i> sp. (117/0.03)</b>
BGAUM3	2016	Yarrowonga	+	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Snowella</i> , <i>Cyanogranis</i>
BGAUM4	2016	Yarrowonga	++	KX096813.1 Uncultured cyanobacterium (100%), JF803655.1 <i>Aphanizomenon</i> sp. 3 (99.7%), KM245024.1 <i>Cuspidothrix issatschenkoi</i> (99.4%), JF803647.1 <i>Dolichospermum circinale</i> 86 (89.7%)	0.2	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Cyanogranis</i> , <i>Aphanocapsa</i> , <i>Pseudanabaena</i>
BGAUM5	2016	Yarrowonga	+	NA	0.2	<i>C. ovalisporum</i> , <i>Cyanogranis</i> , <i>Aphanocapsa</i> , <i>Planktolyngbya</i> , <i>Cyanodictyon</i> , <b><i>Dolichospermum</i> sp. (447/0.19)</b>
BGAUM8	2016	Wahgunyah	+	NA	0.15-0.2	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Merismopedia</i> , <b><i>Dolichospermum</i> sp. (512/0.14)</b>
BGAUM9	2016	Wahgunyah	+	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <i>Cyanogranis</i>
BGAUM11	2016	Mulwala	+	NA	0.2	<i>C. ovalisporum</i> , <i>Aphanocapsa</i> , <i>Planktolyngbya</i> , <b><i>Dolichospermum</i> sp. (75/0.02)</b> , <b><i>C. issatschenkoi</i> (102/0.005)</b>
BGAUM14	2016	MV channel	+++	KP036898.1 Uncultured cyanobacterium (100%),	0.3	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <i>Cyanogranis</i> ,

				KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)		
BGAUM16	2016	MV channel	+	NA	0.15-0.2	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <i>Cyanogranis</i> , <b><i>Dolichospermum</i> sp. (80/0.02)</b>
BGAUM17	2016	Picola	+	NA	<0.15	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Chroococcales</i> , <i>Geltierinema</i> , <b><i>Dolichospermum</i> sp. (220/0.078)</b>
BGAUM19	2016	Numurkah	+	NA	0.2	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Chroococcales</i> , <i>Raphidiopsis raciborskii</i>
BGAUM23	2016	Barmah	+	NA	NA	<i>C.ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <i>C. raciborskii</i> , <b><i>C. issatschenkoi</i> (116/0.006)</b>
BGAUM25	2016	Cobram	++	KX096813.1 Uncultured cyanobacterium (100%), JF803655.1 <i>Aphanizomenon</i> sp. 3 (99.7%), KM245024.1 <i>Cuspidothrix issatschenkoi</i> (99.4%), JF803647.1 <i>Dolichospermum circinale</i> 86 (89.7%)	NA	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> ,
BGAUM27	2016	Numurkah	+	NA	0.8	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <i>R. raciborskii</i>
BGAUM28	2016	Numurkah	+	NA	NA	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <i>R. raciborskii</i>
BGAUM29	2016	Nathalia	+	NA	NA	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> ,
BGAUM30	2016	Barmah	+	NA	0.15-0.2	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <b><i>C. issatschenkoi</i> (77/0.004), <i>Dolichospermum</i> sp. (115/0.032)</b>
BGAUM32	2016	Gunbower	+	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i>
BGAUM33	2016	Echuca	+	NA	NA	<i>C. ovalisporum</i> , <i>Cyanodictyon</i> , <i>Cyanogranis</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <i>Snowella</i>
BGAUMLB33	2011	Merrimu	+	NA	NA	NA
BGAUM35	2016	Pental	+	NA	NA	<i>C.ovalisporum</i> , <i>Aphanocapsa</i> , <i>Planktolyngbya</i>
BGAUM38	2016	Torrumbarry	+++	KX096813.1 Uncultured cyanobacterium (100%), JF803655.1 <i>Aphanizomenon</i> sp. 3 (99.7%), KM245024.1 <i>Cuspidothrix issatschenkoi</i> (99.4%), JF803647.1	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <b><i>C. issatschenkoi</i>, (77/0.004)</b> <i>Aphanothece</i> , <i>R. raciborskii</i>

				<i>Dolichospermum circinale</i> 86 (89.7%)		
BGAUMLB39	2011	Merrimu	+	NA	NA	NA
BGAUMLB40	2011	Pykes Creek	+	NA	NA	NA
BGAUM45	2016	Piangil	+	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <i>Cyanogranis</i> , <i>Microcystis</i> ,
BGAUM46	2016	Nyah	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	0.5	<i>C. ovalisporum</i> , <b><i>C. issatschenkoi</i> (82/0.004)</b> , <i>Planktolyngbya</i> , <i>Cyanogranis</i> , <i>Cyanodictyon</i> , <i>Aphanocapsa</i>
BGAUM48	2016	Nyah	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	0.2	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <i>Cyanogranis</i> , <b><i>C. issatschenkoi</i> (112/0.006)</b>
BGAUM52	2016	Pental	+	NA	NA	<i>C. ovalisporum</i> , <i>Plantolyngbya</i> , <i>Cyanodictyon</i> , <i>Aphanotece</i>
BGAUM56	2016	Yarrowonga	+	NA	NA	<i>C.ovalisporum</i> , <i>Planktolyngbya</i> , <i>Cyanogranis</i> , <b><i>Dolichospermum</i> sp. (200/0.056)</b> , <b><i>C. issatschenkoi</i> (99/0.005)</b>
BGAUM59	2016	Torrumbarry	+	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <i>Cyanogranis</i> , <i>Aphanothece</i> , <i>C. raciborskii</i> & <b><i>Dolichospermum</i> sp. (83/0.02)</b>
BGAUM67	2016	Wemen	+	NA	0.3	<i>Aphanocapsa</i> , <i>Aphanothece</i> , <i>Cyanogranis</i> , <i>C. ovalisporum</i> , <b><i>Dolichospermum</i> sp. (1629/0.7)</b> , <b><i>C. issatschenkoi</i> (106/0.006)</b>
BGAUM77	2016	Wemen	+	NA	NA	<i>Aphanocapsa</i> , <i>Aphanothece</i> , <i>Cyanodicyon</i> , <i>Cyanogranis</i> , <i>Planktolyngbya</i> , <i>C. ovalisporum</i> , <b><i>Dolichospermum</i> sp. (177/0.05)</b> , <b><i>C. issatschenkoi</i> (265/0.01)</b>
BGAUM82	2016	Piangil	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%),	0.5	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <b><i>C. issatschenkoi</i> (1129/0.06)</b> , <i>Pseudanabaena</i> , <i>Cyanogranis</i>

				JF803647.1 <i>D. circinale</i> 86 (89.7%)		
BGAUM86	2016	Pental	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	0.5	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Cyanogranis</i> , <i>Aphanocapsa</i> , <b><i>C. issatschenkoi</i> (93/0.005)</b> , <b><i>Dolichospermum</i> sp. (54/0.023)</b> ,
BGAUM88	2016	Piangil	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	0.5	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Cyanogranis</i> , <b><i>C. issatschenkoi</i> (581/0.03)</b>
BGAUM89	2016	Wemen	+	NA	NA	<i>Aphanocapsa</i> , <i>Planktolyngbya</i> , <i>Cyanogranis</i>
BGAUM92	2016	Mulwala	+	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>cyanogranis</i> ,
BGAUM93	2016	Nyah	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	0.35	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <i>Cyanogranis</i> , <b><i>C. issatschenkoi</i> (2060/0.117)</b> , <i>Pseudanabaena</i> , <i>Aphanothece</i> ,
BGAUM94	2016	Numurkah	+	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Chroococcales</i> , <i>R. raciborskii</i>
BGAUM96	2016	Nathalia	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	1.6	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> ,
BGAUM98	2016	Numurkah	+++	KX096813.1 Uncultured cyanobacterium (100%), JF803655.1 <i>Aphanizomenon</i> sp. 3 (99.7%), KM245024.1 <i>Cuspidothrix issatschenkoi</i> (99.4%), JF803647.1	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Chroococcales</i> , <i>R. raciborskii</i>

				<i>Dolichospermum circinale</i> 86 (89.7%)		
BGAUM99	2016	Barmah	+	NA	NA	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <i>R. raciborskii</i> , <b><i>C. issatschenkoi</i> (116/0.006)</b>
BGAUM102	2016	Leitchville	+	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Chroococcales</i>
BGAUM105	2016	Pental	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	0.2	<i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <i>Cyanogranis</i> , <i>Pseudanabaena</i> , <i>C. ovalisporum</i> , <i>R. raciborskii</i>
BGAUM109	2016	Yarrowonga	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	0.2	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Cyanogranis</i> , <i>Cyanodictyon</i> , <b><i>C. issatschenkoi</i> (588/0.03)</b> , <b><i>Dolichospermum</i> sp. (100/0.007)</b> <i>Microcystis</i>
BGAUM110	2016	Yarrowonga	n	NA	<0.15	<i>C. ovalisporum</i> , <i>Cyanogranis</i> , <i>Planktolyngbya</i> , <i>Pseudanabaena</i> , <i>Aphanothece</i> , <b><i>C. issatschenkoi</i> (114/0.006)</b> , <b><i>Dolichospermum</i> sp. (64/0.001)</b> .
BGAUM135	2016	Pental	n	NA	NA	NA
BGAUM156	2016	Pental	n	NA	<0.15	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <b><i>C. issatschenkoi</i> (4073/0.23)</b> , <b><i>Dolichospermum</i> sp. (940/0.08)</b>
BGAUM160	2016	Yarrowonga	n	NA	<0.15	<i>C.ovalisporum</i> , <i>Cyanogranis</i> , <i>Planktolyngbya</i>
BGAUM165	2016	Wemen	n	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <i>Cyanogranis</i>
BGAUM171	2016	Nyah	n	NA	NA	<i>Planktolyngbya</i> , <i>Cyanogranis</i> , <i>Cyanodictyon</i> , <i>Aphanocapsa</i>
BGAUM175	2016	Wemen	n	NA	NA	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <b><i>C. issatschenkoi</i> (24/0.001)</b>
BGAUMLB176	2012	Rowville	+	NA	NA	NA
BGAUMLB177	2012	Monbulk	+	NA	NA	NA
BGAUMLB179	2011	Greaves Road	+	NA	NA	NA

BGAUMLB180	2011	Greaves Promenade	+	NA	NA	NA
BGAUM186	2016	Yarrowonga	n	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Cyanogranis</i> , <i>Aphanocapsa</i> ,
BGAUM187	2016	Yarrowonga	n	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Cyanogranis</i>
BGAUMLB189	2011	Derrinal	+	NA	NA	NA
BGAUM190	2016	Yarrowonga	n	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Aphanocapsa</i> , <i>Cyanogranis</i> , <b><i>Dolichospermum</i> sp. (84/0.02)</b> and <i>Microcystis</i>
BGAUM194	2016	Mulwala	n	NA	NA	<i>C. ovalisporum</i> , <i>Cyanogranis</i> , <i>Planktolyngbya</i>
BGAUM196	2016	Echuca	n	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Cyanogranis</i>
BGAUMLB201	2011	Greaves Road	+	NA	NA	NA
BGAUM202	2016	Cobram	n	NA	NA	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <i>Pseudanabaena</i>
BGAUM206	2016	Barmah	n	NA	NA	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Chroococcales</i> , <b><i>C. issatschenkoi</i> (525/0.02)</b> , <b><i>Dolichospermum</i> sp. (99/0.007)</b>
BGAUM211	2016	Wemen	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	0.4	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <i>Microcystis</i> , <b><i>C. issatschenkoi</i> (7/0.0004)</b>
BGAUM212	2016	Wemen	+	NA	NA	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <b><i>C. issatschenkoi</i> (20/0.001)</b> , <b><i>Dolichospermum</i> sp. (148/0.063)</b>
BGAUM216	2016	Pental	+	NA	0.3	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Chroococcales</i>
BGAUM217	2016	Barmah	n	NA	NA	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <b><i>C. issatschenkoi</i> (539/0.03)</b> , <b><i>Dolichospermum</i> sp. (299/0.04)</b>
BGAUM225	2016	Piangil	+	NA	0.4	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Chroococcales</i> , <b><i>C. issatschenkoi</i> (542/0.03)</b>
BGAUM239	2016	Nyah	n	NA	NA	NA
BGAUM254	2016	Pental	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i>	0.7	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i>

				(99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)		
BGAUM263	2016	Nyah	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	0.5	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Chroococcales</i>
BGAUM269	2016	Wemen	+	NA	0.3	<i>C. ovalisporum</i> , <i>Microcystis</i> , <i>Chroococcales</i> , <b><i>C. issatschenkoi</i> (43/0.002)</b> , <b><i>Dolichospermum</i> sp. (67/0.02)</b>
BGAUM299	2016	Torrumbarry	+	NA	NA	
BGAUM301	2016	Piangil	n	NA	<0.15	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Chroococcales</i>
BGAUM313	2016	Mulwala	+	NA	NA	<i>C. ovalisporum</i> , <i>Aphanocapsa</i> , <i>Chroococcales</i>
BGAUM324	2016	Leitchville	n	NA	NA	NA
BGAUM372	2016	Nyah	n	NA	0.3	<i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <i>Chroococcales</i>
BGAUM376	2016	Pental	+++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	0.8	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i>
BGAUM700	2017	Picola	+++	JF803653.1 <i>Oscillatoria</i> sp. PCC 9240 (100%), %, KX016036 <i>P.</i> <i>autumnale</i> CAWBG618 (100%)	>4	<i>C. ovalisporum</i> , <i>Aphanocapsa</i> , <i>Planktolyngbya</i>
BGAUM701	2017	Picola	+++	NA	NA	<i>C. ovalisporum</i> , <i>Aphanocapsa</i> , <i>Planktolyngbya</i>
BGAUM702	2017	Goulburn Weir	+++	Poor quality sequence	1	<i>Chroococcales</i> , <i>Planktolyngbya</i> , <i>C. ovalisporum</i> , <i>Romeria</i>
BGAUM704	2017	Kirwans bridge	+++	KT246302.1 Uncultured cyanobacterium (94.7%), JF803647.1 <i>D. circinale</i> 86 (94.7%), JF803655.1	>4	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Planktolyngbya</i> , <b><i>Dolichospermum</i> sp.</b>



				<i>Aphanizomenon</i> sp.3, KM245024.1 <i>C. issatschenkoi</i> (90%)		
BGAUM709	2017	Boonie Doon	++	JF803653.1 <i>Oscillatoria</i> sp. PCC 9240 (100%), %, KX016036 <i>P.</i> <i>autumnale</i> CAWBG618 (100%)	1.5	<i>Planktolyngbya</i> , <i>Pseudanabaena</i> , <i>Aphanocapsa</i> , <i>Merismopidia</i> , <b><i>Phormidium</i> (1178/0.11)</b> , <i>Cyanogranis</i> , <i>Microcystis</i>
BGAUM710	2017	Numurkah	++	KP036898.1 Uncultured cyanobacterium (100%), KM245024.1 <i>C. issatschenkoi</i> (99.7%), JF803655.1 <i>Aphanizomenon</i> sp.3 (99.4%), JF803647.1 <i>D. circinale</i> 86 (89.7%)	0.2	<b><i>Dolichospermum</i> sp. (4,754,287/1331.2)</b> , <i>Microcystis</i> , <i>Planktolyngbya</i> , <i>Pseudanabaena</i> ,
BGAUM711	2017	Waranga	n	NA	<0.15	<i>C. ovalisporum</i> , <i>Aphanothece</i> , <i>Aphanocapsa</i> , <b><i>D.</i></b> <b><i>circinale</i> (7827/1.95)</b> , <i>Cyanogranis</i> , <i>Cyanodictyon</i> , <i>Planktolyngbya</i>
BGAUM714	2017	Katandra	n	NA	<0.15	<i>Chroococcales</i> , <i>C. ovalisporum</i> , <i>Planktolyngbya</i> , <b><i>Phormidium</i> (8947/1.07)</b> , <i>Leptolyngbya</i> , <i>Pseudanabena</i>
BGAUM716	2017	Rushworth	n	NA	<0.15	<i>C. ovalisporum</i> , <i>Chroococcales</i> , <i>Snowella</i> , <i>Psuedanabaena</i> ,
BGAUM720	2017	Numurkah	+++	KT246302.1 Uncultured cyanobacterium (94.7%), JF803647.1 <i>D. circinale</i> 86 (94.7%), JF803655.1 <i>Aphanizomenon</i> sp.3, KM245024.1 <i>C. issatschenkoi</i> (90%)	NA	<i>Chroococcales</i> , <i>Planktolyngbya</i> , <b><i>Dolichospermum</i> sp.</b> <b>(1042/0.17)</b>

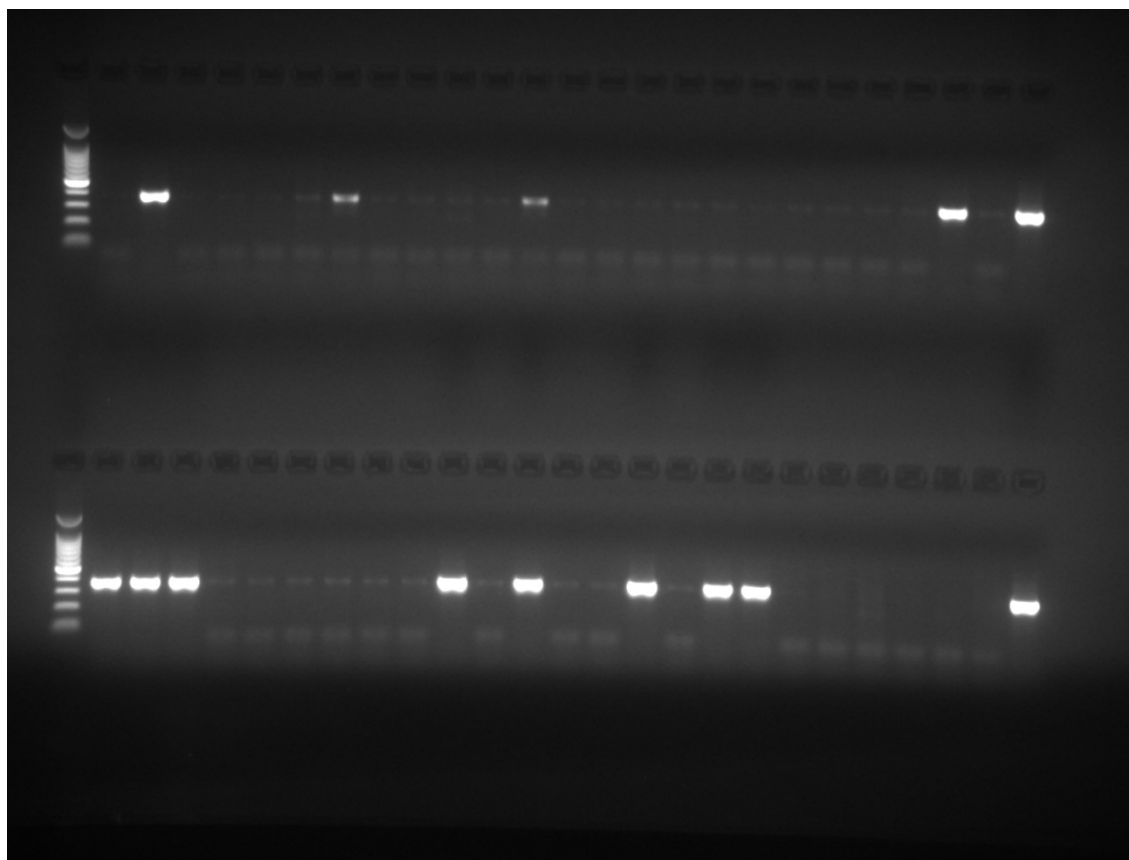


Figure S1. Uncropped, full-length gel image of the nested PCR results of anatoxin-a synthetase C (*anaC*) gene of a subset of cyanobacterial bloom samples separated by 1.5 % agarose gel electrophoresis.