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Table S1. The summary of available ecotoxicity data on individual antibiotics including EC_{50} values based on growth suppression, photosynthetic yield, and oxidative stress markers. The marine and brackish microorganisms are marked in green. (ATC- anhydrotetracycline (tetracycline degradation product), AMP- ampicillin, AMX- amoxicillin, AZM- azithromycin, CAP- chloramphenicol, CFZ- cefazolin, CIP- ciprofloxacin, CLA- clarithromycin, CEP-cephalotin, CLF- clinafloxacin, CLI- clindamycin, CTC – chlortetracycline, CTX- cefotaxime, DOX– doxycycline, DSM- Dihydrostreptomycin, ENR- enrofloxacin, ERY – erythromycin, ETC- pitetracycline (tetracycline degradation product), FLO- florfenicol, FLU- flumequine, GEN- gentamicin, GFX- gatifloxacin, LCM- lincomycin, LMX- lomefloxacin, LVX- levofloxacin, , LZD- linezolid, MEC- mecillinam, MIN – minocycline, MTZ- metronizadole, MXF- moxifloxacin , NOR- norfloxacin, OLX- olaquindox, OTC- oxytetracycline, OFX- ofloxacin, OXO- oxolinic acid, PEN- penicillin, , ROX- roxithomycin, RIF- rifampicin, SAT- sulfacetamide, SCP- sulfachlorpyridazine, SDM- sulfadimidine, SDX sulfadimethoxine, SDZ- sulfadiazine, SFX- sarafloxacin, SLM- sufamerazine, SLP- sulfapyridine, SLT – sulfathiazole, SLX- sulfisoxazole, SMM- sulfamonomethoxine, SMP- sulfamethoxypyridazine, SMT- sulfamethiazole, SMX- sulfamethoxazole, SMZ- sulfamethazine, SPM- spiramycin, STM- streptomycin, SUL- Sulfaguanidine, TCN- tetracycline, TIA – tiamulin, TGC- tigecycline, THI- thiamphenicol, TMP- trimethoprim, TYL- tylosin, QUI- quinocetone, VAN-vancomycin, 7-ACA - 7-aminocephalosporanic acid (degradation product of cephalexin and cefradine)

Antibiotic group	Substance	Microorganism	Species	Exposure time (days)	EC_{50} [mg/L]	Reference
Aminoglycosides	DSM	Green algae	*Raphidocelis subcapitata*	3	0.107	1
	GEN	Green algae	*Raphidocelis subcapitata*	3	19.2	2
	STM	Cyanobacteria	*Synechococcus leopoliensis*	3	0.069	3
		Green algae	*Chlorella vulgaris*	4	20.08	4
			Raphidocelis subcapitata	1	1.5[1]	5
				3	0.133	6
		Cyanobacteria	*Microcystis aeruginosa*	1	0.034[1]	5
				4	0.29	4
				7	0.007	6
Amphenicols	CAP	Green algae	*Chlorella pyrenoidosa*	4	14	7
			Raphidocelis subcapitata	3	137	8
			Isochrysis galbana	4	41	7
			Tetraselmis chui	4	4	7
			Tetraselmis suecica	4	11.16	9
		Diatom	*Chaetoceros gracilis*	15	>0.3	10
	FLO	Green algae	*Raphidocelis subcapitata*	4	5.02	11
				2	2.3-3.7[1]	12
			Chlorella pyrenoidosa	4	215	7
			Isochrysis galbana	4	8	7
			Tetraselmis chui	4	1.3	7
			Tetraselmis suecica	4	9.03	9
		Cyanobacteria	*Microcystis flosaquae*	7	≈ 0.05	13
		Diatom	*Skeletonema costatum*	4	5.043	14
	THI	Green algae	*Raphidocelis*	3	8.86	1

			subcapitata			
			Chlorella pyrenoidosa	4	1238	7
			Isochrysis galbana	4	152	7
			Tetraselmis chui	4	38	7
		Cyanobacteria	*Anabaena cylindrica*	6	1.3	15
			Anabaena flosaquae	6	13	15
			Anabaena variabilis	6	14	15
			Microcystis aeruginosa	6	0.32	15
			Microcystis flosaquae	7	≈ 0.01	13
			Microcystis wesenbergii	6	0.43	15
			Nostoc sp. PCC 7120	6	3.5	15
			Synechococcus leopoliensis	6	0.36	15
			Synechococcus sp.	6	0.67	15
Beta-lactams	AMX	Green algae	*Chlorella sp.*	4	853.54±0.27	16
			Closterium ehrenbergii	4	>50	17
			Chlorella pyrenoidosa	6	>2000	18
			Raphidocelis subcapitata	4	>50	17
				3	>2000	2
				3	>1500	19
				4	3.24	11
				3	>250	20
		Cyanobacteria	*Anabaena flosaquae*	3	0.1	21
			Anabaena cylindrica	6	7.66	18
			Anabaena sp. CPB4337	3	56.3	19
			Microcystis aeruginosa	7	0.0037	20
				7	0.008	22
			Synechococcus leopoliensis	4	0.0022	17
	AMP	Green algae	*Raphidocelis subcapitata*	3	>1000	1
				3	>2000	2
		Cyanobacteria	*Anabaena cylindrica*	6	0.14	15
			Anabaena flosaquae	6	3.3	15
			Anabaena variabilis	6	2.2	15
			Microcystis aeruginosa	6	0.0002	15
				4	0.012	4
			Microcystis wesenbergii	6	0.013	15
			Synechococcus leopoliensis	6	0.083	15
			Synechococcus sp.	6	0.069	15
	CEP	Green algae	*Raphidocelis subcapitata*	3	>600	2
	CTX	Green algae	*Raphidocelis subcapitata*	4	3.15	11
	MEC	Cyanobacteria	*Microcystis aeruginosa*	3	0.06	95
	PEN	Cyanobacteria	*Microcystis aeruginosa*	7	0.006	6

Cephalosporin	CFZ	Green algae	*Raphidocelis subcapitata*	3	>1000	1
	7-ACA*	Green algae	*Raphidocelis subcapitata*	3	0.775	23
Diaminopyrimidine	TMP	Green algae	*Chlorella vulgaris*	3	90.86	24
				4	>100	25
			Desmodesmus subspicatus	4	>79	25
			Raphidocelis subcapitata	4	83.8	26
				3	129	27
				3	80.3	1
				4	>89.1	25
				1	>9[1]	5
				3	0.104	28
				3	130	20
				3	110	95
		Cyanobacteria	*Anabaena flosaquae*	3	253	27
				4	>99	25
				6	>200	15
				3	183.7	21
			Anabaena variabilis	6	11	15
			Microcystis aeruginosa	7	112	20
				6	150	15
				1	6.9[1]	5
				3	112	95
			Nostoc sp. PCC 7120	6	53	15
			Synechococcus leopoliensis	3	182	21
				4	>100	25
		Diatom	*Navicula pelliculosa*	4	20.4 39.5[1]	25
			Phaeodactylum tricornutum	4	21.6	25
				3	2.4	29
Glycopeptide	VAN	Green algae	*Raphidocelis subcapitata*	3	724	2
Lincosamides	CLI	Cyanobacteria	*Anabaena flosaquae*	3	0.0296	21
			Raphidocelis subcapitata	3	0.01	30
	LCM	Green algae	*Chlorella vulgaris*	4	>91.7	25
			Desmodesmus subspicatus	4	>76.7 32.2[1]	25
			Raphidocelis subcapitata	4	9.8 4.8[1]	25
				4	1.51	17
				3	0.07	31
		Cyanobacteria	*Anabaena flosaquae*	4	0.487 1.93[1]	25

				4	0.195	17
			Synechococcus leopoliensis	4	0.038	25
		Diatom	*Cylindrotheca closterium*	5	14.16	32
			Navicula ramosissima	5	11.8	32
			Navicula pelliculosa	4	>62.5	25
			Cyclotella meneghiniana	4	1.63	17
			Phaeodactylum tricornutum	4	>91.7	25
Macrolides	AZM	Green algae	*Chlorella sp.*	4	0.33±0.05	16
			Raphidocelis subcapitata	4	8.07	11
				4	0.019	33
	CLA	Green algae	*Chlorella sp.*	4	0.59±0.004	16
			Desmodesmus subspicatus	3	0.0371	34
			Raphidocelis subcapitata	3	0.046	28
				3	0.23	30
				3	0.0069	35
				4	0.011	36
				4	0.012	33
				3	0.002	31
		Cyanobacteria	*Anabaena flosaquae*	3	0.0121	34
				3	0.0132	21
			Synechococcus leopoliensis	3	0.0152	21
	ERY	Green algae	*Chlorella vulgaris*	3	33.8	1
				4	85.7	37
			Chlamydomonas reinhardtii	3	0.36 0.59[1] <0.1[2]	38
			Raphidocelis subcapitata	3	0.35	19
				3	0.02	31
				3	0.0366	1
				2	0.13-0.24[1]	12
		Cyanobacteria	*Anabaena cylindrica*	6	0.035	15
			Anabaena sp. CPB4337	3	0.022	19
			Anabaena flosaquae	3	0.3449	21
				6	0.27	15
			Anabaena variabilis NIES-23	6	0.43	15
			Microcystis aeruginosa	6	0.023	15
				4	0.023	39
			Microcystis wesenbergii	6	0.023	15

			Nostoc sp. PCC 7120	6	0.02	15
			Synechococcus leopoliensis	6	0.16	15
			Synechococcus sp.	6	0.23	15
				5	0.1	43
		Diatom	*Phaeodactylum tricornutum*	3	1.31 8.26[1] <0.1[2]	38
			Chaetoceros gracilis	15	>0.5	10
	ROX	Green algae	*Chlorella pyrenoidosa*	4	2.87	44
			Raphidocelis subcapitata	3	0.047	28
	SPM	Green algae	*Chlorella pyrenoidosa*	6	4.58	18
			Raphidocelis subcapitata	3	2.3	6
		Cyanobacteria	*Anabaena cylindrica*	6	0.0384	18
			Microcystis aeruginosa	7	0.005	6
				7	0.00115	22
				7	0.00114	13
	TYL	Green algae	*Chlorella vulgaris*	4	>74.3	25
			Desmodesmus subspicatus	4	35 16[1]	25
			Raphidocelis subcapitata	4	4.3 1.9[1]	25
				1	0.0089[1]	5
				3	1.38	6
				3	0.21	28
				3	0.411	1
		Cyanobacteria	*Anabaena flosaquae*	4	0.054 0.3[1]	25
			Microcystis aeruginosa	7	0.034	6
				1	0.29	5
			Synechococcus leopoliensis	4	0.083	25
		Diatom	*Cylindrotheca closterium*	5	0.27	32
			Navicula ramosissima	5	0.99	32
			Navicula pelliculosa	4	4.03 6.7 [1]	25
			Phaeodactylum tricornutum	4	5.22	25
Nitroimidazoles	MTZ	Green algae	*Chlorella vulgaris*	3	12.5	40
			Raphidocelis subcapitata	4	3.22	11
				3	40.4	40
Oxazolidinones	LZD	Cyanobacteria	*Anabaena flosaquae*	3	2.12	21

Pleuromutilins	TIA	Green algae	*Raphidocelis subcapitata*	3	0.165	6
		Cyanobacteria	*Microcystis aeruginosa*	7	0.003	6
Rifamycins	RIF	Green algae	*Raphidocelis subcapitata*	4	3.91	11
Sulphonamides	SCP	Green algae	*Scenedesmus vacuolatus*	1	32.25	41
	SAT	Green algae	*Chlorella vulgaris*	2	13.28	47
	SDM	Green algae	*Scenedesmus vacuolatus*	1	19.52	41
	SDZ	Green algae	*Chlorella vulgaris*	2	1.22	47
			Isochrysis galbana	4	1.44	42
			Raphidocelis subcapitata	3	7.8	20
				3	2.19	1
			Scenedesmus vacuolatus	1	2.22	41
		Cyanobacteria	*Microcystis aeruginosa*	7	0.135	20
		Diatom	*Phaeodactylum tricornutum*	4	0.11	42
	SDX	Green algae	*Chlorella vulgaris*	3	11.2	1
				3	7.65	24
			Raphidocelis subcapitata	3	2.3	1
			Scenedesmus vacuolatus	1	9.85	41
		Cyanobacteria	*Anabaena cylindrica*	6	480	15
			Anabaena flosaquae	6	>2000	15
			Anabaena variabilis	6	1500	15
			Microcystis aeruginosa	6	500	15
			Microcystis wesenbergii	6	470	15
			Nostoc sp. PCC 7120	6	>2000	15
			Synechococcus leopoliensis	6	1100	15
			Synechococcus sp.	6	760	15
	SLM	Green algae	*Scenedesmus vacuolatus*	1	11.9	41
	SLP	Green algae	*Scenedesmus vacuolatus*	1	5.28	41
			Chlorella vulgaris	3	1	24
	SLT	Green algae	*Chlorella vulgaris*	2	17.7	47
			Scenedesmus vacuolatus	1	13.1	41
	SLX	Green algae	*Scenedesmus vacuolatus*	1	18.98	41
	SMM	Green algae	*Raphidocelis subcapitata*	4	5.3	11

	SMP	Green algae	*Scenedesmus vacuolatus*	1	3.82	41
	SMT	Green algae	*Scenedesmus vacuolatus*	1	24.94	41
	SMZ	Green algae	*Raphidocelis subcapitata*	3	0.103	28
	SMX	Green algae	*Scenedesmus obliquus*	4	0.15	46
			Chlorella vulgaris	2	1.57	47
				3	1.51	24
			Raphidocelis subcapitata	3	0.52	31
				4	0.146	48
				3	0.103	28
				1	>9[1]	5
				3	1.53	1
			Scenedesmus obliquus	4	0.15	46
			Scenedesmus vacuolatus	1	1.54	41
		Cyanobacteria	*Anabaena flosaquae*	3	73.9	21
			Microcystis aeruginosa	1	0.55	5
			Synechococcus leopoliensis	4	0.0268	48
				3	1.18	21
		Diatom	*Cyclotella meneghiniana*	4	0.0024	48
	SUL	Green algae	*Scenedesmus vacuolatus*	1	3.42	41
Tetracyclines	ATC*	Green algae	*Chlorella vulgaris*	4	5.96	49
	CTC	Green algae	*Ankistrodesmus fusiformis*	4	3.23 ± 0.53	50
			Chlorella pyrenoidosa	4	32.6	51
			Raphidocelis subcapitata	4	1.19 ± 0.53	50
				3	3.1	6
				3	0.103	28
				3	0.0047	23
		Cyanobacteria	*Microcystis aeruginosa*	7	0.05	6
				9	0.01-1	52
				4	13.1	51
	DOX	Green algae	*Raphidocelis subcapitata*	4	5.92	11
	ETC*	Green algae	*Chlorella vulgaris*	4	8.42	49
	MIN	Cyanobacteria	*Microcystis aeruginosa*	12	0.421	53
	OTC	Green algae	*Ankistrodesmus fusiformis*	4	7.15	54
				4	4.17 ± 3.79	50
			Chlorella vulgaris	2	6.4	55
				3	7.05	1
			Isochrysis galbana	4	6.43	42

			Raphidocelis subcapitata	4	3.1	56
				3	0.17	31
				2	0.47-2.0[1]	12
				4	0.92 ± 0.30	54
				3	1.04	27
				4	0.64 ± 0.38	50
				4	5.07	11
				1	0.6[1]	5
				3	0.342	1
				3	4.5	20
			Tetraselmis suecica	4	17.25	9
		Cyanobacteria	*Anabaena cylindrica*	6	0.032	15
			Aphanizomenon flosaquae	3	2.7	27
				6	0.39	15
			Anabaena variabilis	6	0.36	15
			Microcystis aeruginosa	7	0.207	20
				6	0.23	15
				7	0.09	6
				1	5.4[1]	5
				9	0.01-1	52
			Microcystis wesenbergii	6	0.35	15
			Nostoc sp. PCC 7120	6	7.0	15
			Synechococcus leopoliensis	6	1.1	15
			Synechococcus sp.	6	2.0	15
		Diatom	*Phaeodactylum tricornutum*	4	1.73	42
	TCN	Green algae	*Chlorella vulgaris*	4	7.73	49
			Raphidocelis subcapitata	3	3.31	19
				3	0.103	28
				7	>1	57
				3	2.2	6
				3	0.005	23
		Cyanobacteria	*Anabaena* sp.CPB4337	3	6.2	19
			Microcystis aeruginosa	3	0.09	6
				7	>1	57
				9	0.01-1	52
	TGC	Green algae	*Chlorella pyrenoidosa*	6	6.2	18
		Cyanobacteria	*Anabaena cylindrica*	6	0.062	18
Quin-olones	CIP	Green algae	*Chlorella vulgaris*	4	29.09	58
				4	20.6	59
			Desmodesmus subspicatus	3	0.008	60
				3	8.8	61
			Raphidocelis subcapitata	3	11.3	2

			5	18.7	62
			4	39	63
			4	4.67	11
			3	0.103	28
			7	2.97	95
	Cyanobacteria	*Anabaena flosaquae*	3	0.0102	60
			3	0.0373	21
		Microcystis aeruginosa		0.01724	64
			3	0.005	95
			5	0.017	62
	Diatom	*Cylindrotheca closterium*	5	55.43	32
		Navicula ramosissima	5	72.12	32
CLF	Green algae	*Raphidocelis subcapitata*	5	1.1	62
	Cyanobacteria	*Microcystis aeruginosa*	5	0.103	62
ENR	Green algae	*Ankistrodesmus fusiformis*	4	10.6 ± 1.28	50
		Chlorella vulgaris	4	32.49	65
			4	124.5	37
		Desmodesmus subspicatus	2	5.57	60
		Micractinium resseri	4	28.85	65
		Raphidocelis subcapitata	5	3.1	62
			4	5.18 ± 3.80	50
		Scenedesmus obliquus	4	57.61	65
			3	38 (20°C) 41 (30°C)	66
			4	59.16	67
	Cyanobacteria	*Anabaena flosaquae*	3	0.173	60
		Microcystis aeruginosa	5	0.049	62
		Microcystis aeruginosa SAG 1785	3	0.031	66
		Microcystis aeruginosa PCC7806	3	0.029 (30°C) 0.047 (20°C)	66
		Microcystis aeruginosa V131	3	0.029	66
FLU	Green algae	*Raphidocelis subcapitata*	1	16 [1]	5
			4	2.6	56
			5	5	62
			3	5.0	20
			2	8.1-9.3 [1]	12
	Cyanobacteria	*Microcystis aeruginosa*	5	1.960	62
			7	0.159	20
			1	>8.8 [1]	5
GFX	Cyanobacteria	*Microcystis aeruginosa*	4	25.3	68
LVX	Green algae	*Raphidocelis subcapitata*	5	7.4	62
			3	>120	19

				3	1.2	36
		Cyanobacteria	*Anabaena* sp. CPB4337	3	4.8	19
			Microcystis aeruginosa	5	0.0079	62
			Microcystis flosaquae	7	>0.01<0.04[2]	69
	LMX	Green algae	*Raphidocelis subcapitata*	5	22.7	62
		Cyanobacteria	*Microcystis aeruginosa*	5	0.186	62
	MXF	Cyanobacteria	*Microcystis aeruginosa*	4	60.34	68
	NOR	Green algae	*Chlorella vulgaris*	3	10.4	1
			Raphidocelis subcapitata	3	>80	19
				3	16.6	1
				4	3.73	11
				3	0.103	28
			Scenedesmus obliquus	4	50.18	93
		Cyanobacteria	*Anabaena* sp. CPB4337	3	5.6	19
			Anabaena cylindrica	6	0.053	15
			Anabaena flosaquae	6	0.29	15
			Anabaena variabilis	6	0.19	15
			Microcystis aeruginosa	6	0.062	15
			Microcystis wesenbergii	6	0.038	15
			Nostoc sp. PCC 7120	6	1.7	15
			Synechococcus leopoliensis	6	0.63	15
			Synechococcus sp.	6	0.63	15
	OFX	Green algae	*Raphidocelis subcapitata*	3	12.1	62
				4	4.93	11
				3	1.44	31
		Cyanobacteria	*Microcystis aeruginosa*	5	0.021	62
			Synechococcus leopoliensis	4	0.016	48
		Diatom	*Cyclotella meneghiniana*	4	0.09	48
	OXO	Green algae	*Raphidocelis subcapitata*	3	16	20
				2	37[1]	12
		Cyanobacteria	*Microcystis aeruginosa*	7	0.180	20
	SFX	Green algae	*Raphidocelis subcapitata*	3	16	20
		Cyanobacteria	*Microcystis aeruginosa*	7	0.015	20
Quinoxa-lines	OLX	Green algae	*Raphidocelis subcapitata*	3	40	6
		Cyanobacteria	*Microcystis aeruginosa*	7	5.1	6
	QUI	Green algae	*Raphidocelis subcapitata*	4	4.82	11

1- photosynthetic activity, 2 – oxidative stress, * – degradation products

Table 2S. The summary of available ecotoxicity data on individual antibiotics regarding various toxicity markers. The marine and brackish microorganisms are marked in green. (ATC- anhydrotetracycline (tetracycline degradation product), AMP- ampicillin, AMX- amoxicillin, CAP-chloramphenicol, CEF- cefradine, CIP- ciprofloxacin, CLA- clarithromycin, CTC – chlortetracycline, ENR- enrofloxacin, ERY – erythromycin, ETC- pitetracycline (tetracycline degradation product), FLO- florfenicol, , GEN- gentamicin, GFX- gatifloxacin, KAN- kanamycin, LCM- lincomycin, MXF- moxifloxacin , NOR- norfloxacin, OTC- oxytetracycline, OFX- ofloxacin, ROX- roxithomycin, SDZ- sulfadiazine, SMX-sulfamethoxazole, SMZ-sulfamethazine, SPM- spiramycin, STM- streptomycin, TCN- tetracycline, TGC- tigacycline, THI- thiamphenicol, TMP- trimethoprim, TYL-tylosin)

Antibiotic group	Substance	Microorganism	Species	Exposure time (days)	Endpoint	Effective concentration [mg/L]	Reference
Aminoglycosides	GEN	Cyanobacteria	*Synechocystis* sp.	1	GSH precursor and cellular GSH content	0.01[1]	70
	KAN	Green algae	*Dictyosphaerium pulchellum*	11	Chlorophyll fluorescence kinetics, protein content	5[2,9]	71
			Micractinium pusillum	11	Chlorophyll fluorescence kinetics, protein content	5[9]	71
		Green algae	*Chlorella vulgaris*	4	Chlorophyll and phycocyanobilin content, MDA content and electrolyte leakage (membrane damage), SOD, POD, CAT activities, photosynthesis-related gene transcription inhibition	10[1,5]	4
	STM	Green algae	*Dunaliella* sp.	22	Oxygen evolution, chlorophyll content, chlorophyll fluorescence kinetics	>50[2,5]	72
			Picochlorum oklahomensis	22	Oxygen evolution, chlorophyll content, chlorophyll fluorescence kinetics (F_v/F_m)	>50[2,5]	72
		Cyanobacteria	*Microcystis aeruginosa*	4	Chlorophyll and phycocyanobilin content, MDA content and electrolyte leakage (membrane damage), SOD, POD, CAT activities, photosynthesis-related gene transcription inhibition	0.1[1,5]	4

Amphenicols	CAP	Green algae	*Tetraselmis suecica*	4	FDA metabolic activity, chlorophyll fluorescence kinetics, chlorophyll *a* content	2.52[2,5,10]	9
	FLO	Green algae	*Tetraselmis suecica*	4	FDA metabolic activity, chlorophyll fluorescence kinetics, chlorophyll *a* content	2.5[2,5]	9
		Cyanobacteria	*Microcystis flosaquae*	7	CAT, SOD activity, MDA content, chlorophyll a content, chlorophyll fluorescence kinetics (F_v/F_m)	0.000001-0.001[5] >0.001[1,2]	13
		Diatom	*Skeletonema costatum*	4	Chlorophyll *a* content, chlorophyll fluorescence kinetics (F_v/F_m), ROS overproduction, FDA metabolic activity (membrane damage)	>1.0[1] >4.0[2,5]	14
	THI	Cyanobacteria	*Microcystis flosaquae*	7	CAD, SOD activity, MDA content, chlorophyll a content, chlorophyll fluorescence kinetics (F_v/F_m)	0.000001-0.001[5] >0.001[1,2]	13
Beta-lactams	AMX	Green algae	*Chlorella pyrenoidosa*	6	SOD, CAT activity, MDA content, chlorophyll content	200[1]	18
		Cyanobacteria	*Anabaena cylindrica*	6	SOD, CAT activity, MDA content, chlorophyll content	0.015[1]	18
			Microcystis aeruginosa	7	Microcystins synthesis alteration	0.0001 to 0.001[7]	22
				7	SOD, CAD, POD activity	0.0005[1]	73
				30	Photosynthetic activity and microcystins synthesis stimulation, proteomic responses, metabolism of carbohydrate and nucleoside phosphate	0.001-0.0003[2,7]	74
				1	GSH simulation, SOD activity, MDA content, chlorophyll *a* content	20[1]	75
			Synechocystis sp.	0.5 (12h)	Chlorophyll fluorescence kinetics, O_2 evolution	5[2,11]	76

	AMP	Green algae	*Dunaliella* sp.	22	Oxygen evolution, chlorophyll content, chlorophyll fluorescence kinetics (F_v/F_m)	>50[2,5]	72
			Picochlorum oklahomensis	22	Oxygen evolution, chlorophyll content, chlorophyll fluorescence kinetics (F_v/F_m)	>50[2,5]	72
		Cyanobacteria	*Microcystis aeruginosa*	30	Growth stimulation and microcystin production, CAD, SOD activity, MDA content	0.0003[7]	77
				7	Microcystin synthesis, chlorophyll *a* content	0.00025 to 0.0025[7]	45
	CEF	Green algae	*Scenedesmus obliquus*	6	Chlorophyll *a* content	0.5[5]	78
		Cyanobacteria	*Microcystis aeruginosa*	1	GSH simulation, SOD activity, MDA content, chlorophyll *a* content	10[1]	75
				6	Chlorophyll *a* content	0.5[5]	78
Diaminopyrimidine	TMP	Green algae	*Desmodesmus subspicatus*	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	16[2]	25
			Raphidocelis subcapitata	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	1.9[2]	25
		Cyanobacteria	*Anabaena flosaquae*	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	>99[2]	25
		Diatom	*Navicula pelliculosa*	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	39.5[2]	25
Lincosamides	LCM	Green algae	*Desmodesmus subspicatus*	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	32.2[2]	25
			Raphidocelis subcapitata	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	4.8[2]	25

		Cyanobacteria	*Anabaena flosaquae*	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	1.93[2]	25
		Diatom	*Navicula pelliculosa*	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	>62.5[2]	25
Macrolides	CLA	Green algae	*Chlorella vulgaris*	7	SOD, CAT, GSH, GST, GPX activity, chlorophyll *a*, *b*, and carotenoid contents	0.04[1] 0.02[5]	79
			Raphidocelis subcapitata	5	SOD activity and LPO levels, cellular energy allocation (CEA)	0.0056 (LOEC)	81
				7	SOD, CAT, GSH, GST, GPX activity, chlorophyll *a*, *b*, and carotenoid contents	0.02[1,5]	79
	ERY	Green algae	*Chlorella vulgaris*	4	MDA and GS contents, chlorophyll *a* content	0.021[1,5]	77
			Chlamydomonas reinhardtii	3	Chlorophyll fluorescence kinetics, ROS production, the cell membrane integrity	<0.1[1] 0.59[2]	38
			Raphidocelis subcapitata	4	CAD, SOD, GPX, GST activity, the ascorbate - glutathione cycle, the xanthophyll cycle	0.3 [1] 0.3 [3] 0.06 [4]	80
				5	SOD activity and LPO levels, cellular energy allocation (CEA)	0.012 (LOEC)	81
				3	Chlorophyll fluorescence kinetics, chlorophyll a content, hyperpolarization of mitochondrial membrane, ROS activity, GSH content	0.002 [5] 0.038[1,2]	82
				4	Chlorophyll *a* content, photosynthetic rate, chlorophyll biosynthesis inhibition	0.3[2] 0.18[5] 0.06 [6]	83

	Cyanobacteria	*Microcystis aeruginosa*	4	ROS, MDA, SOD content, microcystins synthesis, Chlorophyll *a* and carotenoid content, chlorophyll fluorescence kinetics	0.1510[1] >0.01[2,7] 0.02[5]	94
			7	Cell membrane hyperpolarization, chlorophyll *a* fluorescence, microcystin synthesis	0.0005[2] and 0.005[2] 0.0005[7] to 0.5[7]	92
		Microcystis flosaquae	8	SOD, CAT, MDA activity, chlorophyll a fluorescence (Fv/Fm) , chlorophyll *a* content	0.04[1] 0.001–0.1[2]	85
	Diatom	*Phaeodactylum tricornutum*	3	Chlorophyll fluorescence kinetics, ROS production, the cell membrane integrity	<0.1[1] 8.26[2]	38
ROX	Green algae	*Chlorella pyrenoidosa*	4 (21)	SOD, CAT activity, MDA content, chlorophyll biosynthesis inhibition,	1-2[1,6]	41
SPM	Green algae	*Chlorella pyrenoidosa*	6	SOD, CAT activity, MDA content, chlorophyll content	5[1]	92
	Cyanobacteria	*Anabaena cylindrica*	6	SOD, CAT activity, MDA content, chlorophyll content	0.1[1]	92
		Microcystis aeruginosa	7	Microcystins synthesis alteration	0.0001 to 0.001[7]	22
			7	SOD, CAD, POD activity	0.0005 to 1[1]	73
			7	Microcystin synthesis, chlorophyll *a* content	0.00025 to 0.0025[7]	45
			30	Growth stimulation and microcystin production, oxidative stress (CAD, SOD activity, MDA content)	0.0003[7]	37
TYL	Green algae	*Desmodesmus subspicatus*	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	16[2]	25
		Raphidocelis subcapitata	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	1.9[2]	25

		Cyanobacteria	*Anabaena flosaquae*	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	0.3[2]	25
		Diatom	*Navicula pelliculosa*	4	O_2 evolution, carotenoids and chlorophyll *a* content, chlorophyll fluorescence kinetics	6.7[2]	25
Sulphonamides	SDZ	Green algae	*Chlorella vulgaris*	16	Chlorophyll fluorescence kinetics (F_v/F_m), SOD, CAT, MDA activity, chlorophyll *a* content	5[5] 5[1]	86
		Cyanobacteria	*Chrysosporum ovalisporum*	16	Chlorophyll fluorescence kinetics (F_v/F_m), SOD, CAT, MDA activity, chlorophyll a content	1[5] mg/L 50[1]	86
				11	Phycobiliproteins content, and alkaline phosphatase (ALP) activity, chlorophyll *a* content	1[5]	92
	SMZ	Green algae	*Chlorella vulgaris*	16	Chlorophyll fluorescence kinetics (F_v/F_m), SOD, CAT, MDA activity, chlorophyll a content	5[5] 50[1]	86
			Scenedesmus obliquus	4	The unsaturated fatty acid methyl esters (FAMEs) content, the chlorophyll and carotenoid content	>0.15[5]	46
		Cyanobacteria	*Chrysosporum ovalisporum*	16	Chlorophyll fluorescence kinetics (Fv/Fm), SOD, CAT, MDA activity, chlorophyll a content	20[1]	86
				11	Phycobiliproteins (PBPs) content, and alkaline phosphatase (ALP) activity, chlorophyll *a* content	1[5]	18
	SMX	Green algae	*Raphidocelis subcapitata*	4	Chlorophyll *a* content, photosynthetic rate, chlorophyll biosynthesis inhibition	>1.5[5] 0.5[6]	83
				4	CAD, SOD, GPX and GST activity, the ascorbate - glutathione cycle, the xanthophyll cycle	2.5[1] <1.5[3] 0.5[4]	80

				5	SOD activity and LPO levels, cellular energy allocation (CEA)	0.4[1]	81
			Scenedesmus obliquus	4	The unsaturated fatty acid methyl esters (FAMEs) content, the chlorophyll and carotenoid content	>0.15[5]	46
		Cyanobacteria	*Microcystis aeruginosa*	7	Cell membrane hyperpolarization, chlorophyll a fluorescence, microcystin synthesis	0.05[2,7] and 0.125[2,7]	84
Tetracyclines	ATC*	Green algae	*Chlorella vulgaris*	4	Cell structure, SOD and CAT content	> 5[1] < 2.5 [8] 5[1]	49
	CTC	Green algae	*Scenedesmus obliquus*	10	Chlorophyll *a* content	0.5[5]	87
		Cyanobacteria	*Microcystis aeruginosa*	9	The cell density, chlorophyll *a* and protein content, SOD, CAT, POD activities	0.05[5,9] 0.01[1]	52
				6	Microcystin synthesis	1.86[7] (EC_{10})	88
				27	Microcystin synthesis	0.1-0.25	89
				10	Chlorophyll *a* content	0.5[5]	87
	ETC*	Green algae	*Chlorella vulgaris*	4	Cell structure, SOD and CAT content	> 5[1] < 2.5[8] 10[1]	49
	OTC	Green algae	*Chlorella vulgaris*	11	Chlorophyll fluorescence kinetics (F_v/F_m), chlorophyll *a* and pheophytin content	0.1[5] 1[2]	90
			Tetraselmis suecica	4	FDA metabolic activity, chlorophyll fluorescence kinetics, chlorophyll *a* content	5[5] 2.5[2] 7.5[10]	9
		Cyanobacteria	*Microcystis aeruginosa*	11	Chlorophyll fluorescence kinetics (F_v/F_m) ,chlorophyll a and pheophytin content	4[2,4]	90

			9	The cell density, chlorophyll *a* and protein content, SOD, CAT, POD activities	0.05[5,9] 0.2[1]	52
			6	Microcystin synthesis	3.02[7](EC_{10})	88
			27	Microcystin synthesis	0.1-0.25	89
		Nodularia spumigena	11	Chlorophyll fluorescence kinetics (F_v/F_m), chlorophyll *a* and pheophytin content	0.1[5] 1[2]	90
	Diatom	*Phaeodactylum tricornutum*	11	Chlorophyll fluorescence kinetics (F_v/F_m), chlorophyll a and pheophytin content	1[5] 0.1[2]	90
TCN	Green algae	*Chlorella vulgaris*	4	Cell structure, SOD and CAT content	> 5[1] < 2.5[8] 5[1]	49
		Dictyosphaerium pulchellum	11	Chlorophyll fluorescence kinetics, protein content	5[2,9]	71
		Micractinium pusillum	11	Chlorophyll fluorescence kinetics, protein content	30[9] 20[2]	71
		Raphidocelis subcapitata	7	Chlorophyll fluorescence kinetics (F_v/F_m), SOD, MDA content	>0.2[2] 1[1]	28
	Cyanobacteria	*Microcystis aeruginosa*	7	Chlorophyll fluorescence kinetics (F_v/F_m), SOD, MDA content	> 0.5[2] 0.1[1]	28
				Microcystin synthesis	0.63[7] (EC_{10})	88
			27	Microcystin synthesis	0.1-0.25	89
			9	The cell density, chlorophyll *a* and protein content, SOD, CAT, POD activities	0.05[5,9] 0.2[1]	52
TGC	Green algae	*Chlorella pyrenoidosa*	6	SOD, CAT activity, MDA content, chlorophyll content	2[1]	92
	Cyanobacteria	*Anabaena cylindrica*	6	SOD, CAT activity, MDA content, chlorophyll content	0.1[1]	92

Quinolones	CIP	Green algae	*Raphidocelis subcapitata*	4	CAD, SOD, GPX and GST activity, the ascorbate - glutathione cycle, the xanthophyll cycle	2.5 [1] 1.5 [3,4]	80
				5	SOD activity and LPO levels, cellular energy allocation (CEA),	0.62 mg/L (LOEC)	81
				4	Chlorophyll *a* and carotenoid content, photosynthetic rate, chlorophyll biosynthesis inhibition	>1.5[5] mg/L 1.0 [6]	83
	ENR	Green algae	*Chlorella vulgaris*	16	Chlorophyll fluorescence kinetics (F_v/F_m), SOD, CAT, MDA activity, chlorophyll a content	5[5] mg/L 20[2] 1[1]	86
				4	Chlorophyll *a*, carotenoid, and MDA content	20[1] 1-100[5] mg/L	65
				4	MDA and GSH contents, chlorophyll *a* content	0.021[1,5] mg/L	37
			Micractinium resseri	4	Chlorophyll *a*, carotenoid, and MDA content	20[1] 1-100[5] mg/L	65
			Scenedesmus obliquus	4	Chlorophyll *a*, carotenoid, and MDA content	20[1] 1-100[5] mg/L	65
			Scenedesmus obliquus UTEX 78	3	Chlorophyll *a* content, chlorophyll fluorescence kinetics	24.6[5] (EC_{10}) 49.6[2] (EC_{10})	66
			Scenedesmus obliquus MPI	3	Chlorophyll *a* content, chlorophyll fluorescence kinetics	30.2[5] (EC_{10}) 49.8[2] (EC_{10})	66
			Scenedesmus obliquus SAG276/3a	3	Chlorophyll *a* content, chlorophyll fluorescence kinetics	36.9[5] (EC_{10}) 17.1[2] (EC_{10})	66
				4	SOD and MDA content, superoxide anion (O^-_2) generation rate, chlorophyll, carotenoids, and protein content	80[5] 48[1,9]	67

	Cyanobacteria	*Chrysosporum ovalisporum*	16	Chlorophyll fluorescence kinetics (F_v/F_m), SOD, CAT, MDA activity, chlorophyll a content	1[2] 50[1]	86
			11	Phycobiliproteins (PBPs) content, and alkaline phosphatase (ALP) activity, chlorophyll *a* content	1[5]	92
		Microcystis aeruginosa SAG 1785	3	Chlorophyll *a* content, chlorophyll fluorescence kinetics	0.008[2] (EC_{10})	66
		Microcystis aeruginosa PCC7820	3	Chlorophyll *a* content, chlorophyll fluorescence kinetics	0.021[5] (EC_{10}) 0.007[2] (EC_{10})	66
		Microcystis aeruginosa V131	3	Chlorophyll *a* content, chlorophyll fluorescence kinetics	0.006[2] (EC_{10})	66
GFX	Cyanobacteria	*Microcystis aeruginosa*	4	Microcystin synthesis, chlorophyll fluorescence kinetics (F_v/F_m), chlorophyll *a* and carotenoid, ROS, and MDA content	0.02[5] 0.05[1,2] 0.01[7]	68
MXF	Cyanobacteria	*Microcystis aeruginosa*	4	Microcystin synthesis, chlorophyll fluorescence kinetics (F_v/F_m), chlorophyll *a* and carotenoid, ROS, and MDA content	0.05[1,,2,5] 0.01[7]	68
NOR	Green algae	*Chlorella vulgaris*	16	Chlorophyll fluorescence kinetics (F_v/F_m), SOD, CAT, MDA activity, chlorophyll *a* content	5[5] 50[1,2]	86
	Cyanobacteria	*Chrysosporum ovalisporum*	16	Chlorophyll fluorescence kinetics (F_v/F_m), SOD, CAT, MDA activity, chlorophyll *a* content	1[2] 5[1]	86
			11	Phycobiliproteins content, and alkaline phosphatase (ALP) activity, chlorophyll *a* content	1[5]	92
		Microcystis aeruginosa	1	GSH simulation, SOD activity, MDA content, chlorophyll *a* content	10[1,5]	75
OFX	Cyanobacteria	*Microcystis aeruginosa*	4	Chlorophyll *a* and carotenoids content, chlorophyll fluorescence kinetics (F_v/F_m)	0.1[2,5]	91

CAT-catalase, EC_{10} –median effect concentration (10%), FDA- fluorescein diacetate, GSH –glutathione, GST- glutathione-S-transferase, GPX- guaiacol glutathione peroxidase, LOEC- lowest observed effective concentration, LPO- lipid peroxidation MDA –malondialdehyde, POD- peroxidase, SOD- superoxide dismutase * – degradation products, 1- oxidative stress, 2 – photosynthetic activity, 3- xanthophyll cycle, 4- the ascorbate - glutathione cycle, 5- pigments content, 6- chlorophyll biosynthesis inhibition, 7- microcystins synthesis, 8- cell structure alterations, 9- protein content, 10- metabolic activity, 11- O_2 evolution

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