Supplementary Data

Table S1. Microalgae performance and productivities, nutrients bioremediation capacity and biochemical composition at the end of the cultivation period of the four species in the three culture media.

	Day 17														
	Cell number (cells/mL)	DCWp (g/L)	OD_{600nm}	AP (mg/L/d)ay)	Nitrogen RE (%)	$P\text{-}PO_4$ RE (%)	Average N-RR (mg/L/day)	Average P-RR (mg/L/day)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)	Caretonoids (µg/L)	Proteins Content %	Carbohydrates Content %	Lipids Contents %
BG-11$_{NO3}$														
C. vulgaris	$29.2\times10^7 \pm 1.4\times10^6$	1.03 ± 0.1	3.94 ± 0.22	60.59 ± 5.88	65.23 ± 7.51	100	4.83 ± 0.55	0.46 ± 0.07	34.19 ± 3.01	16.13 ± 1.7	7.88 ± 0.60	38.1 ± 5.29	24 ± 1.08	24.9 ± 4.00
C. sorokiniana	$30.51\times10^7 \pm 1.6\times10^6$	0.82 ± 0.07	3.21 ± 0.26	51.18 ± 4.11	51.95 ± 6.47	100	3.73 ± 0.46	0.51 ± 0.06	18.04 ± 1.79	6.48 ± 0.82	5.95 ± 0.78	35.2 ± 2.64	20.7 ± 0.11	25.8 ± 2.74
D. communis	$9.1\times10^6 \pm 7.36\times10^5$	0.77 ± 0.08	1.56 ± 0.13	45.29 ± 4.71	46.40 ± 7.92	100	3.41 ± 0.58	1.09 ± 0.00	4.3 ± 1.00	2.17 ± 0.54	1.57 ± 0.62	32.7 ± 3.2	16.5 ± 1.59	23.2 ± 1.06
Stichococcus sp.	$28.7\times10^7 \pm 1.57\times10^6$	1.00 ± 0.05	3.3 ± 0.19	58.82 ± 2.94	43.06 ± 7.13	100	3.06 ± 0.59	0.71 ± 0.05	23.44 ± 0.07	16.78 ± 1.92	6.36 ± 0.47	31.8 ± 1.66	16.1 ± 2.04	21.9 ± 3.61
BG-11$_{NH4}$														
C. vulgaris	$39.1\times10^7 \pm 2.02\times10^6$	2.26 ± 0.1	5.06 ± 0.25	132.94 ± 5.88	89.46 ± 6.32	100	6.27 ± 0.44	0.78 ± 0.02	23.44 ± 0.6	16.78 ± 1.14	6.36 ± 0.54	36.6 ± 4.55	23 ± 3.09	33.5 ± 2.36
C. sorokiniana	$32.0\times10^7 \pm 2,11\times10^6$	2.33 ± 0.25	3.76 ± 0.28	137.06 ± 14.71	79.18 ± 5.12	100	5.33 ± 0.31	0.55 ± 0.06	32.86 ± 3.82	12.91 ± 1.69	8.29 ± 0.80	36.1 ± 2.69	21.7 ± 3.45	36.9 ± 0.62
D. communis	$1.63\times10^6 \pm 4.81\times10^5$	1.94 ± 0.01	2 ± 0.17	114.12 ± 0.59	73.26 ± 5.35	100	5.15 ± 0.31	1.39 ± 0.00	1.81 ± 1.16	0.24 ± 0.09	1.06 ± 0.19	30.7 ± 2.53	15.5 ± 1.04	28 ± 4.6
Stichococcus sp.	$3.44\times10^7 \pm 2.76\times10^6$	1.96 ± 0.11	4.54 ± 0.23	115.29 ± 6.47	90.79 ± 1.04	100	6.2 ± 0.06	0.84 ± 0.20	28.09 ± 3.06	15.69 ± 2.04	9.53 ± 2.33	32.7 ± 1.73	14 ± 2.59	20.1 ± 0.55
3.7% ADE														
C. vulgaris	$1.78\times10^7 \pm 1.29\times10^6$	0.89 ± 0.07	3.11 ± 0.12	52.35 ± 4.11	53.05 ± 6.92	100	3.84 ± 0.47	0.42 ± 0.00	11.31 ± 2.08	5.95 ± 0.83	4.84 ± 0.34	26.6 ± 5.13	24.9 ± 0.03	24.9 ± 5.68
C. sorokiniana	$1.92\times10^7 \pm 8.38\times10^5$	0.7 ± 0.09	2.01 ± 0.17	41.18 ± 5.29	49.13 ± 7.74	100	3.64 ± 0.57	0.23 ± 0.01	16.46 ± 1.79	6.38 ± 0.82	4.26 ± 0.78	32 ± 2.44	25.8 ± 3.14	17.2 ± 3.01
D. communis	$7.26\times10^6 \pm 2.26\times10^5$	0.7 ± 0.06	1.81 ± 0.09	41.18 ± 3.53	50.73 ± 7.23	100	3.66 ± 0.49	0.57 ± 0.00	1.29 ± 0.52	0.21 ± 0.20	0.73 ± 0.62	25.1 ± 3.06	23.2 ± 0.82	20.1 ± 0.55
Stichococcus sp.	Aggregates	0.59 ± 0.08	2.5 ± 0.11	34.71 ± 4.71	69.69 ± 5.12	100	4.94 ± 0.36	0.4 ± 0.12	11.44 ± 0.07	5.59 ± 1.06	5.53 ± 1.47	30.7 ± 1.56	21.9 ± 0.97	23.9 ± 0.6