

## Supplementary materials

**Table S1.** Phycoremediation of wastewater

Microalgae	Wastewater characteristics (mg L <sup>-1</sup> )				Removal (%)			Reference
	Wastewater type	Nitrogen	Phosphorus	COD	Nitrogen	Phosphorus	COD	
<i>Chlorella vulgaris</i>	Municipal*	63	8.5	NR	60	95	NR	(Sousa et al., 2021)
	Domestic*	250	42	NR	99	95	NR	
	Textile*	247	22	1,200	95	96	99	(Fazal et al., 2021)
	Municipal	69	3	82	95	96	NR	(Molazadeh et al., 2019)
<i>Chlorella sorokinina</i>	Municipal	34	6.1	211	91	97	93	(Yaqoubnejad et al., 2021)
<i>Chlorella</i> sp.	Soybean	519	130	19950	87	99	77	(Song et al., 2020a)
	Soybean	106	23	5320	96	95	78	(Hu et al., 2020)
<i>Chlorella pyrenoidosa</i>	Municipal	10	2.25	702	99	94	87	(Kumari et al., 2021)
	Anaerobic food	302	25	915	88	67	53	(Tan et al., 2021)
<i>Chromochloris zofingiensis</i>	Palm oil mill effluent	376	58	2898	64	86	44	(Fernando et al., 2021)

<i>Coelastrella</i> sp.	Swine	1550	35	NR	62	77	NR	(Li et al., 2020)
<i>Chlamydomonas reinhardtii</i>	Aquaculture	4.6	15	NR	98	33	NR	(Enwereuzoh et al., 2021)
<i>Haematococcus pluvialis</i>	Palm oil mill effluent	376	58	2898	50	69	50	(Fernando et al., 2021)
<i>Scenedesmus</i> sp.	Palm oil mill effluent	99	53	1,504	100	>80	>80	(Mohd Udaiyappan et al., 2021)
	Potato mill effluent	127	11	NR	59	32	93	(Yuan et al., 2021)
	Municipal	42	3	550	>99	>99	NR	(Ling et al., 2019)
	Brewery*	45	7	2100	79	98	85	(Song et al., 2020b)
<i>Scenedesmus dimorphus</i>	Lactic acid*	651	28	12571	96	90	95	(Zhang et al., 2021)
<i>Scenedesmus obliquus</i>	Domestic	65	5.5	250	>99	83	70	(Han et al., 2021)
<i>Desmodesmus</i> sp.	Piggery	296	28	550	98	81	NR	(Wang et al., 2016)
	Cassava	NR	NR	121	NR	NR	92	(Z. Chen et al., 2020)

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\*Synthetic wastewaters  
COD: chemical oxygen demand  
NR: data not reported