Table S1. Characteristics of the DSW used in this study.

Characteristic	Parameter	DSW
Nutrient (mg L^{-1})	TN	140.28
	TP	15.91
	SO_4^{2-}	33.08
	NH_3–N	104.32
	NO_3-N	13.26
	TOC	131.67
Metal (μg L^{-1})	Al	216.07
	Ba	1901.42
	Co	N.D
	Cd	N.D
	Cr	N.D
	Cu	409.79
	Li	974.37
	Mn	279.02
	Ni	144.37
	Pb	N.D
	Rb	1083.00
	Zn	954.21
	Ti	N.D
	Sn	N.D

*N.D: Not detected (below 10 μg L^{-1})

Table S2. Results from BLAST searches using the 18S rRNA, and *tuf*A sequences of *H. rubescens* KNUA214

Marker gene	Length (bp)	Closest match (accession no.)	Query cover	Identification
18S rRNA	1767	*Scenedesmus rubescens* KMMCC 263 (JQ315585)	99%	100.00%
*tuf*A	929	*Scenedesmus rubescens* SAG 5.95 (HG514402)	93%	99.54%