



Supplementary material to

Wolffia globosa as a biocatalyst in plant-based biofuel cells

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Table S-1. The content of starch and amylase activity, phosphates, and phytase activity as well as protein and reducing sugars determined in the supernatant fractions, obtained after centrifugation of duckweeds grown under polarization and as control, and in the anolyte and water, respectively.

Parameter	Set-up	<i>W. globosa</i> P-BFC	<i>W. globosa</i> control
Protein content in S _{12000xg} , mg/g biomass		0.31±0.02	1.17±0.10
Protein content in anolyte/water, mg/ml		0.54±0.05	1.35±0.12
Reducing sugars content in S _{12000xg} , mg/g biomass		2.00±0.22	0.06±0.01
Reducing sugars content in anolyte/water, mg/ml		5.25±0.18	0.01±0.00
Starch content in S _{12000xg} , mg/g biomass		69.0±4.2	34.5±5.4
Starch content in the anolyte/water, mg/ml		0.96±0.12	0.87±0.07
Specific amylase activity in S _{12000xg} , U/g biomass		100±7	43±3
Specific amylase activity in anolyte/water, U/ml		0.81±0.02	0.72±0.06
Concentration of PO ₄ ³⁻ in S _{12000xg} , mM		154.4±10.2	83.1±4.2
Concentration of PO ₄ ³⁻ in anolyte/water, mM		146.7±12.5	21.9±3.4
Specific phytase activity in S _{12000xg} , U/g biomass		-	0.4±0.1
Specific phytase activity in anolyte/water, U/ml		0.8±0.1	0.2±0.0