

Table S1. Composition of modified AF-6 medium

Components	Content (g/L)	Components	Content (g/L)	Components	Content (g/L)
CH <sub>3</sub> COONa	1.00	MgSO <sub>4</sub> ·7H <sub>2</sub> O	0.3	Ferric citrate	0.002
NaNO <sub>3</sub>	0.14	Thiamine	0.1	Na <sub>2</sub> EDTA	0.75
		HCl			
(NH <sub>4</sub> ) <sub>2</sub> HPO <sub>4</sub>	0.20	Vitamin B6	0.1	MnCl <sub>2</sub> ·4H <sub>2</sub> O	0.041
K <sub>2</sub> HPO <sub>4</sub>	0.005	Biotin	0.2	ZnCl <sub>2</sub> ·7H <sub>2</sub> O	0.005
KH <sub>2</sub> PO <sub>4</sub>	0.01	Vitamin B12	0.1	Na <sub>2</sub> MoO <sub>4</sub> ·2H <sub>2</sub> O	0.004
CaCO <sub>3</sub>	0.01	Citric acid	0.002	FeCl <sub>3</sub> ·6H <sub>2</sub> O	0.097
CaCl <sub>2</sub> ·2H <sub>2</sub> O	0.01	CoCl <sub>2</sub> ·6H <sub>2</sub> O	0.002	-	-

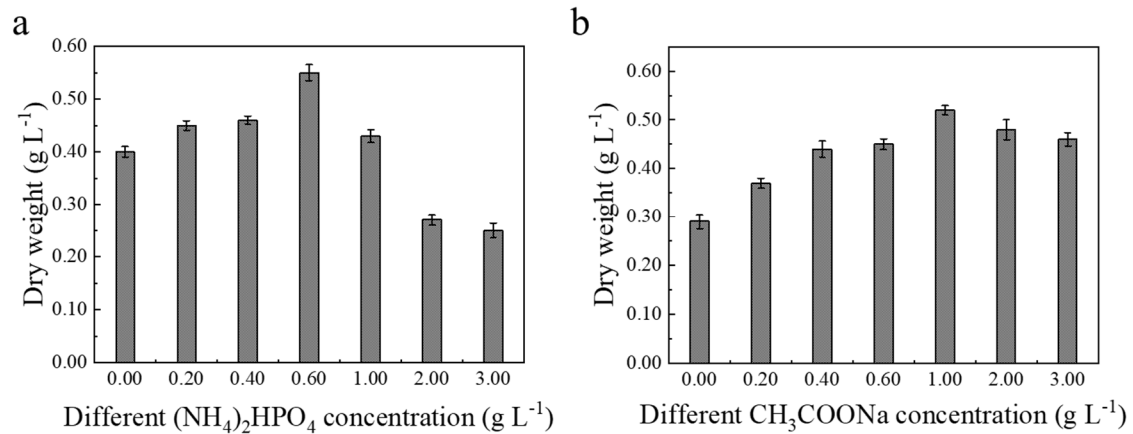


Figure S1. The optimization of diammonium phosphates and sodium acetate concentration after 14 days cultivation. (a: Diammonium phosphates; b: Sodium acetate.) Data were shown as mean  $\pm$  standard deviation ( $n = 3$ ).

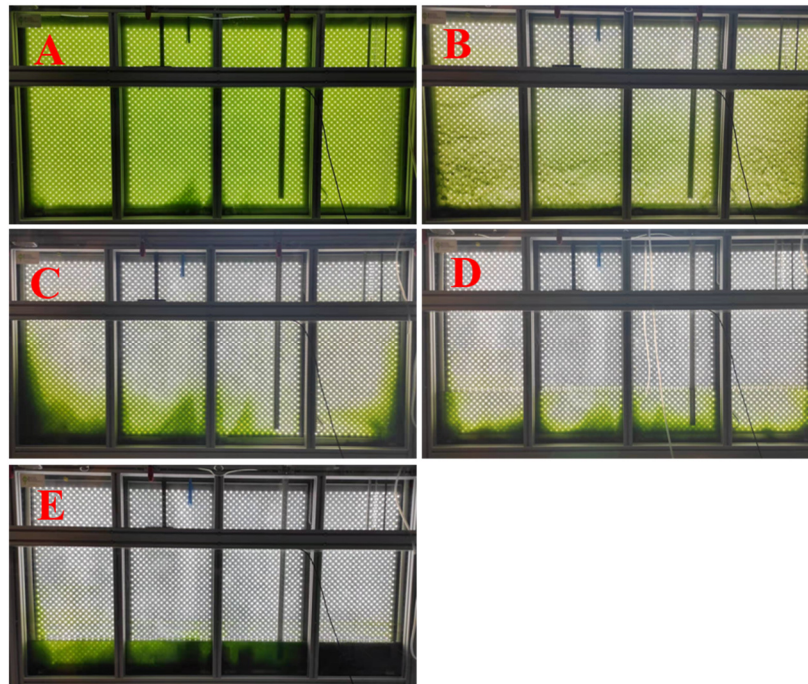


Figure S2. Natural sedimentation of *E. pisciformis* AEW501 during harvest in a 120 L PBR. (Stop ventilation time: A: 0 min; B: 5 min; C: 20 min; D: 40 min; E: 60 min.)

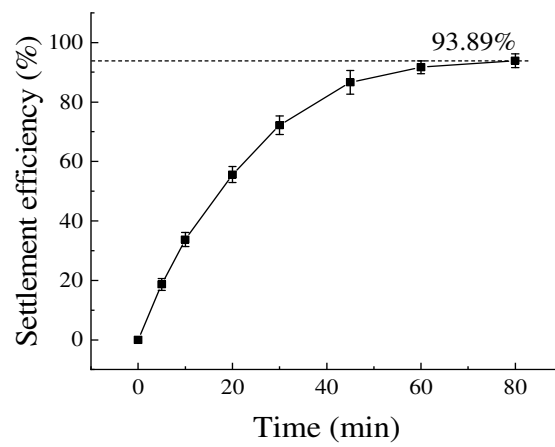


Figure S3. The settling efficiency of *E. pisciformis* AEW501 during harvest.