

Parameter	Value	Unit
f_N	0.2 (0.45 $t = 3 \sim 9$ h)	dimensionless
F_{Nfix}^{full}	0.21	mol m ⁻³ s ⁻¹
$[O_2]_{crit}$	0.1	mol O ₂ m ⁻³
K_C	3667	mol m ⁻³
$f_{NITROGE}$	0.4	dimensionless
$C_{Sto} (t = 0)$	1000	mol m ⁻³
$N_{Sto} (t = 0)$	1000	mol m ⁻³
A_{PB}	$3.6 \times f_P$	s ⁻¹
A_{PN}	0.062	s ⁻¹
A_{BN}	$3.6 \times f_N$	s ⁻¹
A_{BE}	3.6	s ⁻¹
F_{Bio}^{max}	0.053	mol m ⁻³ s ⁻¹
$F_{CfixMax}^{Chl}$	0.00268	mol mol C ⁻¹ s ⁻¹
K_I	0.01	μmol m ⁻² s ⁻¹
Chl_{full}	535	mol C m ⁻³
C_{Sto}^{max}	36666	mol m ⁻³
F_{Res}^{NmaxC}	10.6	mol m ⁻³ s ⁻¹

The parameters are listed roughly in order of appearance in Methods and Supplementary Methods.