

Table 5. Sensitivity of the model-estimated N₂-fixation rates to diffusion, C:N ratio, initial conditions and the *Trichodesmium* growth parameters

Parameter (mainrun/modified)	S1 main/modified	S2 main/modified
	mmoles N m ² yr ⁻¹	
K_w (0.0001/0.000017 m ² /s) †	201/135 (-33%)	18/73 (+305%)
C:N ratio (10/6.625 dimensionless) ‡	201/218 (+8.5%)	18/26 (+44%)
Initial [<i>Tricho</i>] (0.005/.01 μmoles/m ³)	201/200 (-0.5%)	18/18.4 (+2.2%)
μ_T (0.17/0.14 day ⁻¹)*	201/238 (+18.4%)	18/33 (+83.3%)
α (0.70/0.90 dimensionless)	201/213 (+6.0%)	18/1.2 (-93.3%)
TK_s (0.5/6.7 mmole/m ³) ††	201/276 (+37.3%)	18/20 (+11.1%)

† $K_w = .000017$ m²/s from Ledwell *et al.* (1998)

‡ C:N = 6.625 = 106/16 from Redfield *et al.* (1963)

* $\mu_T = 0.14$ day⁻¹ is equal to a doubling time of 5 days, from Capone *et al.* (1997)

†† $TK_s = 6.7$ mmole/m³ from McCarthy and Carpenter (1975)