

Table 2

Calculated quantum requirements for phototrophic carbon fixation pathways (Calvin Benson Bassham cycle, reductive TCA cycle, and the 3-hydroxypropionate/methyl-CoA cycle).

Carbon fixation pathway	Quantum requirement
Calvin Benson Bassham	13.9
Reductive TCA cycle	11.0
3-Hydroxypropionate/methyl-CoA cycle	15.3