

Table IV. *Photosynthesis and Photorespiration in Wheat Protoplasts*

Protoplasts were illuminated (180 w/m²) 8 min in an O₂ electrode before the CO₂ concentration was lowered by adding 10.5 mM Tris to increase the pH to 8.1. Radioactive CO₂ (55 Ci/mol) was added after 6 or 12 min, and samples withdrawn for measurement of CO₂ fixation at 5-s intervals.

Conditions		Fluxes		
O ₂	CO ₂	Net O ₂ evolution	Total CO ₂ uptake	Estimate of photo- respiration
	%		$\mu\text{mol/mg Chl}\cdot\text{h}$	
25	1.4 (500 μM)	96	101	~5
39	0.01 (4 μM)	8	21	13