Table V. Influence of Low CO₂ on Activation of RuBP Carboxylase in Wheat Protoplasts

Protoplasts (25 μ g Chl/ml) were illuminated (see Fig. 5 for details) for 8 min, attaining O₂ evolution of 120 μ mol/mg Chl·h before lowering the CO₂ concentration by adding 10 mm Tris (final pH 7.9). At intervals, aliquots were removed and injected into assay mix for RuBP carboxylase containing 0.1% TX100, and the reaction was stopped 30 s later (14).

Pretreatment of Protoplasts		
Time in high CO ₂	Time in low CO ₂	RuBP Carboxylase
min		μmol/mg Chl·h
8 (Dark)		99
8 (Light)		192
8 (Light)	0.5 (Light)	171
8 (Light)	5 (Light)	143
8 (Light)	12 (Light)	132
8 (Light)	12 (Dark)	129