

Carbon isotope composition was measured in different parts of the plants from the spring-summer experiment and the *S* treatment of the winter experiment. Mean isotopic discrimination was less in grain than in leaf or stem material:

Season	$10^3 \times \Delta$ (\pm s.e.)		
	Leaf	Stem	Grain
Spring/summer (both treatments)	18.94 \pm 0.59	18.98 \pm 0.60	16.37 \pm 1.0
Winter (<i>S</i> treatment)	20.45 \pm 0.98	—	15.37 \pm 1.92

A similar difference in α (1.5×10^{-3}) between seed and leaf material has been observed previously in *Zea mays* (Lowdon 1969). The isotopic compositions of the different plant parts were highly correlated (all $P < 0.05$):

	Correlation coefficient	
	Stem	Grain
Leaf	0.86	0.59, 0.76 ^A
Stem	—	0.63

^A Winter expt; other values for the spring/summer expt.