

Table 1 Pigment and protein contents of leaves and light-saturated activities of partial reactions of photosynthesis in thylakoids isolated from leaves of HN and LN beans, and capacity of PS II photochemistry (F_V/F_M), measured from dark adapted leaves

	Chl (<i>a</i> + <i>b</i>), $\mu\text{g cm}^{-2}$	Chl <i>a/b</i> , $\mu\text{g } \mu\text{g}^{-1}$	Total protein, mg cm^{-2}	(<i>V</i> + <i>A</i> + <i>Z</i> + <i>N</i> + <i>L</i>)/ Chl <i>a</i> , mmol mol^{-1}	F_V/F_M	O ₂ evolution, $\mu\text{mol O}_2 (\text{mg Chl})^{-1} \text{h}^{-1}$	DCIP photo-reduction, $\mu\text{mol DCIP} (\text{mg Chl})^{-1} \text{h}^{-1}$	O ₂ consumption (DCIPH ₂ → MV), $\mu\text{mol O}_2 (\text{mg Chl})^{-1} \text{h}^{-1}$
HN	22.6 ± 2.3	3.3 ± 0.3	0.86 ± 0.05	148	0.80 ± 0.016 ^a	260 ± 11	129 ± 16	284 ± 6
LN	11.3 ± 1.9	3.1 ± 0.5	0.76 ± 0.07	161	0.71 ± 0.035 ^a	288 ± 8	137 ± 11	305 ± 8

V + *A* + *Z* + *N* + *L* is the sum of violaxanthin, antheraxanthin, zeaxanthin, neoxanthin and lutein. The PPF of the saturating flash used for the measurement of F_V/F_M was 5,000 $\mu\text{mol m}^{-2} \text{s}^{-1}$ and the PPF used to measure the activities of the partial reactions was approximately 3,000 $\mu\text{mol m}^{-2} \text{s}^{-1}$. Each value represents the mean ± SD of three independent experiments

^a Each value is an average of eight measurements