

Hydraulic conductance as well as nitrogen accumulation plays a role in the higher rate of leaf photosynthesis of the most productive variety of rice in Japan. R Decenella Taylaran, S Adachi, T Ookawa, H Usuda, and T Hirasawa

SUPPLEMENTARY TABLE

Table S1. Effects of nitrogen top-dressing on dry weight (DW) and accumulated nitrogen (AN) at various growth stages in rice plants grown in 12-L pots.

Standard deviations are given in parentheses (n=5). Asterisks ** and ***: Values are significantly different at the 1% and 0.1% level, respectively, by Student's t-test; ns: not significant. Top-dressing with nitrogen was applied at tillering (3 weeks after transplanting; 0.25 g N hill⁻¹; tillering-stage treatment), at booting (when the flag leaf had just expanded fully; 0.25 g N hill⁻¹; heading-stage treatment), and at ripening (2.5 weeks after heading; 0.20 g N hill⁻¹; ripening-stage treatment). Samples were collected approximately 10 days after top-dressing. The amount of nitrogen applied as basal dressing at transplanting was decreased to 0.1 g pot⁻¹ for the rice plants that were treated at the tillering stage. For the plants treated at heading, 0.5 g pot⁻¹ of nitrogen was applied as basal dressing at transplanting. For the plants treated at the ripening stage, nitrogen was applied as basal dressing at 0.5 g pot⁻¹ at transplanting and at 0.5 g pot⁻¹ at the booting stage.

Time of treatment	Variety	Without top-dressing		With top-dressing		Difference (D - B)
		DW (A) (g hill ⁻¹)	AN (B) (g hill ⁻¹)	DW (C) (g hill ⁻¹)	AN (D) (g hill ⁻¹)	
Tillering stage	Takanari	6.97 (0.51)	0.22 (0.01)	7.83 (0.49)	0.27 (0.02)	0.05
	Koshihikari	6.66 (0.50)	0.19 (0.01)	7.11 (0.46)	0.25 (0.02)	0.06
		ns	ns	ns	ns	
Heading stage	Takanari	68.3 (0.96)	0.48 (0.01)	76.3 (0.71)	0.77 (0.01)	0.29
	Koshihikari	59.7 (1.37)	0.38 (0.01)	64.8 (1.43)	0.58 (0.02)	0.20
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Ripening stage	Takanari	103.3 (1.94)	0.83 (0.01)	110.0 (1.08)	1.04 (0.01)	0.21
	Koshihikari	87.3 (1.22)	0.68 (0.01)	92.2 (1.34)	0.80 (0.01)	0.12
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