Supplementary Table S1

Proportional ratios of minor sterol species under different conditions
(calculated from data shown in Figure 3)

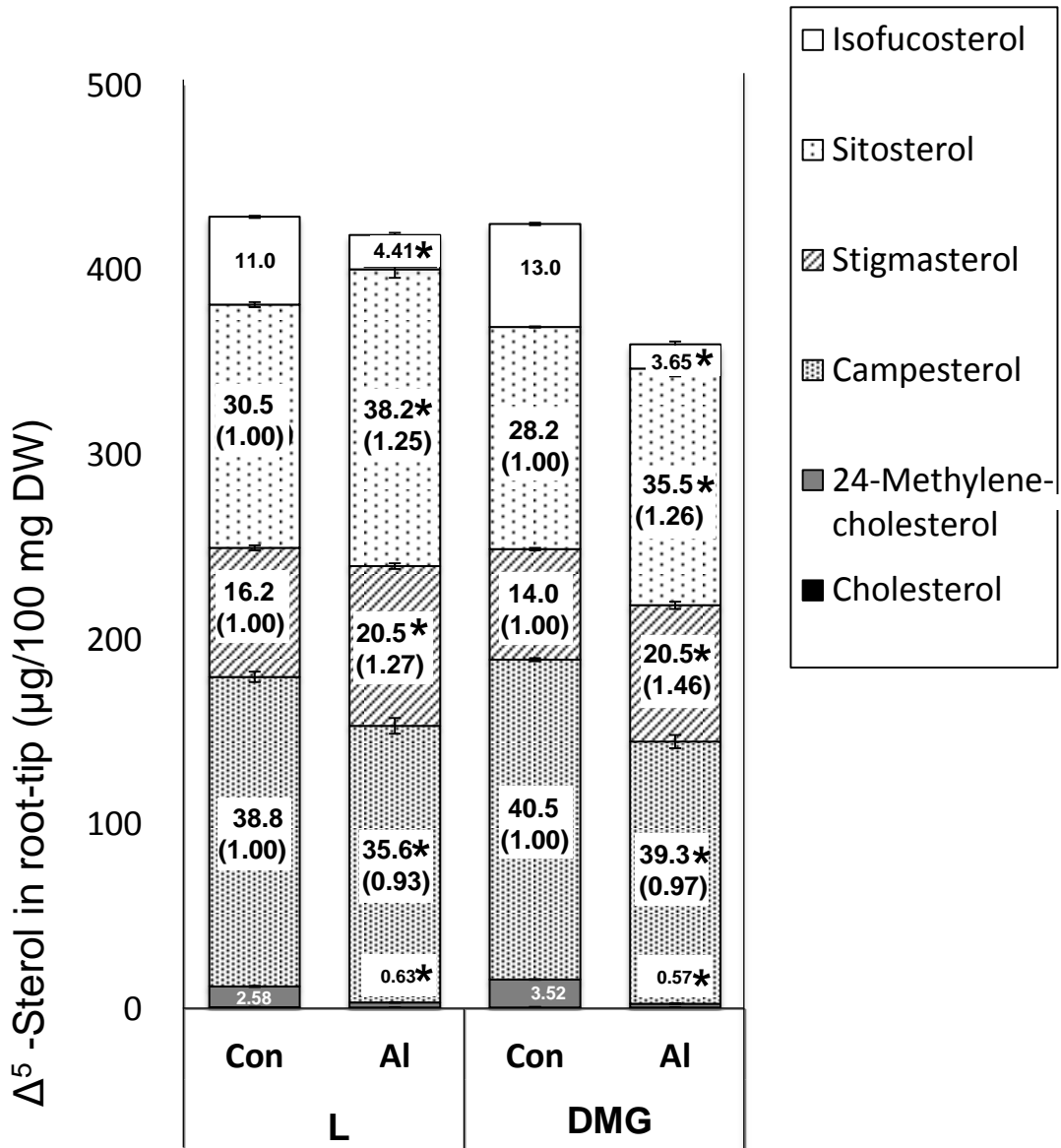|			Isofucosterol	24-Methylene cholesterol
Al/Cont	L	R_{132}	0.78	0.75
		Ko	0.68	0.73
	DMG	R_{132}	1.10	1.09
		Ko	1.25	1.25
Al$_{DMG}$/Al$_L$		R_{132}	1.51	2.02
		Ko	2.11	2.42

・Al/Cont: proportion of each sterol species to total sterols in Al/that in control
・Al$_{DMG}$/Al$_L$: proportion of each sterol species to total sterols in Al under
　　　　　DMG/that in Al under L

Supplementary Table S2

Net root elongation of 5-day-old seedlings of rice cultivars in different illumination and medium conditions during 24 h of treatment (mean of 7-10 replicates ± standard error). Number in parentheses is relative root elongation (net elongation in treatment relative to that under light conditions in the same treatment). M, G: 1 mM mevalonate and 1 mM glucose in the medium.

Cultivar	Treatment	Net root elongation (cm/24h)		
		Light (L) (L=100)	Dark (D) (D/L)	Dark, M, G (DMG) (DMG/L)
R$_{132}$	Control	1.84 ±0.037 (100)	2.24 ±0.048 (121.7)	1.96 ±0.070 (106.5)
	Al	1.31 ±0.032 (100)	1.47 ±0.086 (112.2)	1.51 ±0.045 (115.3)
Ko	Control	1.78 ±0.051 (100)	2.26 ±0.133 (127.0)	1.93 ±0.175 (108.4)
	Al	0.80 ±0.052 (100)	1.27 ±0.150 (158.8)	1.32 ±0.230 (165.0)
Ka	Control	2.93 ±0.060 (100)	3.14 ±0.087 (107.2)	2.98 ±0.045 (101.7)
	Al	0.92 ±0.034 (100)	0.94 ±0.046 (102.2)	1.05 ±0.030 (114.1)

Legend (right side):
- ☐ Isofucosterol
- ⊡ Sitosterol
- ▨ Stigmasterol
- ▦ Campesterol
- ▪ 24-Methylene-cholesterol
- ■ Cholesterol

Y-axis: Δ^5 -Sterol in root-tip (µg/100 mg DW)

Values in bars:

L – Con: 11.0; 30.5 (1.00); 16.2 (1.00); 38.8 (1.00); 2.58
L – Al: 4.41∗; 38.2∗ (1.25); 20.5∗ (1.27); 35.6∗ (0.93); 0.63∗
DMG – Con: 13.0; 28.2 (1.00); 14.0 (1.00); 40.5 (1.00); 3.52
DMG – Al: 3.65∗; 35.5∗ (1.26); 20.5∗ (1.46); 39.3∗ (0.97); 0.57∗

X-axis: Con Al Con Al
L DMG

Supplementary Fig. S1

Sterol composition in 1-cm root-tip portion of rice cv. Ka under different illumination conditions. Length of each sterol bar shows concentration of sterols (µg/100 mg DW); number within each sterol bar shows proportion of each sterol species out of total sterols in the same treatment; number in parentheses shows ratio of proportion of each sterol species in the control to that in the Al treatment (%). As the composition of cholesterol was too low, it hides below that of 24-methylene cholesterol. Five-day-old rice seedlings were treated for 24 h with 0.2 m*M* CaCl2 in the presence or absence of 10 µ*M* AlCl3 (pH 4.9) under light conditions (L) or in the dark conditions with 1 m*M* mevalonate and 1m*M* glucose (DMG). Values are means of three independent replicates ± standard error. Asterisk in the right side of the proportion of each sterol species indicates significant difference (P < 0.01; t-test) between control and Al treatment under the same illumination conditions.