1 TABLES

Table 1| Summary of effects of red light treatment on forking characteristics in hard- and easy-to-flower genotypes, Letters in each column refer to a genotype's average across the C_NL and RLE treatments; different lower case letters within columns indicate significant differences among genotypes by Tukey's HSD test at P ≤ 0.05.

Genotype	Fork (%)		Ht_T1(cm)		Nodes_T1 (Number)		T1_branches (Number)		Tiers (Number)	
	C_NL	RLE	C_NL	RLE	C_NL	RLE	C_NL	RLE	C_NL	RLE
Hard-to-flower genotypes										
Aladoalado	77.4	100.0	96.4	60.8 bc	47	29 a	3	2b c	2	4 c
TME204	94.3	100.0	129.5	82.2 a	46	32 a	3	3 a	3	4 c
UG15F039P015	79.2	100.0	124.3	56.5 b	47	24 ab	2	2 c	2	5 c
UG15F056P001	96.6	100.0	59.6	51.5 ef	25	22 ef	3	2 bc	6	6 a
UG15F079P001	97.1	100.0	102.5	73.2 b	36	28 bc	3	3 ab	4	5 b
UG15F171P506	87.1	100.0	84.9	57.2 cd	36	26 bcd	3	2 bc	4	3 c
UG15F180P005	100.0	100.0	50.0	41.7 f	23	19 f	3	2 c	6	6 a
UG15F190P001	100.0	100.0	92.9	81.9 b	30	25 de	3	3 a	6	6 a
UG15F239P015	96.3	100.0	55.2	48.2 ef	31	29 cd	3	3 a	5	5 b
UG15F265P001	100.0	100.0	65.0	56.6 de	29	24 def	2	3 bc	5	5 b
P (Genotype)	***		***		***		***		***	
P (Treatment)	***		***		***		*		***	
Easy-to-flower genotypes										
NASE 13	100.0	100.0	54.4	37.2 cd	22	17 c	2	2 c	6	7 a
NASE 14	96.0	100.0	58.6	38.0 cd	30	23 ab	2	2 abc	5	5 cde
NASE 2	100.0	100.0	15.3	17.5 e	8	10 d	3	2 c	6	6 ab
NASE 3	97.0	100.0	67.1	47.3 abc	30	25 a	3	3 a	5	5 bcde
UG15F178P006	100.0	100.0	59.1	47.0 abc	28	23 ab	3	3 ab	6	6 bc
UG15F192P012	100.0	100.0	57.7	40.8 bc	22	18 bc	3	3 bc	6	5 bcde
UG15F199P006	100.0	100.0	29.4	26.6 de	17	16 cd	3	2 c	7	7 a
UG15F222P017	100.0	100.0	55.9	42.5 bc	25	21 abc	3	3 bc	5	5 de
UG15F228P016	100.0	100.0	54.5	52.5 ab	25	24 a	2	2 c	6	5 e
UG15F302P016	100.0	100.0	72.4	57.9 a	24	23 ab	3	3 a	6	6 bcd
P (Genotype)	ns		***		***		***		***	
P (Treatment)	ns		***		***		***		ns	

C_NL = control with no red light exposure at night; RLE = red light exposure; T1_branches = number of branches at first branching; Ht_T1 = stem height at first branching; Nodes_T1 = number of nodes at first branching. Data includes means of 10 hard-to-flower genotypes grown in six replications over two growing seasons, 2019-2020 at Namulonge. Except for 'Fork' which was scored continuously up

to 12 months after planting, the other variables were scored once at 12 months. Different lower case letters within columns indicate significant differences for averages across C_NL and RLE treatments among genotypes by Tukey's HSD test at P ≤ 0.05. ANOVA tests of significant main effects are indicated: P ≤ 0.10 (•), P ≤ 0.05 (*), P ≤ 0.01 (**), P ≤ 0.001 (***).

Table 2| Effect of red light exposure on number of pistillates, fruits and seeds in Hard-to-flower and Easy-to-flower genotypes

Genotype	Number of pistillates (% of control)	Proportion of pistillates (% of control)	Fruits (% of control)	Seeds (% of control)
Hard-to-flower				
Aladoalado	179.2 c	101.5 bc	193.2 c	180.9 b
TME 204	130.5 c	95.6 bc	165.4 c	127.9 b
UG15F039P015	463.8 c	305.9 c	902.9 c	313.2 b
UG15F056P001	147.9 c	124.6 bc	279.0 c	161.2 b
UG15F079P001	205.6 c	158.3 bc	411.0 c	329.5 b
UG15F171P506	66.1 c	87.3 bc	71.2 c	98.9 b
UG15F180P005	60.8 b	110.6 b	78.3 b	83.5 b
UG15F190P001	106.3 a	134.1 a	135.9 a	100.3 a
UG15F239P002	155.5 c	125.0 bc	1143.0 c	356.5 b
UG15F265P001	952.9 c	427.3 c	9276.9 c	1768 b
P-value (Genotype)	***	***	***	***
P-value (Treatment)	***	*	*	*
Easy-to-flower				
NASE 13	54.6 c	118.9 b	69.4 d	110.1 c
NASE 14	44.4 bc	88.8 b	50.9b cd	97.6 bc
NASE 2	66.3 bc	71.3 ab	170.3 d	220.8 bc
NASE 3	53.3 a	90.8 a	71.7 a	108.7 a
UG15F178P006	40.0 a	95.2 b	59.7 a	91.3 bc
UG15F192P012	37.8 bc	80.6 b	29.0 bc	87.0 bc
UG15F199P006	57.3 c	84.8 b	57.2 bcd	83.5 bc
UG15F222P017	116.4 c	122.0 b	132.4 cd	137.1 abc
UG15F228P016	59.8 c	85.1 c	85.7 d	95.8 c
UG15F302P016	75.1 ab	187.3 ab	66.4 b	81.2 ab
P-value (Genotype)	***	***	***	***
P-value (Treatment)	***	ns	***	ns

Data includes means of genotypes grown in six replications over two growing seasons. Percentages of control were obtained by dividing means of genotypes under red light treatment with means under control. Proportions of pistillates were obtained by dividing number of pistillate flowers with staminate flowers. Different lower case letters within columns indicate significant differences among genotypes by Tukey's HSD test at P ≤ 0.05. P ≤ 0.10 (•), P ≤ 0.05 (*), P ≤ 0.01 (**), P ≤ 0.001 (***), ns= not significant.

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No	Genotype	Genotype status	Onset of flowering	Capacity to flower
1	NASE 2	Elite variety	Early	Easy
2	NASE 3	Elite variety	Early	Easy
3	NASE 13	Elite variety	Early	Easy
4	NASE 14	Elite variety	Moderately early	Easy
5	UG15F178P006	Breeding line	Early	Easy
6	UG15F199P006	Breeding line	Early	Easy
7	UG15F228P016	Breeding line	Early	Easy
8	UG15F192P012	Breeding line	Early	Easy
9	UG15F222P017	Breeding line	Moderately early	Easy
10	UG15F302P016	Breeding line	Moderately early	Easy
11	TME 204	Elite variety	Non/very late	Hard
12	Aladoalado	Land race	Late	Hard
13	UG15F265P001	Breeding line	Non/very late	Hard
14	UG15F171P506	Breeding line	Late	Hard
15	UG15F190P001	Breeding line	Late	Hard
16	UG15F180P005	Breeding line	Late	Hard
17	UG15F039P015	Breeding line	Non/very late	Hard
18	UG15F239P002	Breeding line	Non/very late	Hard
19	UG15F056P001	Breeding line	Late	Hard
20	UG15F079P001	Breeding line	Non/very late	Hard

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