

**Appendix A** Leaf shapes controlled by *L-D<sub>1</sub>* alleles. (A) normal leaf shape; (B) sub-okra leaf shape; (C) okra leaf shape; (D) super okra leaf shape; Scale bar, 1 cm.

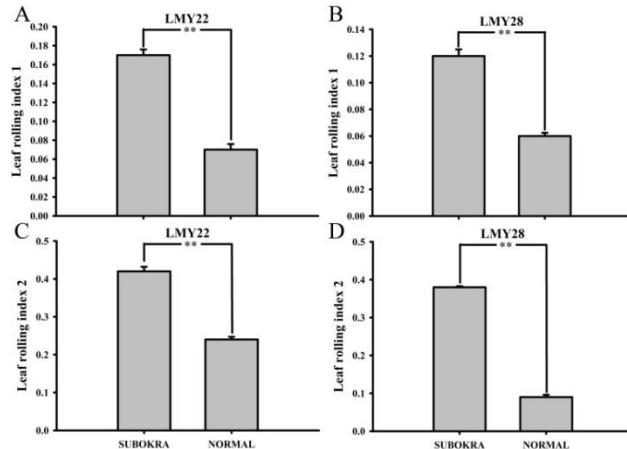
**Appendix B** Materials used in this study

No.	Material	No.	Material
1	LMY22 SUPER OKRA	8	LMY28 SUPER OKRA
2	LMY22 OKRA	9	LMY28 OKRA
3	LMY22 SUB-OKRA	10	LMY28 SUB-OKRA
4	LMY22 NORMAL	11	LMY28 NORMAL
5	F <sub>1</sub> ( LMY22 SUPER OKRA × LMY22 ) 12 F <sub>1</sub> ( LMY28 SUPER OKRA × LMY28 NORMAL )	12	F <sub>1</sub> ( LMY28 NORMAL )
6	F <sub>1</sub> ( LMY22 OKRA × LMY22 NORMAL ) 13 F <sub>1</sub> ( LMY28 OKRA × LMY28 NORMAL )	13	F <sub>1</sub> ( LMY28 NORMAL )
7	F <sub>1</sub> ( LMY22 SUB-OKRA × LMY22 ) 14 F <sub>1</sub> ( LMY28 SUB-OKRA × LMY28 NORMAL )	14	F <sub>1</sub> ( LMY28 NORMAL )

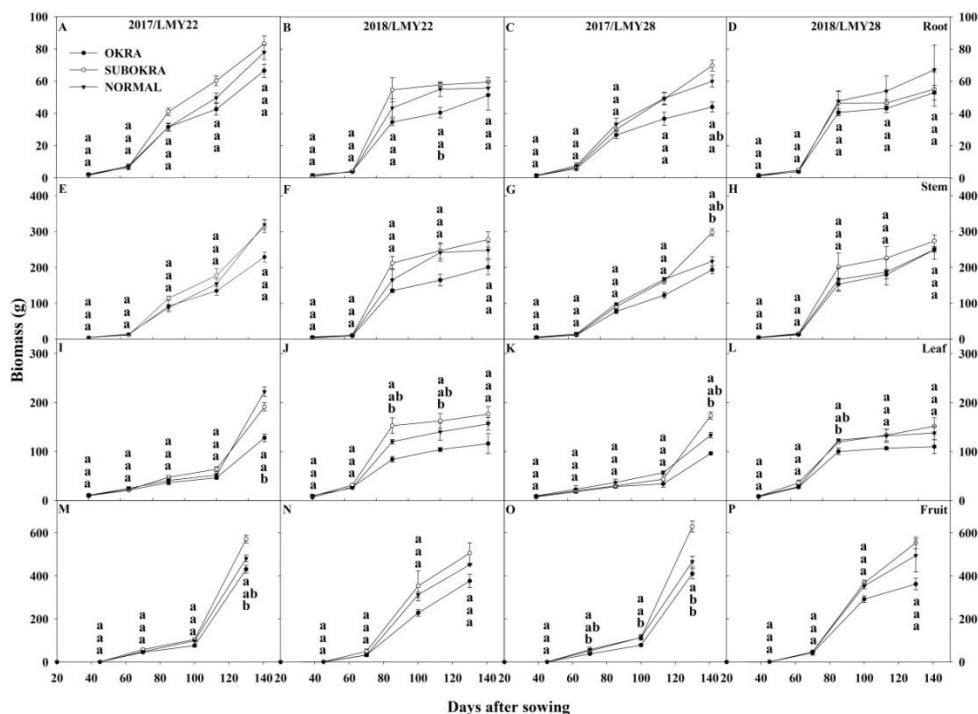
**Appendix C** Primers used for qRT-PCR and VIGS vector construction

Primer Name	Sequence 5'- 3'	Note
polyT/AP	GGCCACCGCTCGACTAGTACTTTTTTTTTTTTTTT	3'RACE (L <sub>2s</sub> )
AUAP/R	GGCCACCGCTCGACTAGTAC	3'RACE (L <sub>2s</sub> )
GSP/F	GACAAGTGATCAGTTAGATTCGTT	3'RACE (L <sub>2s</sub> )
VIGS/F	AAGGTTACCGAATTCTCTAGAGGAGCTGAACAAGACGAGT	VIGS Vector (L <sub>2s</sub> ) XbaI
VIGS/R	CGTGAGCTCGGTACCGGATCCACTCACTGATGCAGCCTTG	VIGS Vector (L <sub>2s</sub> ) BamHI
QPCR/F	CCCAGTTCCACTCACTACTGG	qRT-PCR (L <sub>2s</sub> )
QPCR/R	ACTGAAACGAGGACCAACCT	qRT-PCR (L <sub>2s</sub> )

Y8991F	CGGTGGTGTGAAGAAGCCTCAT	qRT-PCR ( <i>histone-3</i> )
Y8991R	AATTCACGAACAAGCCTCTGGAA	qRT-PCR ( <i>histone-3</i> )



**Appendix D** The leaf rolling index (LRI) of sub-okra leaf and normal leaf. (A, B) LRI1 of sub-okra leaf and normal leaf at the background of LMY22 and LMY28, respectively. (C, D) LRI2 of sub-okra leaf and normal leaf at the background of LMY22 and LMY28, respectively. Statistical significance was determined using *t*-test. \*\*,  $P<0.01$ .



**Appendix E** Biomass of different organs of isogenic lines at different stages. (A, B) biomass of root of isogenic lines at background of LMY22 in 2017 and 2018; (C, D) biomass of root of isogenic lines at background of LMY28 in 2017 and 2018; (E, F) biomass of stem of isogenic lines at background of LMY22 in 2017 and 2018; (G, H) biomass of stem of isogenic lines at background of LMY28 in 2017 and 2018; (I, J) biomass of leaf of isogenic lines at background of LMY22 in 2017 and 2018; (K, L) biomass of leaf of isogenic lines at background of LMY28 in 2017 and 2018; (M, N) biomass of fruit of isogenic lines at background of LMY22 in 2017 and 2018; (O, P) biomass of fruit of isogenic lines at background of LMY28 in 2017 and 2018; Different low-case letters are significantly different at  $P<0.05$ .