

附表1 56份甘蔗种质资源的基本信息

Supplementary Table 1 Basic information on 56 sugarcane germplasm resources

序号No	品种/系 Vareity/line	类型Type	材料来源Varietysource	亲本组合 Parentalcombination	备注Notes
1	滇蔗01-106 YAU01-106	育种材料 Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	崖城89-9 × 蔗 茅 YC89-9 × Erianthus fulvus	含有蔗茅野生种血缘的 F1代材料 F1 generation material containing wild Erianthus fulvus
2	新台糖22号 XTT22	栽培品种Cultivated varieties	台湾糖业研究所 Taiwan Sugar Research Institute	新台糖5号 × 69- 463 XTT5 × 69-463	
3	新台糖20号 XTT20	栽培品种Cultivated varieties	台湾糖业研究所 Taiwan Sugar Research Institute	69-463 × 68- 2599	
4	滇蔗11-810 YAU11-810	育种材料 Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-106 × 新 台糖10号 YAU01-106 × XTT10	含有蔗茅野生种血缘的 F2代材料 F2 generation material containing wild Erianthus fulvus
5	滇蔗11-818 YAU11-818	育种材料 Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-106 × 新 台糖10号 YAU01-106 × XTT10	含有蔗茅野生种血缘的 F2代材料 F2 generation material containing wild Erianthus fulvus
6	运河点65-557 CP65-557	栽培品种Cultivated varieties	美国运河点甘蔗育种场 Canal Point Sugarcane Breeding Farm in the United States	运河点52-68a × 运河点53-17 CP52-68a × CP53-17	
7	滇蔗19-6 YAU19-6	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗16-9 × 新台 糖10号YAU16- 9 × XTT10	滇蔗16-9为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-9 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
8	滇蔗16-16 YAU16-16	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-58 × 蔗 茅 YAU01-58 × Erianthus fulvus	含有蔗茅血缘的BC1F1代 材料 BC1F1 generation material containing wild Erianthus fulvus
9	滇蔗01-58 YAU01-58	栽培品种（糖能兼用型甘蔗 新品种）Cultivated varieties (A new sugarcane variety with dual-use sugar energy)	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	崖城89-9 × 蔗 茅 YC89-9 × Erianthus fulvus	含有蔗茅野生种血缘的 F1代材料 F1 generation material containing wild Erianthus fulvus
10	滇蔗01-104 YAU01-104	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	崖城89-9 × 蔗 茅 YC89-9 × Erianthus fulvus	含有蔗茅野生种血缘的 F1代材料 F1 generation material containing wild Erianthus fulvus
11	滇蔗09-38 YAU09-38	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗04-14 × 新 台糖10号 YAU04-14 × XTT10	含有蔗茅野生种血缘的 BC2代材料 BC2 generation material containing wild Erianthus fulvus
12	滇蔗17-2 YAU17-2	育种材料 Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	新台糖10号 × 割手密 XTT10 × Saccharum spontaneum	
13	滇蔗18-1 YAU18-1	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗02-277 × 割 手密 YAU02-277 × Saccharum spontaneum	滇蔗02-277为含有蔗茅血 缘的F1代材料 YAU02-277 is the F1 generation material containing wild Erianthus fulvus

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14	滇蔗19-3 YAU19-3	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗16-9×新台 糖10号 YAU16-9 × XTT10	滇蔗16-9为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-9 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
15	滇蔗19-7 YAU19-7	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗16-9×新台 糖10号 YAU16-9 × XTT10	滇蔗16-9为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-9 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
16	滇蔗19-9 YAU19-9	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗16-9×新台 糖10号 YAU16-9 × XTT10	滇蔗16-9为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-9 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
17	滇蔗19-17 YAU19-17	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	运河点72-2086 ×滇蔗16-12 CP72-2086× YAU16-12	滇蔗16-12为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-12 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
18	滇蔗19-19 YAU19-19	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	运河点72-2086 ×滇蔗16-12 CP72-2086× YAU16-12	滇蔗16-12为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-12 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
19	滇蔗19-30 YAU19-30	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	运河点72-2086 ×滇蔗16-12 CP72-2086× YAU16-12	滇蔗16-12为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-12 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
20	滇蔗19-1 YAU19-1	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗16-9×新台 糖10号 YAU16-9 × XTT10	滇蔗16-9为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-9 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
21	滇蔗19-11 YAU19-11	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	运河点72-2086 ×滇蔗16-12 CP72-2086× YAU16-12	滇蔗16-12为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-12 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
22	滇蔗19-14 YAU19-14	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	运河点72-2086 ×滇蔗16-12 CP72-2086× YAU16-12	滇蔗16-12为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-12 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
23	滇蔗19-16 YAU19-16	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	运河点72-2086 ×滇蔗16-12 CP72-2086× YAU16-12	滇蔗16-12为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-12 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.

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24	滇蔗02-277 YAU02-277	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	崖城89-9 × 蔗 茅 崖城89-9 × Erianthus fulvus	含有蔗茅野生种血缘的 F1代材料 F1 generation material containing wild Erianthus fulvus
25	滇蔗19-18 YAU19-18	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	运河点72-2086 × 滇蔗16-12 CP72-2086 × YAU16-12	滇蔗16-12为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-12 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
26	滇蔗19-2 YAU19-2	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗16-9 × 新台 糖10号 YAU16-9 × XTT10	滇蔗16-9为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-9 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
27	滇蔗19-20 YAU19-20	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	运河点72-2086 × 滇蔗16-12 CP72-2086 × YAU16-12	滇蔗16-12为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-12 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
28	滇蔗19-25 YAU19-25	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	运河点72-2086 × 滇蔗16-12 CP72-2086 × YAU16-12	滇蔗16-12为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-12 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
29	滇蔗19-26 YAU19-26	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗02-277 × 滇 蔗02-277 YAU02-277 × YAU02-277	滇蔗02-277为含有蔗茅血 缘的F1代材料 YAU02-277 is the F1 generation material containing wild Erianthus fulvus
30	滇蔗19-8 YAU19-8	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗16-9 × 新台 糖10号 YAU16-9 × XTT10	滇蔗16-9为滇蔗01-58与 蔗茅回交的BC1F1代材料 YAU16-9 is a BC1F1 generation material from a backcross between YAU01-58 and Erianthus fulvus.
31	滇蔗19-38 YAU19-38	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	不详 Unclear	
32	滇蔗16-10 YAU16-10	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-58 × 蔗 茅 YAU01-58 × Erianthus fulvus	含有蔗茅血缘的BC1F1代 材料 BC1F1 generation material containing wild Erianthus fulvus
33	滇蔗10-1 YAU10-1	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-70 × 粤 糖93/159 YAU01-70 × YT93-159	含有蔗茅野生种血缘的 F2代材料 F2 generation material containing wild Erianthus fulvus
34	滇蔗01-52 YAU01-52	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	崖城89-9 × 蔗 茅 YC89-9 × Erianthus fulvus	含有蔗茅野生种血缘的 F1代材料 F1 generation material containing wild Erianthus fulvus
35	滇蔗01-47 YAU01-47	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	崖城89-9 × 蔗 茅 YC89-9 × Erianthus fulvus	含有蔗茅野生种血缘的 F1代材料 F1 generation material containing wild Erianthus fulvus

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36	滇蔗01-64 YAU01-64	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	崖城89-9 × 蔗 茅 YC89-9 × Erianthus fulvus	含有蔗茅野生种血缘的 F1代材料 F1 generation material containing wild Erianthus fulvus
37	滇蔗16-17 YAU16-17	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-58 × 蔗 茅 YAU01-58 × Erianthus fulvus	含有蔗茅血缘的BC1F1代 材料 BC1F1 generation material containing wild Erianthus fulvus
38	滇蔗16-19 YAU16-19	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-120 × 蔗 茅 YAU01-120 × Erianthus fulvus	含有蔗茅血缘的BC1F1代 材料 BC1F1 generation material containing wild Erianthus fulvus
39	滇蔗04-14 YAU04-14	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-47 × 新 台糖10号 YAU01- 47 × TTT10	含有蔗茅野生种血缘的 F2代材料 F2 generation material containing wild Erianthus fulvus
40	滇蔗04-429 YAU04-429	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-47 × 新 台糖10号 YAU01-47 × TTT10	含有蔗茅野生种血缘的 F2代材料 F2 generation material containing wild Erianthus fulvus
41	滇蔗02-38 YAU02-38	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	崖城89-9 × 蔗 茅 YC89-9 × Erianthus fulvus	含有蔗茅野生种血缘的 F1代材料 F1 generation material containing wild Erianthus fulvus
42	新台糖10号 XTT10	栽培品种Breeding materials	台湾糖业研究所 Taiwan Sugar Research Institute	不详 Unclear	
43	新台糖16号 XTT16	栽培品种Cultivated varieties	台湾糖业研究所 Taiwan Sugar Research Institute	台糖174 × 74- 575 F174 × 74-575	
44	崖城89-9 YC89-9	栽培品种Cultivated varieties	海南崖城甘蔗育种场 Hainan Yacheng Sugarcane Breeding Farm	运河点72-1210 × 崖城82-108 CP72-1210 × YC82-108	
45	桂糖11 GT 11	栽培品种Cultivated varieties	广西甘蔗研究所 Guangxi Sugarcane Research Institute	运河点49-50 × 印度419 CP49-50 × Co419	
46	粤糖93-159 YT93-159	栽培品种Cultivated varieties	中国轻工总会广州甘蔗糖业研 究所湛江甘蔗试验站 Zhanjiang Sugarcane Experimental Station, Guangzhou Sugarcane Research Institute, China National Light Industry Federation	粤糖73-204 × 运 河点72-1210 YT73-204 × CP72-1210	
47	粤糖86-368 YT86-368	栽培品种Cultivated varieties	中国轻工总会广州甘蔗糖业研 究所湛江甘蔗试验站 Zhanjiang Sugarcane Experimental Station, Guangzhou Sugarcane Research Institute, China National Light Industry Federation	台糖160 × 粤糖 71-210 F160 × YT71- 210	
48	滇蔗11-726 YAU11-726	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-106 × 新 台糖10号 YAU01-106 × XTT10	含有蔗茅野生种血缘的 F2代材料 F2 generation material containing wild Erianthus fulvus
49	滇蔗11-736 YAU11-736	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-106 × 新 台糖10号 YAU01-106 × XTT10	含有蔗茅野生种血缘的 F2代材料 F2 generation material containing wild Erianthus fulvus

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50	滇蔗11-832 YAU11-832	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-106×新 台糖10号 YAU01-106× XTT10	含有蔗茅野生种血缘的 F2代材料 F2 generation material containing wild Erianthus fulvus
51	滇蔗11-728 YAU11-728	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-106×新 台糖10号 YAU01-106× XTT10	含有蔗茅野生种血缘的 F2代材料 F2 generation material containing wild Erianthus fulvus
52	滇蔗11-732 YAU11-732	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-106×新 台糖10号 YAU01-106× XTT10	含有蔗茅野生种血缘的 F2代材料 F2 generation material containing wild Erianthus fulvus
53	滇蔗11-718 YAU11-718	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	滇蔗01-106×新 台糖10号 YAU01-106× XTT10	含有蔗茅野生种血缘的 F2代材料 F2 generation material containing wild Erianthus fulvus
54	滇蔗97-191 YAU97-191	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	崖城89-9 ×蔗 茅 YC89-9× Erianthus fulvus	含有蔗茅野生种血缘的 F1代材料 F1 generation material containing wild Erianthus fulvus
55	梁河78-121 LH78-121	育种材料Breeding materials	德宏州甘蔗科学研究所梁河甘 蔗站 Lianghe Sugarcane Station, Dehong Prefecture Sugarcane Science Research Institute	不详 Unclear	
56	滇蔗19-216 YAU19-216	育种材料Breeding materials	云南农业大学甘蔗研究所 Sugarcane Research Institute, Yunnan Agricultural University	不详 Unclear	

附表2 生理指标测定试剂盒

Supplementary table 2 Physiological index measurement kit		
生理指标	试剂盒	公司
Physiological index	Kit	Company
过氧化物酶	过氧化物酶(POD)试剂盒	江苏，艾迪生，中国
Peroxidase	Peroxidase (POD) kit	Jiangsu, Adisheng, China
多聚半乳糖醛酸酶	多聚半乳糖醛酸酶试剂盒	江苏，艾迪生，中国
Polygalacturonase	Polygalacturonase kit	Jiangsu, Adisheng, China
纤维素酶	内切-β-1, 4-葡聚糖酶/纤维素酶试剂盒	江苏，艾迪生，中国
Cellulase	Ensection-β-1,4-glucanase/cellulase kit	Jiangsu, Adisheng, China
脱落酸	植物脱落酸(ABA)检测试剂盒	江苏，晶美，中国
Abscisic acid	Plant abscisic acid (ABA) detection kit	Jiangsu, Jingmei, China
乙烯合成前体	植物乙烯合成前体（ACC）检测试剂盒	江苏，晶美，中国

Ethylene synthesis precursor	Plant ethylene synthesis precursor (ACC) detection kit	Jiangsu, Jingmei, China
生长素	植物生长素（IAA）检测试剂盒	江苏，晶美，中国
Auxin	Plant auxin (IAA) detection kit	Jiangsu, Jingmei, China