

Table 5 The variety name, parents and breeding institutions of 12 sweet corn used in this study

Number	Variety name	Parents (Female/Male)	Breeding institutions
1	Zhongtian 7	M39/M102	Zhongkai University of Agriculture and Engineering
2	Yuetian 28	GQ-1/Qun1-1	Crops Research Institute, Guangdong Academy of Agriculture Sciences
3	Zhongtian 9	T46-3/MCT-2	Zhongkai University of Agriculture and Engineering
4	Ruizhen	Huzhen H04-3/Xian T05-4	Zhuhai Goldenland A&D Co., LTD
5	Weitian 1	WT01/WT02	Guangzhou Harvest-Seed Co., LTD
6	Fotian 2	Fox-2/Fox-8	Foshan University
7	Zhongxiantian 3	T49-3/YDT-5	Zhongkai University of Agriculture and Engineering
8	Kupula	SUSP00Y01F/SUSP00W02M	Syngenta Biotechnology (China) Co., LTD
9	Jinzhongyu	YT0213/YT0235	Hubei Provincial Seed Group Co., LTD
10	Zhongxiantian 102	T60-10-1/MCT-10-2	Zhongkai University of Agriculture and Engineering
11	Zhuyutian 1	Zhuxuan GT-128/Zhuxuan GT-99	Zhuhai Agricultural Science Research Center
12	Fotian 10	L63W91/X10E56	Foshan University