

Supplementary Table S8. List of eight tested tomato cultivars/hybrids with their type, seed sources and characterization.

Cultivar	Type	Seed source	Characterization
Yuanwei NO.1	cherry tomato cultivar	originally imported from Japan	Unlimited growth types, apple-shaped fruit, single fruit weight 80-120 grams, pink with green shoulders, fully mature green shoulders disappeared, crispy skin, sweet and sour delicious, unique tomato fragrance and also rich in vitamins A, C, B1, B2, carotene, calcium, phosphorus, potassium, magnesium, iron, zinc, copper, iodine and other elements, as well as protein, sugars, organic acids, cellulose.
Fenyuan	cherry tomato cultivar	originally from Hongwei Seed Industry Co., Ltd., Shouguang, Shandong, China	Unlimited growth type, early maturity, pink circle fruit, super sweet taste, transportation resistance, high disease resistance, and high yield, suitable for early spring, autumn extension, and overwintering production.
Ziyu	cherry tomato hybrid	from Hongwei Seed Industry Co., Ltd, but originally imported from Japan	Unlimited growth type, single fruit weight around 20g, good taste, and high disease resistance.
Hongyu	cherry tomato hybrid	from Hongwei Seed Industry Co., Ltd, but originally imported from Japan	Unlimited growth type, single fruit weight around 20g, good taste, and high disease resistance.
Xiariyangguang	cherry tomato cultivar	originally introduced from Israel's Hazera, Israel	Unlimited growth type, yellow round fruit, super sweet taste, resistance to transportation, high disease resistance, and high yield.
Huangzhenzhu	cherry tomato hybrid	from Beijing Fengming Yashi Seed Industry, originally introduced from Japan	Unlimited growth type, early maturity, round and spherical fruit, good hardness, strong growth, short internodes, high disease resistance, and high temperature resistance
Jinpeng 11	big fruited tomato cultivar	originally from Xi'an Jinpeng Seed Industry Co., Ltd., Xi'an, Shaanxi, China	Strong growth, round fruit, single fruit weight 250g, early maturity, resistance to Ty virus disease, and resistance to root knot nematode.
Fengshouhuang	big fruited tomato cultivar	originally from Jiuquan Dajinke Seed Industry Co., Ltd., Jiuquan, Gansu, China	Mid-late maturing, disease resistant, round orange-yellow fruit, and single fruit weight up to 350g.