

晚熟桃新品种秋忆的选育

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摘要:秋忆是由燕红桃自然实生种子播种成苗后,经筛选获得的晚熟桃新品种。果实近圆形,果顶凹,缝合线浅,两侧对称,平均单果质量287 g,最大单果质量415 g。完全成熟时果面95%以上着深红色,具中等密度茸毛;果肉呈黄白色,近果皮处花青苷含量较高,硬溶质,风味甘甜,黏核,可溶性固形物含量(w)12.6%,果实硬度12.5 kg·cm⁻²;蔷薇型花,花粉量多,自花结实。在河北昌黎地区9月上中旬成熟,果实发育期135 d左右,耐贮运,抗寒性强,丰产。适宜在河北、山东等北方桃产区种植。

关键词:桃;新品种;秋忆

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Report of a new late-ripening peach cultivar Qiuyi

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Abstract: Peach has been cultivated for more than four thousand years in China. Yanhong peach is a main cultivar in Hebei province, but the fruits of it tend to be subjected to cracking in the rainy season. Qiuyi is a new late-ripening peach cultivar derived from the seedlings of Yanhong. The seeds of Yanhong were collected in late August of 2002 and were sowed in early March of 2003 after stratification. The seedlings were transplanted to the breeding nursery in May. The seedlings bore fruits in 2005. After three years selection. The elite seedling numbered 02-08-102 was selected in 2007 for its good quality. After regional adaptability testing in Changli county, Laoting county and Yongqing county started from 2008. It was named as Qiuyi finally and licensed in 2021. The trees of Qiuyi are tall with semi-spreading tree gesture. The flowers have self-pollination ability. The fruit shape of Qiuyi is nearly round and the top of fruit is concave, the suture is shallow and symmetrical. The average fruit weight is 287 g, and the biggest one can reach 415 g. The color of background skin is green-white, and more than 95% of the fruit surface is covered by deep red color. The flesh is white with red pigment, and hard-melting. It tastes sweet. The texture is fine. The soluble solids content is 12.6%, and the firmness is 12.5 kg·cm⁻². The stone is cling. The quality is excellent. In Changli area, Hebei province, the flower buds of Qiuyi begin to sprout in early April, and flower by the end of April. The fruits mature in early-mid September. The fruit development period is about 130–135 days. The fruits have good storage stability and the shelf life is about 15 days. The cultivar has generally high germination rate and branching ability. It is resistant to fruit cracking and coldness. The variety can bear fruits in the third year after planting, and has high yield potential. The spacing would be 3 m×4 m for “Y” shape form and 3 m×5 m for open heart-shape form. Summer pruning would be recommended to control tree size and maintain tree vigor. Qiuyi would be suitable for planting in Hebei and Shandong provinces.

Key words: Peach; New cultivar; Qiuyi

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桃(*Prunus persica* L. Batsch)为多年生落叶果树,在中国已有4000年的栽培历史。桃果实甜美多汁、营养丰富,深受大众喜爱。中国桃的种植区域分布较广,经济栽培主要分布在西北、华北、华东等地区。河北省光照充足,地理条件优越,目前桃种植面积及产量位居全国第2位^[1-3],但近几年在生产中存在早熟和中熟品种较集中、晚熟品种较少的问题。

河北省露地桃栽培的品种主要有大久保、庆丰、燕红、京玉等^[4]。主栽品种燕红桃,原名绿化九号,成熟期为8月底,采收前遇雨季易裂果^[5],造成减产,影响果实品质。为此,笔者课题组自2002年以培育晚熟、优质、高抗、耐贮运桃为育种目标,以燕红桃作为亲本开展品种选育工作,以期丰富河北省晚熟桃品种类型。

1 选育过程

2002年8月下旬,采收燕红桃种子,沙藏越冬,于2003年3月进行催芽、播种,5月定植于育苗圃,2005年开始结果,经过3 a(年)的连续观察,选出综合性状突出的单株02-08-102,该单株果实9月上旬成熟,比母本燕红晚熟10~15 d,表现出果型大、肉质较硬、不裂果、晚熟等特点,2007年确定为优选系。自2008年开展品种比较试验和多点区试,区试点主要在昌黎县、永清县、乐亭县等地,监测记录表明,02-08-102较对照品种燕红桃的成熟期晚10~15 d,果实硬度及可溶性固形物含量较燕红桃有所提高,其他经济性状无明显差别。通过多年多点高接鉴定、品种比较试验、区域试验、丰产试验,对各区试地植株的树势、树体、叶片、种子、花、果实等进行观测,结果均具有一致性、稳定性,综合性状优良,未出现异型株。于2021年12月30日获得农业农村部植物新品种授权,授权信息在2022年第2期《农业植物新品种保护公报》公告,定名为秋忆(图1)。



图1 晚熟桃新品种秋忆

Fig. 1 A new late-ripening peach cultivar Qiuyi

2 主要性状

2.1 植物学特征

秋忆生长势强,树体健壮,半开张,萌芽率高,成枝力强。1年生枝阳面红褐色,节间平均长2.35 cm。叶片披针形,呈深绿色,叶片平均长18.5 cm,宽5.0 cm,叶面平展,叶片蜜腺肾形,2~4枚。蔷薇型花,花瓣5枚,粉红色,花粉量大,自花结实。花芽起始节位为2~3节,复花芽多。

2.2 果实经济性状

如表1所示,果实近圆形,对称性好,果顶圆平,缝合线浅,成熟一致,平均单果质量287 g;果皮底色绿白,果面着深红色,着色率 $\geq 95\%$;茸毛较短,中等密度;果皮不易剥离。果肉黄白色,皮下具红色素,硬溶质,汁液中等,风味甜,可溶性固形物含量(w)12.6%。黏核,不裂果。果实硬度为12.5 kg·cm⁻²,耐贮运性强,货架期长。

2.3 物候期

在河北昌黎地区,秋忆正常年份4月初萌芽,4月底始花期,盛花期在5月上旬,花期持续7~10 d,9月上旬果实成熟,果实发育期135 d左右,10月下旬树体开始落叶,生育期205 d左右。

表1 秋忆与燕红桃主要经济性状对比

Table 1 Comparison of main fruit characters between Qiuyi and Yanhong

| 品种 Cultivar | 成熟期 Maturing date | 果实发育期 Fruit growth period/d | 果形 Fruit shape | 平均单果质量 Mean single fruit mass/g | w(可溶性固形物) Soluble solids content/% | 风味 Flavor | 硬度 Fruit firmness/(kg·cm ⁻²) | 果核状态 Stone adhesion | 产量 Yield |
|----------------|----------------------|--------------------------------|-------------------|------------------------------------|---------------------------------------|--------------|---|------------------------|-------------|
| 秋忆 Qiuyi | 9月10日 Sept. 10 | 135 | 近圆 Round | 287 | 12.6 | 甜 Sweet | 12.5 | 黏核 Cling | 丰产 High |
| 燕红 Yanhong | 8月25日 Aug. 25 | 120 | 圆 Round | 274 | 12.3 | 甜 Sweet | 12.0 | 黏核 Cling | 丰产 High |

2.4 抗逆性及栽培适应性

树体和花芽抗寒性强,冬季无抽条现象。无明显特异性病虫害。

3 栽培技术要点

3.1 建园

选择土层深厚、土壤肥沃、灌溉和排水条件良好的平地或山地梯田建园,土壤以中性或微酸性为宜。秋忆株行距为 $3\text{m}\times(4\sim 5)\text{m}$,每 666.7m^2 定植 $44\sim 55$ 株, $0.5\sim 0.6\text{m}$ 定干。4月上旬定植。定植时挖 0.6m 见方的定植穴,回填时每 666.7m^2 混入 2500kg 左右有机肥,栽后浇足水分,覆盖地膜。

3.2 整形修剪

秋忆树形以两主枝“Y”字形或三主枝开心形为好,整形以夏剪为主,每年宜进行 $4\sim 5$ 次。任务是调整新梢留量和生长方向,抹除背上旺长新梢;清理内膛徒长枝,疏除过密、过旺、竞争枝。每 666.7m^2 成龄树结果枝总数控制在 $4500\sim 6000$ 个,控制负载量,保证良好的通风透光条件。

3.3 肥水管理

建议滴灌或喷灌。开花到6月中下旬应(视土壤墒情)限制灌水,萌芽期和果实膨大期需要充足水分,及时灌溉。基肥于秋季落叶前1个月内一次性施入,每 666.7m^2 园土施肥量以 $4\sim 5\text{m}^3$ 为宜。肥料以腐熟的鸡粪、羊粪或牛粪为宜。施肥后立即浇水。生长季内土壤追肥2次。花前、6月中下旬追施化肥。

3.4 花果管理

秋忆容易成花,花粉量大,自花结实,坐果率高,因此生产上应进行合理疏花疏果。成龄树每株留果量控制在 $200\sim 300$ 个,每 666.7m^2 产量保持在 $2000\sim 2500\text{kg}$ 。长果枝一般留果 $3\sim 4$ 个,中果枝留果 $2\sim 3$ 个,短果枝和花束状果枝留果1个,多留外围上部果,内膛和下部少留果。该品种为晚熟品种,建议套

袋栽培,提高果实品质。

3.5 病虫害防治

本地区主要病害为细菌性穿孔病、褐腐病等,病害初侵染期在开花前,病菌借风雨和昆虫传播,防治方法如下:发芽前喷1次 $3\sim 5^\circ\text{Bé}$ 石硫合剂,花后间隔 10d 连续喷3次40%噻唑锌悬乳剂 $600\sim 800$ 倍。在昌黎地区害虫主要防治对象为桃蚜、桃小食心虫、梨小食心虫等。

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