

## 观赏桃新品种钟丽的选育

俞明亮, 张斌斌, 许建兰, 马瑞娟, 郭磊, 严娟, 张好艳, 丁辉, 宋思言

(江苏省农业科学院果树研究所·江苏省高效园艺作物遗传改良重点实验室, 南京 210014)

**摘要:**钟丽是由白垂枝优株G05×菊花桃F<sub>1</sub>代中选出的优株2007-25自然实生培育而成的观赏桃新品种。果实卵圆形, 果皮绿色, 果肉绿白色; 平均单果质量30.5 g, 最大单果质量42 g。可溶性固形物含量(w, 后同)为12.6%, 风味酸, 不宜食用。果实生育期150 d左右, 在江苏南京(N32°02'13", E118°52'2")8月中旬成熟; 花为菊花型, 花径3.5 cm, 花瓣浅红色, 15~20瓣; 花丝红色, 33~40条, 花药橘红色, 有花粉, 雌蕊1枚, 雌蕊与雄蕊等高; 萼片红褐色, 2轮, 10枚, 萼筒内壁浅黄色。树型为垂枝形, 树势中庸; 幼树以长、中果枝为主, 成龄树中、短果枝量增多。流胶病抗性中等, 其他病虫危害较轻。适合长江流域和黄河流域地区栽培, 第2年开花结果。

**关键词:** 观赏桃; 新品种; 钟丽; 浅红色; 重瓣; 菊花型; 垂枝形

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## Breeding report of a new ornamental peach cultivar Zhongli

YU Mingliang, ZHANG Binbin, XU Jianlan, MA Ruijuan, GUO Lei, YANG Juan, ZHANG Yuyan, DING Hui, SONG Siyan

(Institute of Pomology, Jiangsu Academy of Agricultural Sciences/Jiangsu Key Laboratory for Horticultural Crop Genetic Improvement, Nanjing 210014, Jiangsu, China)

**Abstract:** Zhongli is an ornamental peach with excellent tree habit and flower. The seedling was derived from 2007-25 with open pollination in 2010 at experimental field. The 2007-25 was derived from a cross between a selection of Baichuizhi × 'Juhuatao'. It was initially selected in 2013 for its extraordinary tree habit and flower type. After regional adaptability testing at three sites (including Nanjing, Lishui and Wuxi) over four years from 2016 to 2019, it was finally selected in 2019. This species is a tall tree, attaining a height of 3 m; the tree is medium vigor with semicircular crown and weeping tree gesture. Young branches are dull grey-brown in color. The shoot internode length is 2.00 cm. Leaves are long elliptic-lanceolate, margin serrulate, base cuneate, green color, 11.24 cm long, 4.0 cm wide. The petiole length is 0.75 cm, with reniform glands. The flowers are chrysanthemum-like form, 10-20 petals, light red, 3.5 cm diameter when fully open; thirty-three to forty light red filaments and orange anthers with pollens; one pistil, pistil and stamen equal height; two round and ten pieces of reddish brown sepals with light yellow inner calyx tub color. Fruit is mainly ovate, has greenish surface color. Its flesh is greenish-white, crisp. The average fruit weight is 30.5 g, maximum fruit weight is 42 g. The content of soluble solid is 12.6%, sour taste. The fruit development period is about 150 d and it matures at mid-August in Nanjing area. The percentage of water sprout branch with flower buds, long fruit shoot, middle fruit shoot, short fruit shoot and spur branch buds is 1.71%, 39.25%, 29.01%, 24.23% and 5.80%, respectively with 5-year-old tree. The site of first node with flower is 1-3, average 69 flowers per meter shoot. In Nanjing area, the flower buds expanded at early March, and began to bloom on March 20. The flowering period lasted for 15 days. It is moderately resistant to fugal gummosis. Suitable cultivation area is the Yangtze River Basin and the Yellow River Basin, this variety can flower and bear fruits next year after planted. It would be better to choose neutral sandy soil to plant trees, keep away from water

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作者简介:俞明亮,男,研究员,主要从事桃种质资源与新品种选育研究。Tel:13601588855,E-mail:mly1008@aliyun.com

logging area. It can be top-grafted on 1 m tall rootstock, so the shoots will hang down with good shape. The main purpose of pruning was to train the canopy shape for young tree, and to control the growth and promote the differentiation of flower buds for adult tree. Pruning after bloom was highly recommend so as to keep more flowers on the tree, and promote the ornamental value. In the period of flower bud expansion, the sulphur mixture should be sprayed, in order to reduce aphids, scale insects, erythronera sudra and bacterial shot-hole.

**Key words:** Ornamental peach; New cultivar; Zhongli; Light red; Semi-double petal; Chrysanthemum-like form; Weeping tree shape

桃起源于中国,具有悠久的种植栽培历史。桃花是春天的象征,以其开花早、艳丽吉祥而深受人们喜爱。中国的桃文化源远流长,历代文人赋予桃花美丽的诗句。20世纪末以来,全国各地举办形式多样的桃花节活动,春天观花、夏秋品桃,桃花、桃果深入家家户户,拓展了产业链,提升了产品价值。

不同的树型与枝态、花型与颜色、始花期与开花持续时间,为观赏桃提供了多样组合与类型。江苏省农业科学院自20世纪90年代开始开展观赏桃新品种选育研究<sup>[1]</sup>,旨在丰富观赏桃类型,延长桃花观赏期。

## 1 选育过程

2007年以白垂枝优株G05为母本、菊花桃<sup>[2]</sup>为父本配置杂交组合,获得F<sub>1</sub>代单株15株,2010年杂种群体开花,从中筛选出粉花重瓣优株2007-25,当年8月采集该优株的自然授粉种子,播种后得到实生苗12株,2011年春定植于江苏省农业科学院桃选种圃。2013年春实生苗开花,其中C20-27-69植株表现为垂枝形,花型为菊花型,花重瓣、浅红色;花期比菊花桃提早5~7 d,与红垂枝<sup>[3]</sup>相近。2014年春季高接扩繁,2015年高接树开花。2015年秋季以毛桃为砧木嫁接繁殖小苗,2016年春定植于南京本部试验园、溧水基地以及无锡阳山。经过连续4 a的观察比较,该品种树、枝、花、叶、果等性状均表现稳定。2021年6月获得国家林业和草原局植物新品种权证书(品种权号:20210141),定名为钟丽(图1)。

## 2 主要性状

### 2.1 植物学特征

树型垂枝形;1年生枝阳面皮色暗红,节间长度2.00 cm。叶片长11.24 cm,宽3.29 cm,长与宽的比



图1 钟丽的系谱关系

Fig. 1 The pedigree of ornamental peach Zhongli

值为3.41,叶柄长0.75 cm;叶片呈长椭圆披针形,表面皱缩似菊花桃,叶缘细锯齿状,叶基楔形,叶尖渐尖,叶色绿色,叶腺肾形;花为菊花型(图2),花瓣数量10~20瓣,浅红色,花朵直径3.5 cm;花丝浅红色,33~40条,花药橘红色,有花粉;雌蕊1枚,雌蕊与雄蕊等高,萼筒内壁浅黄色;萼片红褐色,10枚。果实卵圆形,绿色,果个小,平均单果质量30.5 g,大果质量42 g,果肉绿白色,味酸,不宜食用,离核。

### 2.2 生长结果习性

树势中庸。花芽起始节位低,为第1~3节,花密度中等。幼树以长、中果枝为主,成龄树中、短果枝量增多。5年生树徒长性果枝占1.71%,长果枝占39.25%,中果枝占29.01%,短果枝占24.23%,花束状果枝占5.80%。自花可以结实,坐果量少。

### 2.3 物候期

南京地区3月初花芽开始膨大,3月中旬小蕾至中蕾,3月20日左右始花,盛花期持续8~10 d,开花持续期可达15 d(表1)。果实8月中旬成熟,果实生育期150 d左右,11月上旬开始大量落叶,11月中下旬落叶终止,全生育期270 d左右。



图2 观赏桃新品种钟丽

Fig. 2 A new ornamental peach cultivar Zhongli

表1 钟丽与菊花桃、红垂枝的比较

Table 1 Comparation between Zhongli and Juhuatao, Hongchuizhi

品种 Cultivar	始花期 First blooming date	花色 Petal color	花径 Flower size/cm	花瓣数 Petal number	花药颜色 Anther color	萼片数 Sepal number	开花持续期 Flower lasted tome/d
钟丽 Zhongli	3月20日 Mar. 20	浅红 Light red	3.5	10~20	橘红 Jacinth	10	15
菊花桃 Juhuatao	3月27日 Mar. 27	粉红 Pink	4.3	19~36	橘红 Jacinth	10	16~20
红垂枝 Hongchuizhi	3月22日 Mar. 22	深红 Dark red	4.0	15~18	橘红 Jacinth	5~10	15

### 3 栽培技术要点

适宜在长江流域和黄河流域桃产区栽植。根据景观需求,可利用直立性好的砧木高干(1 m)嫁接,枝条下垂披挂;也可嫁接小苗。桃树不耐涝,该品种流胶病抗性中等,不宜在地势低洼处种植。种植前多施有机肥,并疏松改良定植点周围土壤。幼树期修剪以树形培养为主,促进树冠扩大;成龄树为保持开花量,提高观赏效果,可在花后进行修剪,疏除细弱、密枝,重短截,促发新枝。冬季休眠期、花芽膨大期喷施石硫合剂,平时注意蚜虫、介壳虫、一点叶蝉以及穿孔病等的防治,秋季注意保护叶片,尽量延迟落叶。

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