观赏桃新品种玲珑红的选育品

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摘 要: 玲珑红是以嫣红早花桃为母本、红寿星桃为父本进行杂交,从其杂交后代中选育出的观赏桃新品种。 树姿矮型,2年生平均株高50.7 cm,平均冠幅34.6 cm×34.9 cm,枝条短;节间短,平均长0.9 cm;以短枝着花为主,成花容易,花芽数多;花梅花型,重瓣,平均花径3.8 cm;花蕾深红色,花瓣红色,4轮,平均22片;花丝平均33条,少量花丝瓣化;花药黄色,有花粉;雌蕊1枚;花萼2轮,10片,红褐色。在河南省许昌地区,始花期3月14日,盛花期3月18—27日,末花期3月29日,开花持续天数15 d左右。果面绿色,茸毛中等。耐旱,耐寒,适应性广,抗逆性强。需冷量较低,在满足需冷量400~550 h 的地区均可栽植。

关键词: 观赏桃; 新品种; 玲珑红; 矮型

中图分类号: S662.1 文献标志码: A 文章编号: 1009-9980(2024)08-0001-08

Breeding report of a new ornamental peach cultivar 'Linglonghong'

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(1.Zhengzhou Agricultural Science and Technology Research Institute, Zhengzhou 450005, China; 2. Yanling Donghua Planting Farmers' Professional Cooperative, Xuchang 461200, China) Abstract: 'Linglonghong' is a new ornamental peach cultivar developed by crossbreeding 'Yanhongzaohua' peach as the female parent and 'Hongshouxing' peach as the male parent. It was initially selected in 2015 for its bright colors and early flowering time. Through artificial hybridization pollination, 30 hybrid seeds was got. In March 2017, after the flowering of 25 seedlings, excellent individual plants with specific performance were found. The initial flowering period of this individual plant was around March 14th, 8 days earlier than the check variety 'Shimahongshouxing'. The flowers were red and of high ornamental value. Subsequently, peach was used as the rootstock for grafting and propagation. In 2018, after the flowering of grafted seedlings, the budding stage, initial flowering stage, peak flowering stage, and final flowering stage was observed, the performance of flowers, leaves, fruits, and other characteristics were recorded, and flower diameter, internode length, and fruit size were measured. Through comparison, it was found that its traits were stable and consistent with the performance of the mother plant. After regional adaptability testing at three sites (including Xuchan, Zhengzhou and Luoyang) over five years from 2018 to 2022, it was finally selected in 2023. The tree posture is dwarf, with a semi open body and straight branches. Two-year average plant height is 50.7 cm, with an average crown width of 34.6 cm x 34.9 cm. The internodes are of short size, with an

收稿日期: 2024-03-12 接受日期: 2024-04-17

基金项目:中原学者工作站项目(ZYGZZ2022073)

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average length of 0.9 cm. The flowers usually grow on short branches, with an average of 36 flowers per branch. It is easy to form flowers, with moderate number of flower buds. The flower is plum blossom shaped, double petal, with an average diameter of 3.8 cm and an average number of 22 petals. The flower buds are deep red, and the petals are red. There are 10 pieces reddish brown sepals. The average number of filaments is 33, with a small amount of filaments petalizing. The anthers are yellow with pollen. There is one pistil, which are almost the same length as stamens. In Xuchang of Henan Province, the initial flowering period was on March 14th, 8 days earlier than the check variety. The peak flowering period lasted from March 18th to 27th, and the final flowering period was on early March 29th. The flowering lasts for about 15 days. The fruit was green with moderate hair. It is resistant to drought, cold and adversity. It is wide adaptability. It is suitable for planting in areas that meet the chilling requirement of 400-550 hours. Grafting methods is used for reproduction. Hard branch grafting can be used in early spring and bud grafting should be carried out before June 10th, using peach as the rootstock.

It is suitable for planting with a rowing space $1 \text{ m} \times 1.5 \text{ m}$ or $1 \text{ m} \times 2 \text{ m}$. In the early stage of pruning, the main focus is on cultivating tree shape, while in the later stage, the vigorous growth is controlled to promote flower bud differentiation. Before flower bud differentiation, it can be combined with watering and applying phosphorus and potassium fertilizers to improve the quality and quantity of flower buds. It has fewer pests and diseases. Strengthening lighting and ventilation can effectively reduce the occurrence of pests and diseases.

Key words: ornamental peach; new cultivar; Linglonghong; dwarf type

观赏桃(Prunus persica)为蔷薇科(Rosaceae)李属(Prunus L.)多年生落叶小乔木,具有花型丰富、花色鲜艳繁多、花期跨度长等观赏性较强的特点,且适应性强、易繁殖,通常作为观赏植物,广泛应用于城市景观美化、生态环境改善、风景名胜区建设、观光农业等领域中。我国观赏桃起源较早[1],随着社会需求的不断变化、生长地域及应用领域的不断增加,培育出了各种特性的观赏桃新品种[2-4]。观赏桃以其花色、花型、树型、枝型、叶色等性状的多样性以及较长的花期等特点,在园林绿化中占有重要地位,不仅对风景名胜区建设、行道树绿化、庭院布置、城市规划设计等有增色作用,它在改善生态环境方面也起着不可估量的作用[5]。观赏桃还可作为盆景、切花、插花等使用[6],在园林绿化中的应用日益广泛。根据枝型特征将观赏桃分为 4 大类,分别为直枝桃、寿星桃、垂枝桃、帚形桃[7]。

明代(公元1368—1644年)开始有寿星桃、日月桃的记载:"瑞香桃,又名孩儿桃,矮桃,高0.33~0.67 cm"即为今日的寿星桃^[8]。寿星桃植株矮小,节间短,花芽密集,花色丰富,既适合园林绿化栽植,也适合作盆栽室内观赏。常见的有

双花寿白、单瓣寿白、单瓣寿粉、单瓣寿红等品种^[7]。近年来又培育出了一些新的品种,如红宝石寿星桃、红伞寿星桃等。

1 选育过程

2015年3月,以嫣红早花为母本、红寿星桃为父本进行杂交,获得杂交种子30粒。2015年秋季,按照常规播种育苗方法,成功繁育种苗25株。2017年3月开花后,从中发现一株特异单株S16。该单株始花期3月14号左右,比石马红寿星桃早8d,花红色,花型为梅花型,重瓣,花径较大,观赏价值高。随后进行嫁接扩繁。2018年分别在许昌市鄢陵县、郑州市中牟县、洛阳市新安县等试验基点进行区域试验,连续5年观测发现,该品种生物学特性表现稳定、一致,初步定名为玲珑红桃(图1)。2023年河南省林木品种委员会审定为良种(编号:豫 S-SV-PP-022-2023)。谱系关系见图2。





图 1 观赏桃新品种玲珑红

Fig. 1 A new ornamental peach cultivar Linglonghong

嫣红早花×红寿星

Yanhongzaohua×Hongshouxing

玲珑红

Linglonghong

图 2 玲珑红的系谱关系

Fig. 2 The pedigree of nectarine cultivar Linglonghong

2 主要性状

2.1 花器性状

玲珑红桃为梅花型,重瓣,花朵直径 3.8 cm。花蕾深红色;花瓣红色,4 轮,平均 22 片;花丝平均 33 条,少量花丝瓣化;花药黄色,有花粉;雌蕊 1 枚;花 萼 2 轮,10 片,红褐色。

表 1 玲珑红与石马红寿星性状比较

Table 1 Comparation between Linglonghong and Shimahongshouxing

品种	始花期	花色	平均花瓣数	花药颜色
Cultivar	First blooming date	Petal color	Petal number	Anther color
玲珑红	3月14日	红色	22	黄色
Linglonghong	Mar.14	Red		Yellow
石 马 红 寿 星	3月22日	浅红色	20	橘黄色
Shimahongshouxing	Mar.22	Light red		Orange

2.2 生长成花习性

树姿矮型,节间长度平均 0.9 cm, 2 年生平均株高 50.7 cm,平均冠幅 34.6 cm×34.9 cm。以短枝着花为主,花芽起始节位为第 3~4 节,单枝着花数平均 36 朵;成花容易。

2.3 物候期

在河南省许昌地区,2月底叶芽膨大,3月4日现蕾,始花期3月14日,盛花期3月18—27日,末花期3月29日,开花持续天数15d左右。7月中旬果皮底色转为绿白色,果实成熟。

3 栽培技术要点

3.1 栽植条件要求

喜温暖湿润气候,适应性强。对立地条件要求不严,但要注意防涝。喜光,

不耐荫,耐寒,需冷量较低,在满足需冷量 400~450 h 的地区均可栽植。对立地条件要求不严,耐干旱,耐瘠薄,但不耐水湿,怕渍涝,适生于地势高燥、排水良好、疏松、肥沃的沙质壤土。

3.2 栽植要点

种植前施有机肥,深翻土壤 30~40 cm。按照 1 m×1.5 m 或 1 m×2 m 株行距进行栽植。前期修剪以培养树形为主,后期控制旺长,促进花芽分化。在落叶前后,结合施有机肥进行秋耕,深 20~30 cm,靠近树干周围宜浅,约 10 cm,由内向外逐步加深。中耕常与灌水相结合,每次灌水后进行中耕除草,以利保墒,疏松土壤。

3.3 水肥管理

施足基肥,定植时穴内要施充分腐熟的有机肥,配施少量复合肥。玲珑红桃喜干怕涝,喜磷钾肥。由于其耐干旱、不耐水湿、更怕渍涝,平日注意适时中耕、锄草,视干旱情况及时浇水。雨季注意排水防涝,防止水大烂根导致植株死亡。早春浇一次开冻水,秋末浇一次封冻水。夏季高温天气,如遇连续干旱,需要适当浇水。花芽分化之前可以结合浇水增施磷钾肥,以提高花芽质量及数量。

3.4 病虫害防治

玲珑红桃病虫害较少,加强光照和通风,可有效减少病虫害发生。流胶病发生时可用刀刮净流胶,并涂硫磺粉,10 d后再涂1次即可防治。防治蚜虫用50%氟啶虫胺腈4000~5000倍液喷雾,防治红蜘蛛用15%哒螨灵乳油2000倍液喷雾。在花芽膨大期应喷洒石硫合剂,可降低蚜虫、蚧壳虫及一些真菌类的侵害。

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