

赏食兼用桃新品种盈香的选育

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摘 要: 盈香是野生毛桃优株经多代嫁接繁殖、栽培观测、性状评价、三性测试培育而成的赏食兼用桃新品种。树势中等, 树姿开张。花芽分布较密集, 花芽间距 2.1 cm。花梅花型, 红色复瓣, 平均花瓣数 24 枚。雌蕊数量通常 1 枚, 花柱红色, 柱头浅黄色, 花药橘红色。果实圆形黏核, 果皮粉红色, 果面茸毛中等, 果皮薄, 果肉初熟时中等紧实, 完熟时变软, 平均单果鲜质量 210 g。3 月上旬始花, 4 月初结束, 7 月底果实成熟。盈香具有花色艳丽、群体花期持续时间长、果实大、口感香甜等特点, 适宜作为赏食兼用桃品种在四川盆地满足需冷量 600 h 以上的山地丘陵地带种植。

关键词: 赏食兼用桃; 新品种; 盈香

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Breeding report of a new dual-purpose peach cultivar, Yingxiang, ideal for both ornamental purposes and fruit consumption

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Abstract: The new dual-purpose peach cultivar, Yingxiang, ideal for both ornamental purposes and fruit consumption was selected from superior wild trees through multiple generations of grafting propagation, cultivation observation, trait evaluation, and DUS test. In March 2015, a unique plant was found in the wild peach population in Muchuan County, Leshan Municipality. This plant had the characteristics of bright red color, double petal, and long flowering period, and the subsequent observation showed that it has high fruit set and good fruit taste. In January 2017, it was propagated by grafting using wild peach as rootstock in Jintang County, Chengdu Municipality, and its flowering characteristics, fruit bearing characteristics and resistance were continuously observed and recorded. From 2018 to 2021, with the first generation of grafted plants as a source, the clones were propagated continuously for multiple generations, and a test nursery was established to observe related traits. The results showed that the botanical characteristics, biological characteristics and excellent traits including bright flowers, double petals, long flowering period, large fruit size and sweet taste could be stably inherited. In September 2023, it was certified as a new cultivar by the National Forestry and Grassland Administration. This cultivar has moderate vigor and an open canopy. The flower bud is medium dense, with an average bud spacing of 2.1 cm. The flower is similar to plum flower and has 24 petals in average, which are red double petals in broad oval shape. The flower usually has one pistil with red style and light yellow stigma. Stamens has a red filament and an orange-red anther. The average fruit weight is 210 g, with a round sticky core, pink peel, medium fuzz on the surface, and the flesh is medium firm to soft from mature to fully

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ripe. In the mountainous and hilly areas around Sichuan Basin, the flowering period is from early March to early April, the fruit ripens at the end of July, and the leaves begin to drop in mid-October. It is moderately resistant to drought and cold. The fruit has a medium storage-life with a cold storage life about 10 days, and is suitable for fresh consumption. This cultivar possesses gorgeous flowers, long flowering period and sweet taste, and can be cultivated for ornamental purpose and for fruit in the mountainous and hilly areas with cooling hours above 600 around Sichuan Basin. It is mainly propagated by grafting. The optimal grafting time is early February, with 1-year-old solid peach seedlings as rootstock. The plants can be transplanted after leaf drop in autumn in the same year. The plants can flower in the second year after grafting, but it is not recommend to allow the plantlet to bear fruit. Field management practices are similar to those for ordinary peach trees, with key aspects including planting density, irrigation, fertilization, and weed control. The pest control is usually carried out using a combination of physical and chemical methods.

Key words: Ornamental purposes and fruit consumption peach; New cultivar; Yingxiang

桃[*Prunus persica* (L.) Batsch]为蔷薇科(Rosaceae)李属(*Prunus* L.)落叶乔木,全球分布广泛,栽培历史悠久,观赏性和食用性俱佳,文化内涵深厚。四川为我国桃主要产区之一,栽培区域主要分布于龙泉山脉和川中丘陵、盆周山地、西南横断山区等地,栽培种类以水蜜桃为主,油桃次之,观赏桃种类较少^[1]。长期以来,桃新品种选育多集中于以低需冷量、花期长、花色丰富等^[2-4]为特点的观赏桃品种和以产量高、品质好、抗性强等^[5-7]为特点的果桃品种两大方向。近年来,随着市场应用场景多元化,兼有观赏桃和果桃优点的桃品种需求增加,但目前该类品种报道较少^[8-9]。因此,培育兼具观赏性和果用性的桃品种,是未来新品种选育工作的重点方向之一。

1 选育过程

2015年3月,成都市金堂县金收庆农业有限公司在乐山市沐川县的自有桃园外购的野生毛桃群体中发现1株性状特异植株,该植株相较于园内其他植株,具有花色艳丽呈红色、复瓣、群体开花持续时间长等特点,后续观察发现其结实率亦较高,果实口感佳。2017年1月,四川省农业特色植物研究院(原四川省植物工程研究院)联合成都市金堂县金收庆农业有限公司在四川省成都市金堂县,采用该特异植株穗条以毛桃为砧木进行嫁接扩繁,并从开花特性、结实特性及抗逆性等方面进行了持续观察和记录。2018—2021年,采集第一代嫁接植株穗条,以毛桃为砧木,连续多代无性系扩繁,建立无性系测定试验苗圃,观测相关性状,结果表明后代植株的植物

学特征、生物学特性和优良性状等均能稳定遗传,具有花艳、复瓣、开花时间长、果实大、口感香甜等特点,初步命名为盈香(图1)。2023年9月获得国家林业和草原局颁发的植物新品种权证书(品种权号:20230490)。

2 主要性状

2.1 植物学特征

盈香树势中等,树冠开张,树皮褐色,当年生枝红褐色。叶片披针形,长12.3 cm,宽3.2 cm,边缘具密钝锯齿,叶柄具肾形蜜腺。花芽分布较密集,花芽间距2.1 cm;花萼2轮,基部隆起,外轮萼片5枚,棕色桃心形,内轮萼片5枚,披针形,呈五角形排列,一定程度瓣化;花梅花型呈红色(表1),颜色均匀,直径4.5 cm,复瓣,花瓣阔卵圆形,覆瓦状排列,表面光滑,轻微褶皱呈不规则扭曲,单朵花瓣数24枚;雌蕊数量通常1枚,花柱红色,具浅黄色柱头,花丝红色,具橘红色花药。果实圆形,平均单果鲜质量210 g,果柄处凹窝中等,果顶弱突,片肉较对称,缝合线浅,果面茸毛中等,底色绿白色,果皮粉红色;果皮薄,不易剥离,果肉初熟时中等紧实,完熟时变软,呈绿白色,纤维程度低,软溶质,口感香甜;果核小,浅褐色呈长椭圆形,表面具点状和槽状混合凹陷,黏核,与果肉依附程度高,较难剥离。

2.2 物候期

该品种在四川盆周山地丘陵地区2月底花芽露红,3月初膨大,3月上旬始花,中旬盛花,3月底至4月初谢花坐果,7月底果实成熟,10月中旬开始落叶。



图 1 赏食兼用桃新品种盈香

Fig. 1 A dual-purpose peach cultivar, Yingxiang, ideal for both ornamental purposes and fruit consumption

表 1 盈香与当地主栽品种性状对比

Table 1 Comparison between Yingxiang and local main cultivar

品种 Cultivar	花型 Flower type	花瓣形状 Petal shape	花色 Flower color	花期 Florescence	果熟期 Fruit ripe season	平均单果鲜质量 Average fruit mass/g
盈香 Yingxiang	梅花型 Plum blossom type	阔卵圆形 Broad oval	红色 Red	3月上旬至4月初 Early March to early April	7月底 End of July	210
白凤 Baifeng	单瓣型 Unipetal type	长卵圆形 Long oval	粉色 Pink	3月中旬 Mid-March	6月下旬至7月初 Late June to early July	250

3 栽培技术要点

3.1 育苗

盈香采用嫁接方式育苗。四川盆周山地丘陵地区2月上旬,以露天种植1年生实生毛桃苗(株行距30 cm×30 cm)为砧木,剪取新品种健康、芽体饱满半木质化枝条为接穗进行枝接,每接穗长5~6 cm,保留1个芽,嫁接时注意接穗与砧木形成层贴紧对齐,接口塑料薄膜绑束严实,嫁接成功后15~20 d新芽即可萌发。后期及时抹掉砧木萌芽,视土壤情况补充水分,3月中旬开始可适当补充氮肥,并配施少量磷钾肥,促进植株更好生长。

3.2 移植

盈香苗嫁接当年10—12月可移植,以肥沃、疏松、透气微酸性(pH 5.5~6.5)壤土或壤砂土的缓坡地块移植为宜。移植前,土壤施足腐熟有机肥作底肥后按3 m×5 m株行距整地起垄,垄宽1.5 m、高30~50 cm,并于垄上挖宽30 cm、深30 cm定植穴,行间推平。移植时,离树干15 cm向下20 cm起出健壮嫁接苗,带土球定植于穴内,覆土压实,浇透定根水。移植后注意土壤保湿,遇寒冷天气可于树干周围铺地膜保温。

3.3 田间管理

3.3.1 水肥管理 盈香植株水肥管理根据不同生长阶段按需进行。结合天气与土壤情况适时浇水,注意萌芽期、硬核期、膨果期等关键时期水分补充,7—8月降雨集中期及时疏沟排水,防止涝害。按不同生长期适时施肥,可于10月环沟施腐熟有机肥作基肥,配施硫酸钾复合肥,保障植株正常生长^[10];2月中旬追施速效氮肥,促进根系生长、抽新梢及花芽萌动;5月底、6—7月追施高钾肥,促进果实发育。日常还可结合病虫害防治喷施叶面肥,促进养分吸收和花果发育。

3.3.2 修剪管理 盈香树枝整形修剪可采用“三主枝开心形+短枝修剪”方式进行。夏季疏除直立旺长枝、过密新梢,冬季修剪长枝,主枝保持水平面均匀分布,每枝保留2~3个侧枝^[11]。幼树前3年适时采用抹芽、摘心、疏枝、回缩等手段培养树冠骨架,3年后以单枝更新法逐年更新修剪。该品种花量大、坐果率高,5月上旬应及时疏果,长、中、短果枝分别保留3~5、2~3、1个果,上部果枝多留果,下部果枝少留果。

3.3.3 病虫害防治 盈香病害主要为缩叶病、桃褐腐病、流胶病等,虫害主要为梨小食心虫、潜叶蛾、桃蛀螟等,特别需要注意幼果期、套袋前、采果后等关键时期病虫害的防治工作。日常可在田间放置捕虫灯、性诱

剂、黄板等,辅助施用高效、低毒、低残留化学农药进行病虫害综合防治,同时如冬季清园、果实套袋、病虫危害植株及时清除等措施亦能有效降低病害发生率。

3.3.4 杂草防治 盈香桃园杂草防治时应以物理、生态防治手段为主,少用或不用化学除草剂。幼树前3年春季至秋季垄上可覆盖地布以控草、保墒,成龄结果期后垄上宜适时用人工集中锄草以松土透气。行间杂草可依据立地条件选用桃园生草、套种低矮蔬菜或农作物、人工锄草等方式进行防治,以达到防草、高效利用土地空间以及生态环保等多重目的。针对恶性杂草,可结合喷洒精草铵膦铵盐、草铵膦、精喹禾灵等低毒环保型除草剂加以改善,但需严格控制浓度和用量,以免损伤桃树及其生长环境。

4 发展前景

盈香适宜作为赏食兼用桃品种在四川盆周满足需冷量 600 h 以上的山地丘陵区推广栽培,以阳光充足、土壤肥沃、疏松、透气、排水良好的缓坡地带种植为佳。日常田间管理工作可参照上述栽培技术要点,结合当地普通毛桃品种管理方法进行。针对盆周山区可能存在的土壤有机质含量较低、养分分布不均、夏秋季雨水集中等影响推广的不利因素,可通过采取撒施农家有机肥改良土壤、起垄栽培、行间间作低秆经济作物等措施加以改善。盈香花色艳丽喜庆、观赏期长、果实口感佳,既能赏花,又能食果,具双重经济价值,可推广用于城市公园绿化建设,也可作为特色经济果树品种用于乡村旅游和果蔬产业发展,丰富观花桃和果桃种类,增加农民综合收入,助力乡村振兴。

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