

中国樱桃新品种粉黛樱珠的选育

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摘要:粉黛樱珠是从中国樱桃(*Prunus pseudocerasus* L.)实生资源中选育出的优良品种。树势中庸, 树姿半开张, 萌芽力中等, 成枝力中等。果实扁圆形, 果皮黑紫色, 果面光亮, 平均单果质量2.25 g, 可溶性固形物含量(w, 后同)15.90%, 可滴定酸含量0.34%, 维生素C含量12.20 mg·100 g⁻¹, 味甜, 品质好, 不易裂果。果实生长发育期52 d左右, 在浙江宁波5月1日前后成熟。适应性和抗病虫性较强, 种植第3年开花结果, 5~6年进入盛果期, 丰产、稳产。

关键词:中国樱桃; 新品种; 粉黛樱珠

中图分类号: S662.5

文献标志码: A

文章编号: 1009-9980(2025)01-0241-03

Breeding report of a new Chinese cherry cultivar Fendaiyingzhu

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Abstract: Fendaiyingzhu is a new cultivar selected from the seedling resources of Chinese cherry (*Prunus pseudocerasus* L.). In 2008, during the germplasm resource investigation on Chinese cherry in Ningbo, a dark purple, sweet-tasting and high-yield Chinese cherry seedling tree (superior plant) was discovered in Liangnong Town and identified as 4-29. The biological characteristics of the mother tree and grafted trees were investigated from 2009 to 2019 in different locations. The results indicated that the morphology and biology of the mother plant and its grafted offsprings remained stable. Application for the protection of the new cultivar right was submitted to the Ministry of Agriculture and Rural Affairs of China. And the National Certificate of the right to new varieties of plants was obtained on 30 November, 2022 (variety rights number: CNA20191002168) and the new cultivar was formally named Fendaiyingzhu. The floral characteristics are as follows: The inflorescence of corymbs usually has 3-6 flowers. A flower has 5 round petals, 1 pistil, 32-41 stamens with the purple-red anthers. The petal color is pink at the beginning of flowering and turns to light pink gradually with the opening time. Fendaiyingzhu has self-fertility ability. The fruits are dark purple, oblate shape, not easy to crack and few deformed. The average single fruit mass is 2.25 g with the maximum up to 3.91 g. The flesh is light yellow. The soluble solids content is about 15.90%, the titratable acid content is 0.34%, and the vitamin C content is 12.20 mg per 100 g. The fruit stalk is short with an average length of 1.51 cm, thick and not easy to fall off. The fruit development period is about 52 d in Ningbo region, Zhejiang province. The mature period is around May 1st, about 7 days later than that of the main early maturing variety Zhujiduanbing. The whole harvest period can continue for 15 days. The growth vigor of the trees is medium, tree gesture is half upright and the tree branch ability is middle. The variety has early fruiting ability and high yield. Flowering and fruiting begins in the third year after planting and the period of high yield is from 5 to 6

收稿日期: 2024-10-21

接受日期: 2024-11-02

基金项目: 宁波市科技创新2025重大专项(2019B10024); 宁波市农业科技专项(2014C11003)

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years after planting. The more fruits are produced on short, middle and long fruit branches, and the fruiting locations are easy to shift outwards. The variety has strong adaptability and disease resistance, and is easy to plant. It is suitable for planting in sandy loam and similar habitat with good drainage and deep soil layer. The recommended spacing within rows and between rows is 3 m×4 m or 4 m×4 m.

Key words: Chinese cherry; New cultivar; Fendaiyingzhu

中国樱桃又称小樱桃,是蔷薇科李亚科樱属落叶灌木或小乔木,起源和分布于中国^[1],果实发育周期短,成熟期早,果实生长期极少用药,是生产绿色果品的首选,又因其树姿秀丽、果艳味美、营养丰富,兼具观赏和食用价值,是落叶果树中经济效益最高的树种之一,在特色水果产业发展和乡村振兴战略中发挥着越来越重要的作用^[2]。浙江省是中国樱桃的发源地之一,现有栽培面积约0.4万hm²,产量约1.4万t^[3]。近年来,随着乡村休闲旅游业的蓬勃发展,中国樱桃因成熟期早、营养丰富、产值高而备受消费者和种植户的喜爱,栽培面积也越来越大^[4],已成为宁波部分乡村旅游业的重要支柱,余姚樱桃2021年获得国家农产品地理标志认证,但品种单一、酸味偏重、易裂果且不耐贮藏等缺点限制中国樱桃的健康发展,因此,选育口感甜、抗裂果的中国樱桃优良品种,对丰富中国樱桃种质资源、满足生产需求有着重要意义。

1 选育过程

中国樱桃粉黛樱珠是2008年从中国樱桃实生资源中选育出的优良品种。据明嘉靖《余姚县志》记载,宁波余姚市已有500余年樱桃栽培历史,至今,余姚四明山上及四明湖畔边缘还有野生樱桃的分布,且多为实生树,有着丰富的种质资源。2008年,笔者对宁波市中国樱桃种质资源进行调查时,在余

姚发现了一株果实黑紫色、风味甜、丰产的中国樱桃实生树(优株),标记为4-29。2009年在宁波市农科院试验基地和梁弄镇百果园进行大树高接观察,2010年高接树开始结果,当年进行拉枝处理,2011年大量结果,且两地果实性状表现稳定;2010年春以本地山樱为砧木进行嫁接繁殖,在梁弄镇百果园建立品种试验园,2012年试花挂果,2015年进入盛果期,经过连续多年对母树及嫁接树进行植物学特征和生物学特性观察记录,该品种果实品质优,外观艳丽、风味浓甜,遗传性状稳定。2019年向中华人民共和国农业农村部提交植物新品种权保护申请,2022年11月30日获得植物新品种权证书(品种权号:CNA20191002168),定名为粉黛樱珠(图1)。

2 主要性状

2.1 果实经济性状

果实扁圆形,果形端正,果面光滑,缝合线不明显,果顶低平,初成熟时果皮鲜红色,完全成熟后呈黑紫色。果肉淡黄色,汁液多,半黏核,核小,不易裂果。果柄细而短,平均长度为1.51 cm,最长为1.68 cm,不易脱落。平均单果质量2.25 g,最大果质量3.91 g,丰产性好。果实可食率93.62%,可溶性固形物含量(w,后同)15.90%,可滴定酸含量0.34%,固酸比46.75,维生素C含量12.20 mg·100 g⁻¹,风味甜,果实鲜食品质上乘(表1)。



图1 中国樱桃新品种粉黛樱珠

Fig. 1 A new Chinese cherry cultivar Fendaiyingzhu

表1 粉黛樱珠与诸暨短柄主要性状比较

Table 1 Comparison of main characters between Fendaiyingzhu and Zhujidianbing

品种 Cultivar	成熟期 Maturity date	果实形状 Fruit shape	果皮色泽 Peel color	平均单果质量 Average single fruit mass/g	w(可溶性固形物) Soluble solid content/%	w(可滴定酸) Titratable acid content/%	w(维生素C) Vitamin C content/ (mg·100 g ⁻¹)
粉黛樱珠 Fendaiyingzhu	4月下旬至5月上旬 Late-April to early-May	扁圆形 Oblate	黑紫色 Dark purple	2.25	15.90	0.34	12.20
诸暨短柄 Zhujidianbing	4月中旬 Mid-April	扁圆形 Oblate	黄底红晕 Yellow on red	2.93	13.63	0.36	5.62

2.2 植物学特征

该品种树势中庸,树姿半开张,成枝力中等;叶片长椭圆形,叶片长14.28 cm,叶片宽8.20 cm,叶缘锯齿深且较密,齿尖,叶尖极尾尖,叶片基部有2个蜜腺,圆形,紫红色,叶柄长1.37 cm。叶片初展时呈浅红色,成熟叶片绿色。伞房花序,平均每花序有3.4朵花,自交结实。

2.3 生物学特性

3月初现蕾,3月上中旬盛花,花期持续13~16 d,花蕾为深粉红色,初花时花瓣颜色为粉红色,随着开放时间的延长逐渐转为淡粉红色;4月下旬成熟可以分批采摘,整个采收期约15 d,果实生长发育期52 d左右。结果早,丰产性好,嫁接苗栽植第3年开始开花结果,5~6 a(年)进入丰产期,以短果枝和中、长果枝结果为主,结果期注意控制树势,若树势过旺易形成徒长枝,降低结果能力。

2.4 适应性与抗逆性

粉黛樱珠在宁波地区生长良好,耐瘠薄,壤砂或砂砾壤土均可种植。

3 栽培技术要点

3.1 定植

选择交通方便、排水良好且有灌溉条件、pH值5.5~7.0的肥沃壤砂或砂砾壤土建园。粉黛樱珠选择山樱、草樱、大青叶等砧木通过嫁接培育苗木,春季或秋季选择主干粗度大于0.8 cm且整形带内含6~8个饱满芽的健壮苗进行定植,以春栽为好。起垄栽植,适宜株行距(3~4)m×4 m,每666.7 m²栽41~55株。

3.2 整形修剪

树形多采用自然开心形,为便于采摘树高控制在2.5 m以下。幼树以整形为主,通过拉枝等方式培养侧枝和结果枝;成年树注重夏季修剪,于果实采收后1个月内完成夏季修剪,主要对结果枝组尤其是过长的主枝和侧枝进行回缩修剪,促发新梢,防止结果部位外移;萌芽前进行休眠期修剪,疏除过密枝

条、病残枝,调整枝条密度以及各级枝梢比例,改善后期光照条件。

3.3 肥水管理

根据不同时期对营养需求进行施肥,幼树期以氮肥为主,薄肥勤施,促进树冠形成;成年树花果期喷施叶面肥2~3次,5月采果后及时施果后肥,秋季早施以有机肥为主的基肥。保持土壤相对含水量不低于60%,平稳补水,果实转色后不宜浇水,以防裂果。

3.4 花果管理

初花期对开花量过多的花枝进行适当短截,初花期园内放蜂授粉,盛花期喷施速乐硼促进坐果;花前覆膜,果实转色期加防鸟网,采摘后去除薄膜和防鸟网;果实按成熟度进行分批采摘。

3.5 病虫害防治

中国樱桃果实成熟期早,病虫害危害少。果实采摘后,主要受细菌性穿孔病、褐斑病、流胶病、梨小食心虫和介壳虫等病虫害危害,种植过程中以预防为主,按照病虫害发生规律科学防治。

参考文献 References:

- [1] 俞德浚,陆玲娣,谷粹芝,李朝奎,陈绍煌. 中国植物志第38卷[M]. 北京:科学出版社,1986.
YÜ Dejun, LU Lingdi, GU Cuizhi, LI Chaoluan, CHEN Shaoxing. Flora of China (Vol. 38)[M]. Beijing: Science Press, 1986.
- [2] 陈涛,李良,张静,黄智林,张洪伟,刘胤,陈清,汤浩茹,王小蓉. 中国樱桃种质资源的考察、收集和评价[J]. 果树学报, 2016, 33(8): 917-933.
CHEN Tao, LI Liang, ZHANG Jing, HUANG Zhilin, ZHANG Hongwei, LIU Yin, CHEN Qing, TANG Haoru, WANG Xiaorong. Investigation, collection and preliminary evaluation of genetic resources of Chinese cherry [*Cerasus pseudocerasus* (Lindl.) G. Don][J]. Journal of Fruit Science, 2016, 33(8): 917-933.
- [3] 吴延军. 浙江省樱桃产业发展现状及建议[J]. 落叶果树, 2021, 53(3): 6-9.
WU Yanjun. Development status and suggestions of cherry industry in Zhejiang Province[J]. Deciduous Fruits, 2021, 53(3): 6-9.
- [4] 刘珠琴,汪国云,汪国武,周超超,赵秀花,厉鑫. 中国樱桃新品种梁弄红的选育[J]. 果树学报, 2022, 39(11): 2201-2204.
LIU Zhuqin, WANG Guoyun, WANG Guowu, ZHOU Chaochao, ZHAO Xiuhua, LI Xin. Breeding report of a new Chinese cherry cultivar Liangnonghong[J]. Journal of Fruit Science, 2022, 39(11): 2201-2204.