

观赏桃新品种鄢粉4号的选育¹

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摘要: 鄢粉4号是以嫣红早花桃为母本、早甜桃为父本进行杂交选育出的观赏桃新品种。树姿中等, 开张型; 节间中等; 花枝绿具红斑纹; 花芽数中等; 花蕾粉色, 长卵形; 花型为梅花型; 花径大小中等; 萼片10枚; 花粉色; 花瓣长卵形; 花瓣大小中等; 重瓣; 雄蕊与花瓣近等长; 雌蕊1枚, 柱头与花药近等长; 花药橘红色; 叶片绿色, 披针形; 叶面平展; 果面绿白色, 绒毛中等; 果实很大, 圆形; 核椭圆形, 核纹数量中等; 始花期3月5日左右, 开花持续时间长。适应性强, 喜光, 忌涝, 需冷量300~500 h。

关键词: 观赏桃; 新品种; 鄢粉4号

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Breeding report of a new ornamental peach cultivar Yanfen No.4

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Abstract: Yanfen No.4 peach is a new ornamental peach cultivar developed by crossbreeding Yanhongzaohua peach as the female parent and Zao Tian peach as the male parent. It was initially selected in 2013. Through artificial hybridization pollination, 30 hybrid seeds was got. In March 2015, after the flowering of 20 seedlings, an excellent individual plant with specific performance was found. The initial flowering period of this individual plant was around March 5th, 12 days earlier than the check variety Yanhongzaohua. The flower was pink and of high ornamental value. Subsequently, peach was used as the rootstock for grafting and propagation. In 2016, after the flowering of grafted seedlings, the phenotype features and phenological phase were observed and recorded. Through comparison, it was found that its traits were stable and consistent with the performance of the mother plant. After regional adaptability testing over five years from 2016 to 2020, it was finally selected in 2023. The tree has a moderate posture with an open body and straight branches. The internodes are of long size, with an average length of 1.6 cm. The flowers usually grow on short branches, with an average of 42 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 4.1 cm and an average number of 19 petals. The flower bud and the petals are all pink. There are 10 pieces reddish brown sepals. The average number of filaments is 49. The anthers are tangerine with pollen. The stamens are almost the same length as the petals. There is one pistil, which is almost the same length as the anthers. The leaves are green and lanceolate with flat surface. The peelings is green-white with medium fuzz. The fruit is large and round. The stone is oval shaped with moderate number of stone veins. In Xuchang of Henan

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Province, the initial flowering period was on March 5th, 12 days earlier than the check variety. The peak flowering period lasts from March 10th to 20th, and the final flowering period is on early March 23th. The flowering lasts for about 18 days. Yanfen No.4 is resistant to drought, cold and adversity. It is wide adaptability. It is suitable for planting in areas that meet the chilling requirement of 300-500 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 2 m × 3 m or 2 m × 3 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. After rainfall or watering during the growing season, the soil should be plowed and loosened timely. The depth of tillage is 5 cm to 10 cm. Every autumn, combined with autumn, base fertilizer should be applied and the soil should be deeply plowed with a depth of 30 cm to 40 cm. Fertilizer should be applied once a year in May and July respectively.

Key words: ornamental peach; new cultivar; Yanfen No.4

桃 (*Prunus persica*) 隶属蔷薇科 (*Rosaceae*) 李属 (*Prunus*)，原产于我国，距今有 4000 多年的栽培历史^[1]。根据果树品质及花、叶的观赏特性，将桃分为果桃和观赏桃两大类，其中观赏桃以观赏性为主，花色丰富、花型各异，是早春重要的观赏树种之一^[2]。

国内外对观赏桃品种资源开展了大量工作，取得了一些成果。日本、美国、意大利等国家相继对各种桃种质资源进行品种鉴定，筛选出白枝垂、照手白、照手红、Crimson Cascade、Pink Cascade、Bianco Pendulo 等品种^[3]。1985 年吉田雅夫利用粉色菊花桃品种的芽变培育出了红色‘菊花桃’^[4]。

我国观赏桃花育种起步于 20 世纪 90 年代，2000 年以后，观赏桃的主要育种目标是增加树形、花型、花色的多样性，以白花山碧桃、红寿星及菊花桃为亲本育成一系列观赏桃品种^[5]。北京市农林科学院以寿星桃和‘白凤’等为亲本，筛选出了一批花果性状较好的优良品系^[6]；中国农业科学院郑州果树研究所先后育成了花果两用且抗南方根结线虫的新品种满天红^[7]、早花品种探春^[8]、报春、惜春以及菊花型新品种红色菊花桃^[9]。近年来鄆陵县东华种植农民专业合作社陆续培育出鄆红^[10]、玲珑红^[11]等新品种。这些新品种极大地丰富了我国的观赏桃资源。

1 选育过程

2013 在河南省许昌市鄆陵县东华种植农民专业合作社观赏桃种质资源圃，以嫣红早花桃为母本，早甜桃为父本进行杂交，采收果实并当年播种，繁育出实生苗 30 株。从开花的实生苗中选出特异单株 P15，该单株花型为梅花型，粉色，萼片 10 枚，始花期很早，观赏价值高。随后进行嫁接并进行连续观测，发现该单株生物学特性表现稳定、一致，初步定名为鄆粉 4 号桃（图 1）。2023 年通过国家林草局新品种保护办公室现场审查，2024 年获得国家植物新品种权（品种权号：20240221）。

表 1 连续 5 年主要观赏性状调查

Tab.1 Continuous investigation on main ornamental traits during five years

年份 Year	花色 Flower color	花型 Flower shape	花径 Flower diameter/cm	花瓣形状 Petal shape	萼片数量 Sepals number /piece	花瓣数量 Petal number /piece	雌蕊数量 Pistil number	花药颜色 Anther color
2016	粉色 Pink	梅花型 Plum blossom shaped	4.16±0.23	长卵形 Long oval shaped	10	20±1	1	橘红 Tangerine
2017	粉色 Pink	梅花型 Plum blossom shaped	4.01±0.11	长卵形 Long oval shaped	10	19±2	1	橘红 Tangerine
2018	粉色 Pink	梅花型 Plum blossom shaped	4.11±0.06	长卵形 Long oval shaped	10	18±3	1	橘红 Tangerine
2019	粉色 Pink	梅花型 Plum blossom shaped	4.08±0.18	长卵形 Long oval shaped	10	19±1	1	橘红 Tangerine
2020	粉色 Pink	梅花型 Plum blossom shaped	4.17±0.21	长卵形 Long oval shaped	10	19±2	1	橘红 Tangerine



图 1 观赏桃新品种郟粉 4 号表型特征

Fig. 1 A new ornamental peach cultivar Yanfen No. 4

嫣红早花×早甜桃

Yanhongzaohua×Zaotiantao



鄢粉 4 号

Yanfen No.4

图 2 鄢粉 4 号的系谱关系

Fig. 2 The pedigree of nectarine cultivar Yanfen No. 4

2 主要性状

2.1 植物学特征

鄢粉 4 号桃树势中等，开张型；节间中等；花枝绿具红斑纹；花芽数中等；花蕾粉色，长卵形；花型为梅花型；花径大小中等；萼片 10 枚；花粉色；花瓣长卵形；花瓣大小中等；重瓣；雄蕊与花瓣近等长；雌蕊 1 枚，柱头与花药近等长；花药橘红色；叶片绿色，披针形；叶面平展；果面绿白色，绒毛中等；果实很大，圆形；核椭圆形，核纹数量中等。

表 2 鄢粉 4 号与嫣红早花表型性状差异比较

Table 1 Comparison of phenotypic differences between Yanfen No.4 and Yanhongzaohua

品种 Cultivar	萼片数量 Sepals number/piece	花色 Flower color	花瓣形状 Petal shape
鄢粉 4 号 Yanfen No.4	10	粉色 Pink	长卵形 Long oval shaped
嫣红早花 Yanhongzaohua	5	红色 Red	阔卵形 Broad oval shaped

2.2 生物学特性

节间长度平均 1.6 cm。以短枝着花为主，花芽起始节位为第 3~4 节。成花容易，单枝着花数平均 42 朵。在河南省许昌地区，3 月 5 日左右进入始花期，盛花期 3 月 10—20 日，开花持续天数 18 d 左右。7 月中旬果面底色转为绿白色，果实成熟。

3 栽培技术要点

3.1 栽植时期

春秋两季均可进行。春季定植宜在土壤解冻后至萌芽前（2 月中下旬至 3 月上中旬）进行；秋季定植宜在秋季落叶后至土壤封冻前（11 月中下旬至 12 月上中旬）进行。

3.2 栽植条件

鄢粉 4 号桃喜温暖湿润气候，喜光，不耐荫，适宜在地势高燥、排水良好的沙质壤土种植，忌涝。在

需冷量达到 300~500 h 的地区可根据立地条件进行栽植。

3.3 栽植方法

种植前撒施有机肥深翻土壤 30~40 cm，起 40 cm 左右高垄，按照 2 m×3 m 或 2 m×4 m 株行距在垄上进行栽植。大田种植一般需要带土球，根据苗木胸径确定土球大小，定植穴尺寸应略大于土球尺寸。放苗时土球上表面应略高于地面；放苗后，先在土球底部四周垫少量土固定土球，然后边填土边夯实，切忌破坏土球。栽后立即浇透水，3~4 d 再浇一次透水。

3.4 肥水管理

生长季节降雨或灌水后，应及时中耕松土，土壤微生物因氧气充足而活动旺盛，大量分解和释放土壤潜在养分，提高土壤养分的利用率，调节土壤水分，同时可以及时清除杂草。中耕深度 5 cm~10 cm。

栽植时施足基肥，每年在 5 月和 7 月各追肥一次。5 月份追肥时每 666.7 m² 施尿素 25 kg~30 kg；7 月份每 666.7 m² 施氮磷钾复合肥（15-15-15）40 kg~50 kg。追肥后及时灌水。早春浇一次开冻水，秋末浇一次封冻水。夏季连续干旱时适当浇水。8 月后，控制肥水。雨季及时做好排水防涝工作。

3.5 病虫害防治

鄠粉 4 号桃主要病害有炭疽病、细菌穿孔病、流胶病等，主要虫害有蚜虫、红蜘蛛、刺蛾等。喷施 450 g·L⁻¹ 咪鲜胺水乳剂 1000 倍液或 40% 苯醚甲环唑悬浮剂 2000~3000 倍液可有效防治炭疽病。喷施 45% 春雷霉素啉铜悬浮剂 2000~3000 倍液或 3% 中生菌素可湿性粉剂 800~1 000 倍液可有效防治穿孔病。流胶病发生时可用刀刮净流胶，并涂抹石硫合剂原液。喷施 2.5% 高效氯氟氰菊酯水乳剂 3000~4000 倍液或 25% 噻虫嗪水分散粒剂 2000~4000 倍液可防治蚜虫。

喷施 15% 哒螨灵乳油 1500~2000 倍液或 1.8% 阿维菌素乳油 3000~4000 倍可防治红蜘蛛。防治刺蛾等食叶性害虫可喷施 5.7% 甲氨基阿维菌素苯甲酸盐 5000~7000 倍或 5% 氯氰菊酯乳油 800~1000 倍或 25% 灭幼脲悬浮剂 1500~2000 倍液。

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