

# 优质中熟桃新品种七月肥的选育

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**摘要:**七月肥是以白里肥桃为母本、中华寿桃和川中岛的混合花粉为父本杂交选育的优质中熟桃新品种。果实近圆形, 果个大, 两半部较对称, 果尖明显, 平均单果质量 329.3 g; 缝合线深, 梗洼深广。果皮茸毛细密, 果面黄绿色, 完熟后底色乳黄, 无红色素。果肉白色, 肉质细腻, 味甜, 有浓郁的肥城桃香味, 可溶性固形物含量(w)14.5%, 黏核, 丰产。在泰安地区, 3月中旬萌芽, 4月初盛花, 7月底成熟, 果实发育期 110 d 左右。以 2 m×4 m 的株行距定植, 5 年生树每 666.7 m<sup>2</sup> 产量可达 2 195.4 kg。适宜在山东及周边桃产区栽植。

**关键词:**桃; 新品种; 七月肥; 肥城桃; 中熟

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## Breeding report on a high-quality mid-ripening peach cultivar Qiyuefei

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**Abstract:** Feicheng peach is a famous traditional peach cultivar in China, with a cultivation history of more than 1100 years. Due to the requirement of pollination specificity, Feicheng peach often does not bear fruits when the exogenous pollens are used during crossing pollination. In order to increase the diversity of Feicheng peach varieties and improve the fruit quality, a long-term breeding program has been carried out. Qiyuefei is a new high-quality mid-ripening peach cultivar derived from the seeds of Bailifeitao pollinated with the mixed pollens of Zhonghuashoutao and Chuanzhongdao in 2011. Qiyuefei was first selected in 2015 for its early ripening, large fruit, good taste and distinct aroma like Feicheng peach. The regional field trails were conducted in the peach production areas of Feicheng county, Mengyin county and Zoucheng county in Shandong Province from 2016 to 2020. The tree of Qiyuefei is moderately vigorous with open gesture. The annual branch is red-brown on the sunward side and green on the back side. The nectary of leaf is kidney-shaped. The margin of leaf is obtuse serrate. The flower buds are conical in shape. The flower is pink and rose-shaped with fertile pollens. The fruit is large with an average weight of 329.3 g, and its shape is nearly round with two nearly symmetrical halves. The fruit tip is obvious with deep cavity and the suture line. The background color of fruit is creamy yellow, and there is no red pigment on the surface of the fruit. The fruit is not easy to peel. The flesh is white. The soluble solids content is 14.5%. The stone is cling. The date of bud burst is mid-March, and the blooming date is early April. The fruit ripens in the end of July in Taian, Shandong Province, much earlier than that of its parents. The fruit development period of Qiyuefei is nearly 110 days. The date of leaf fall is mid-November, and its full growth period is nearly 230 days. All kinds of fruit

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branches can bear fruits, and the medium and short fruit branches are dominant. The yield of 5-year-old tree is up to 2 195.4 kg per 666.7 m<sup>2</sup>. Qiyuefei passed the examination and approval of Shandong Forest and Grass Variety Committee in February 2022. It is suitable to plant in Shandong Province and its surrounding peach producing areas. The fertile land with good drainage is needed for growing Qiyuefei. The Y-shaped of the tree form is recommended in the plain area, with spacing of 2 m×(4-5) m. The open heart-shaped tree form with three main branches is recommended in the hilly or mountainous area, with spacing of 3 m×4 m or 4 m×5 m. Qiyuefei has good resistance to stresses and good adaptability.

**Key words:** Peach; New cultivar; Qiyuefei; Feicheng peach; Mid-ripening

肥城桃是我国的传统名桃,距今有1100多年的栽培历史,外形美观、香气馥郁、甘甜多汁,有“群桃之冠”的美誉<sup>[1]</sup>。肥城桃是一个较为封闭的遗传群体,具有授粉特异性,对群体内花粉表现可授,对多数群体外源花粉授粉后表现不坐果<sup>[2]</sup>。为增加肥城桃品种多样性,丰富种群结构、提高果实品质,育种团队长期开展肥城桃育种工作。经多年努力,选育出肥城桃杂交后代、中熟桃新品种七月肥,在亲本基础上成熟期大大提前,果实品质得到改善。

## 1 选育经过

2011年,山东省果树研究所与肥城市肥城桃产

业发展中心联合育种,用中华寿桃和川中岛的混合花粉与肥城桃品系中果实成熟后不易软化的白里肥桃进行不去雄蕊杂交<sup>[3]</sup>。获得的杂交种子于营养钵中培育,出苗64株。2012年定植,成活62株,2015年经鉴定初选,获得一株成熟期提前、品质优异的优系,果实整齐,口感好,具有浓郁的肥城桃香味。2016年,在山东肥城、蒙阴、邹城等地建立新品种区试园,经连续多年观察,其性状稳定,适应性良好。表现为果形圆整、果实大型、表皮不着色、白肉、肉质细腻、黏核、风味甜、具有浓郁的肥城桃香味、丰产。2022年2月通过山东省林草品种审定委员会审定,定名为七月肥(图1),良种编号:鲁S-SV-AP-012-



图1 中熟桃新品种七月肥

Fig. 1 A new mid-ripening peach cultivar Qiyuefei

2021。

## 2 主要性状

### 2.1 植物学特征

树势中庸,树姿开张,幼树生长势旺。主干褐色,皮孔中等,长椭圆形,灰白色;1年生枝阳面红褐色,背面绿色。叶片长椭圆披针形,绿色,叶片长16.41 cm、宽3.94 cm,叶柄长0.82 cm;叶基楔形,叶

缘为钝锯齿状,叶尖渐尖。蜜腺肾形,2~3个。花芽圆锥形,多复花芽,花芽密度集中;花蔷薇形,粉红色,花药橘黄色,花粉多,雌蕊与雄蕊等高或稍低于雄蕊。

### 2.2 果实经济性状

七月肥果实近圆形,大果型,平均单果质量329.3 g。果尖明显,茸毛细密;两半部较对称,缝合线深,梗洼深广。果面黄绿色,完熟底色乳黄,成熟度一致;果

皮较厚,难剥离。果肉白色,肉质细腻,纤维少,汁多味甜,有浓郁的肥城桃香味,可溶性固形物含量(w) 14.5%。核卵圆形,黏核(表1)。

### 2.3 生长结果习性

七月肥以中短果枝结果为主,开花结实率高。以2 m×4 m的株行距栽植,嫁接苗定植当年即可形成花芽,第2年少量结果,第4年进入盛果期,每666.7 m<sup>2</sup>产量为1 646.6 kg,第5年每666.7 m<sup>2</sup>产量可

表1 七月肥与白里肥桃果实经济性状比较

Table 1 Comparison of main economic characters between Qiyuefei and Bailifeitao

品种 Cultivar	成熟期 Mature stage	茸毛 Skin fuzz	平均单果质量 Average fruit weight/g	w(可溶性固形物) Soluble solids content/%	果核状态 Stone adhesion
七月肥 Qiyuefei	7月底 End July	少 Less	329.3	14.5	黏核 Cling stone
白里肥桃 Bailifeitao	9月初 EarlySeptember	少 Less	232.4	13.2	黏核 Cling stone

达2 195.4 kg。

### 2.4 物候期

在泰安地区,3月中旬萌芽,4月初盛花,7月下旬果实成熟,果实发育期110 d左右,11月中旬落叶,生育期230 d左右。

## 3 栽培技术要点

### 3.1 定植建园

适宜在山东及周边桃产区栽植。选择土层深厚、排水良好的非重茬地建园,平原地区推荐采用Y字形树形,株行距2 m×(4~5) m;丘陵地或山地推荐采用三主枝开心形树形,株行距为3 m×4 m或4 m×5 m。

### 3.2 土肥水管理

施肥以有机肥为主,每年9—10月,每666.7 m<sup>2</sup>施农家肥5000~6000 kg;在果实膨大期,每666.7 m<sup>2</sup>施硫酸钾复合肥或有机肥60~75 kg。根据天气情况适时浇水和排涝。果园可进行行间生草管理,有利于保持土壤水分,增加土壤有机质含量。采用自然生草或人工生草的方式,人工生草推荐草种有毛叶苕子、黑麦草、紫花苜蓿等<sup>[4]</sup>。

### 3.3 花果管理

为保证果实品质严格按照要求疏花疏果,长果枝留3~4个果,中果枝留2~3个果,短果枝留1个果。果实成熟可分多批次采收,判断成熟度时可以果实绿色减退变白、果肉稍硬、果面基本满色、具有该品

种固有风味为标准。

### 3.4 病虫害防控

七月肥桃抗逆性和适应性强,无特殊易感病虫害。生产中注意蚜虫、桃潜叶蛾、梨小食心虫、卷叶虫、红蜘蛛、炭疽病、疮痂病等主要病虫害的综合防控。

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