

## 晚熟油桃新品种‘福美’的选育

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**摘要:** ‘福美’是由‘瑞光19号’×(‘北京晚蜜’+‘冠华雪桃’+‘贾家甜油桃’等)杂交选育的晚熟油桃新品种。果实圆形,平均单果质量174.7 g,果皮全面着深红色,果肉乳白。果肉脆,硬溶质,风味甘甜微香,可溶性固形物含量19.8%。去皮硬度11.5 kg·cm<sup>-2</sup>,离核,可食率97.9%。在山东烟台地区一般8月下旬至9月上旬成熟,果实发育期120 d左右;早果、丰产。适宜在山东、河北、北京等地区栽培,定植后第2年开始结果,4 a生树产量34.8 t·hm<sup>-2</sup>。

**关键词:** 油桃; 新品种; ‘福美’; 晚熟

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### Breeding of a new late ripening nectarine cultivar ‘Fumei’

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**Abstract:** ‘Fumei’ is a late-ripening nectarine cultivar with excellent appearance. The original seeding was derived from a cross between ‘Ruiguang 19’ and (‘Beijingwanmi’+ ‘Guanhuaxuetao’ + ‘Jiajiatianyoutao’ et al.) in 1999 at experimental field. It was initially selected in 2004 for its bright colors and late ripening stage. Through artificial hybridization pollination, 361 hybrid seeds were got. After regional adaptability testing at four sites (including Beijing, Shijiazhuang, Xi’an, Taiyuan) over 8 years from 2006 to 2014, it was finally selected in 2014. ‘Fumei’ is a dwarfing tree cultivar, attaining a height of 4–5 m; the tree is vigorous with ramose crown and upright tree gesture. Young branches are glabrous, yellowish-brown in color. Leaves are broad-lanceolate, acuminate, 16.28 cm long, 3.6 cm wide, serrated. Flower is pink, 3.9 cm across. Fruit is mainly round, has dark red surface. Its flesh is white, crisp, hard melting and tasting sweet. The average fruit mass is 174.7 g, maximum fruit mass is 293.2 g. the content of soluble solid is 19.8%, the content of total sugar is 15.77%, the content of total acid is 0.2%, the sugar-acid ratio is 78.85, hardness without skin is 11.5 kg·cm<sup>-2</sup>, vitamin C is 77.3 mg·kg<sup>-1</sup>, freestone, and the edible rate is 97.9%. Quality is excellent. The fruit development period is about 120 d and it matures from the end August to early September in Yantai area; proportion of flower buds/leaf buds is 108.5%, single flower bud/complex flower buds is 205.3%. Branching ability is great and yield is high and stable. It is resistant to coldness, powdery mildew and moderate resistant to fruit cracking, etc. Suitable cultivation area is North China peach producing, this variety can bear fruits next year after planted, has high yield potential. The yield of 4-year-old trees is about 34.8 t·hm<sup>-2</sup>. Orchard should choose neutral sandy soil which is flat and has ability of moisture and fertilizer retention; spacing in the rows and spacing between rows are 3 m×(4–5) m with open-centered training, and spacing in the rows and spacing between rows are (1.5–2) m×4 m with central leader-type training; pruning includes pinching, bending and back spune, aiming at controlling tree size and maintaining tree vigor.

**Key words:** Nectarine; New cultivar; ‘Fumei’; Late ripening

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油桃是毛桃的果皮无毛突变体,近年来,我国的油桃生产发展迅速,但品种仍然是制约产业发展的重要因素。目前,油桃栽培品种的熟期多集中在6—7月,供应链较短;8月中旬以后成熟的晚熟油桃品种缺乏,但消费需求持续上升,从国外引进的中晚熟油桃,如‘晴朗’等,口味偏酸,果个较小,极大制约了油桃产业的发展。调整桃的品种结构是生产上亟需解决的难题<sup>[1]</sup>。据此,烟台市农业科学研究院利用‘北京晚蜜’‘瑞光19号’等资源开展杂交育种工作,选育出综合性状优良的晚熟油桃新品种‘福美’(图1)。



A. ‘福美’油桃果实(无袋栽培);B. ‘福美’油桃结果状。  
A. Fruit of ‘Fumei’ nectarine (no bag); B. Fruiting character of ‘Fumei’ nectarine.

图 1 晚熟油桃新品种‘福美’

Fig. 1 A new late ripening nectarine cultivar ‘Fumei’

## 1 选育经过

‘福美’原育种编号‘FX-02’。1999年以‘瑞光19号’油桃为母本、以‘北京晚蜜’+‘冠华雪桃’+‘贾家甜油桃’等的混合花粉为父本进行杂交,杂种实生苗于2001年春定植,2004年开始结果,‘FX-02’入选为优良单株。2005年进行高接和嫁接苗木比较试验,连续8 a对其性状进行分析、评价,表现晚熟,果个大,果面全红,表光好,果肉硬脆、甘甜,离核,鲜食品质佳,耐碰压、贮运,综合性状优良。2015年12月,通过山东省林木品种审定委员会审定,定名为‘福美’,审定编号:鲁S-SV-PPN-009-2015。

## 2 主要特性

### 2.1 植物学特征

树势中庸,树姿紧凑较直立。1 a生枝阳面黄褐色,背面绿色;2 a生枝黄褐色;主枝和多年生枝灰白色。成熟叶片宽披针形,叶长16.28 cm,叶宽3.6 cm,叶柄长1.09 cm;叶片绿色;叶尖渐尖,微向外卷;叶基楔形;叶缘为钝锯齿状;侧脉末端交叉;蜜腺小,圆形,1~4个。花蔷薇型、单瓣,花瓣粉红色,花径3.90 cm;花药橙红色,花粉量大,可育;萼筒内壁橙黄色;雌蕊高于雄蕊,雄蕊数为50~54个<sup>[2]</sup>。

### 2.2 果实主要经济性状

‘福美’油桃,平均单果质量174.7 g,最大单果质量293.2 g。果实圆形,缝合线中深,果实较对称,果面光洁,无果锈;果皮底色绿白色,全面着深红色。果皮厚度中等,不易剥离。果肉白色、微黄,果肉硬脆,果实去皮硬度 $11.53 \text{ kg} \cdot \text{cm}^{-2}$ ;硬溶质,风味香甜,可溶性固形物含量19.8%,高者达到23%,鲜食品质上。离核,可食率可达97.9%(表1)。果核小,近圆形,核质量3.3 g,核面较粗糙,核纹理中深。

### 2.3 生长结果习性

‘福美’幼树生长旺盛,结果树生长势强旺。易成花,花芽/叶芽为1.08:1;单花芽/复花芽中等,为

表 1 ‘福美’与‘瑞光19号’油桃果实经济性状比较

Table 1 Comparison of fruit traits between ‘Fumei’ and ‘Ruiguang19’ varieties

品种 Cultivar	采收期 Ripening time	单果质量 Mean fruit mass/g	$\omega$ (总糖) Total sugar content/%	$\omega$ (总酸) Total acid content/%	糖酸比 Sugar/acid	$\omega$ (维生素C) Vitamin C content/ ( $\text{mg} \cdot \text{kg}^{-1}$ )	$\omega$ (可溶性固形物) Soluble solids content/%	可食率 Edible rate/%
福美 Fumei	8月21日 Aug. 21	174.7	15.77	0.20	78.85	77.3	19.8	97.9
瑞光19号 Ruiguang 19	8月1日 Aug. 1	150.2	9.98	0.34	29.35	13.6	11.6	96.2

2.05:1;花芽起始节位低,为1~2节。各类果枝均能结果,幼树以中、长果枝结果为主,树势缓和后以中、短果枝结果为主。自花授粉结果率高,结果早。丰产,夏接苗木定植后第2年开始结果,4 a生树666.7 m<sup>2</sup>产量2 320 kg。

#### 2.4 物候期

在山东烟台,‘福美’3月25日左右萌芽,4月10日左右开花,果实一般8月下旬至9月上旬成熟,比‘瑞光19号’成熟期晚20 d左右,果实发育期120 d左右,属晚熟品种。

#### 2.5 抗逆性及栽培适应性

‘福美’为晚熟油桃品种,果实未发现严重病虫害,树体对白粉病有较强抗性。‘福美’在北方桃产区表现出良好的栽培适应性:花芽抗寒能力强,在北京、河北、陕西西安等地试栽,未发现花芽冻害。抗裂果能力中等。

### 3 栽培技术要点

‘福美’采用主干形整枝,栽植株行距可选用1.5 m×4 m或2 m×4 m;采用自然开心形,株行距采用3 m×(4~5)m。选择优质壮苗建园,起垄栽培。加强肥水管理,盛果期树,在9月施基肥(每666.7 m<sup>2</sup>施用4 000 kg有机肥)的基础上,谢花后及果实硬核期应追施氮磷钾复合肥,并加大钾肥的施用量,以提高产量和品质。果实发育期间可每15 d喷施1次氨基酸

液态肥,采果后再追施1次磷钾肥。果实发育期应尽量保持土壤水分稳定,萌芽期和硬核期要保证水分的供应。采前10 d以内不宜浇水,以防风味变淡。适当疏果,合理负载。疏果应在5月中下旬进行,疏除畸形果、病虫果和密挤果,短果枝留1~2个果,中果枝留2~3个果,长果枝留4~5个果,每666.7 m<sup>2</sup>产量控制在2 000 kg。果实生长季节尽量少用农药或用低毒低残留无公害农药,推荐采用杀虫灯、糖醋液和粘虫板)、性诱剂、人工捕杀等物理方法,提高果实安全性。根据病虫发生情况及时防治桃褐腐病、桃穿孔病、桃蚜、桃蛀螟、桃小食心虫、桃潜叶蛾等病虫害。

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