

## 黄肉油桃新品种中油金帅的选育

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**摘要:** 1998年配置杂交组合黄桃园1-6×乐园,筛选出油桃优株98-5-24;2006年3月,选用油桃品种中油桃4号为母本,98-5-24为父本,进行人工杂交培育而成。2015年正式命名为中油金帅,2018年通过河南省林木品种审定委员会审定。果实椭圆形,两半部对称,果顶平,梗洼浅,缝合线浅,成熟状态一致;单果质量210 g,大果420 g;果皮光滑无毛,底色浅黄,果面75%着红色,果肉黄色,肉质为硬溶质,有韧性,耐运输,货架期长;果实风味甜,可溶性固形物含量(w)14.5%,黏核。树势健壮,树姿半开张;叶片长椭圆披针形;花为铃形,花色粉红,花粉多,自花结实。郑州地区3月初叶芽膨大,3月中下旬开花,6月25—30日果实成熟,果实生育期90 d左右。落叶终止期11月10日左右,全生育期260 d。

**关键词:** 油桃; 新品种; 中油金帅; 黄肉

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## Breeding of a new yellow flesh nectarine cultivar Zhongyoujinshuai

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**Abstract:** Zhongyoujinshuai is an early ripening nectarine, derived from a cross between Zhongyoutao 4 and 98-5-24 in 2006 at experimental field. Zhongyoutao 4, the female parent, is an early ripening yellow nectarine covered by shining red. 98-5-24, the pollen donation, is nectarine and yellow flesh. Zhongyoujinshuai was first selected in 2010 for its large fruit, hard flesh, early ripeness and high yield. It passed the run-off election and named in 2015, licensed by Ministry of Agriculture in 2018, approved by Henan Forest Variety Certification Committee in 2018. Under normal cultivation conditions, the average fruit weight is 210 g, and maximum fruit weight is 420 g. Fruit is mainly elliptic with two symmetrical halves. The top of the fruit is flat with shallow cavity and the suture, consistent mature state. The peel has beautiful color approximately 75% percent of bright red, smooth and hairless, the background color is light yellow. Its flesh is brilliant yellow and firm texture. The peel cannot be peeled, and the core is sticky. The flavor is fragrant and sweet, with a soluble solids content of 14.5%. It is fertile without bringing in pollen donation, and its yield is relatively stable through experiments in Wenxian county of Henan province, Mengyin county of Shandong province and Fengxian county of Jiangsu province. The experiment results also show that under the condition of strictly sparse flowering and fruit, the fruit of this cultivar exhibits large fruits and high soluble solids content, the quality is more excellent. In Zhengzhou, middle of China, the first flower of Zhongyoujinshuai comes into bloom mostly appears in late March. Fruits ripen is in late June, about 90 days after blooming. The termination period of fallen leaves is mid-November, and the full growth period is 260 days. Compared with the current main planting variety Zhongnongjinhui which is nectarine and yellow flesh matured in mid-June, the fruit mature period of Zhongyoujinshuai is about half a month later and the fruit size is larger. The tree of Zhongyoujinshuai has a strong tree vigor, and attention should be taken to control the tree vigour during cultivation; Y-shaped pruning can be adopted, with a ridge height of 2.0 m and a ridge width of 4.0 - 5.0 m. It

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is necessary to properly control the fertilizer and water and avoid flood irrigation. The fruit setting rate of this variety is very high, and it is necessary to increase the intensity of thinning flowers and fruits. The fruit of this variety is relatively large, the distance between fruits should be greater than 15.0 - 20.0 cm when thinning flowers and fruits. The appearance of fruit is very beautiful, and it can be cultivated without bags or bagging. However, in areas with heavy rain in the south, there is a phenomenon of cracked fruits, and bagging cultivation is recommended. The bagging time is generally carried out after the fruit is set, when the fruit development enters the stone hardening stage, and the insecticide and fungicide need to be sprayed before the bagging. The fruit has a moderate hardness, which needs to be harvested in a timely manner, and the whole cold chain transportation is better during transportation.

**Key words:** Nectarine; New cultivar; Zhongyoujinshuai; Yellow flesh

油桃以果皮光滑无毛、色泽艳丽、食用方便深受消费者喜爱。我国的油桃育种在过去的30 a(年)内取得了可喜的进展,培育出了曙光<sup>[1]</sup>、中油桃4号<sup>[2]</sup>、中农金辉<sup>[3]</sup>、中农金硕<sup>[4]</sup>、中油桃8号<sup>[5]</sup>等主要栽培品种。桃无毛基因具有广泛的遗传多效性,致使遗传学角度的育种难度更大<sup>[6]</sup>;同时相对于普通桃,油桃在我国育种历史短,在生产中的突出问题仍然是品种熟期不配套、果实的商品性能不如普通桃等。笔者以选育果个大、风味甜、耐贮运为育种目标<sup>[7]</sup>,经过多年努力,选育出早熟油桃新品种中油金帅。

## 1 选育过程

1998年配置杂交组合黄桃园1-6×乐园,筛选出油桃优株98-5-24;2006年3月,选用国家果树种质郑州桃资源圃中的油桃品种中油桃4号为母本,98-5-24为父本,进行人工杂交,获得杂交种子120粒;2006年6月15日将种胚接种于WPM培养基上,进行胚培养,经冷库低温处理80 d后,播种于温室的营养钵中,培育获得成苗78株。2007年4月下旬将苗木带基质移入到河南温县试验基地田间培养畦内,按1 m×4 m种植,进行常规管理。2010年大量结果,其中温06-8-8表现果实大,外观漂亮,大果250 g,肉

质硬,风味甜,丰产。2012年建立优良品系试验园,分别在河南省温县、新乡县、西华县、鄢陵县等地试种,各地综合表现优良。2015年正式命名为中油金帅(图1)。2018年通过河南省林木品种审定委员会审定,良种编号:豫S-SV-PP-005-2017;同年9月通过农业农村部非主要农作物品种登记。

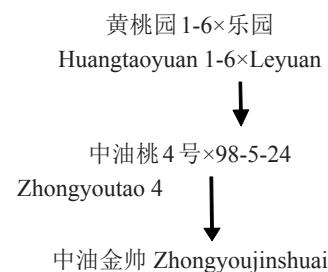


图1 中油金帅的系谱关系

Fig. 1 The pedigree of nectarine cultivar Zhongyoujinshuai

## 2 主要性状

### 2.1 果实经济性状

中油金帅为早熟黄肉油桃。果实椭圆形,两半部对称,果顶平,梗洼浅,缝合线明显、浅(图2),成熟状态一致;单果质量210 g,大果420 g;果皮光滑



图2 油桃新品种中油金帅

Fig. 2 A new nectarine cultivar Zhongyoujinshuai

无毛,底色浅黄,果面75%着红色,皮不能剥离;果肉橙黄色,肉质为硬溶质,有韧性,耐运输,货架期长;

果实风味甜,可溶性固形物含量(w)14.5%,汁液中等,纤维中等;黏核(表1)。

表1 中油金帅与中农金辉的比较

Table 1 Comparation of Zhongyoujinshuai and Zhongnongjinhuai

品种 Cultivar	成熟期 Ripening date	果肉颜色 Flesh color	单果质量 Single fruit weight/g	肉质 Texture	w(可溶性固形物) Soluble solid content/%	花型 Flower type
中油金帅 Zhongyoujinshuai	6月底 End June	橙黄色 Bright orange	210	硬溶质 Firm texture	14.5	铃形 Nonshowy
中农金辉 Zhongnongjinhuai	6月中旬 Mid June	橙黄色 Bright orange	173	硬溶质 Firm texture	13.0	铃形 Nonshowy

## 2.2 植物学特征

树势健壮,树姿半开张,乔化;1年生枝皮色暗红,节间长度2.0 cm;叶片长16.0 cm,宽3.92 cm,呈长椭圆披针形,叶柄长0.84 cm,叶色黄绿色,叶基楔形,叶尖渐尖;花为铃形,花色粉红,花粉多,萼筒内壁色橙黄;自花结实。在一般管理水平下,采用2 m×4 m株行距栽植,4年生平均株产38 kg。在河南、山东、河北、山西、安徽等地进行生产示范,均进行严格疏果,果实表现果个大,可溶性固形物含量高,产量比较稳定。

## 2.3 生物学性状

郑州地区3月初叶芽膨大,3月中下旬开花,开花持续期约5 d。6月底果实成熟,果实生育期90 d左右。落叶终止期11月10日左右,全生育期260 d。

## 3 栽培技术要点

### 3.1 高标准建园

选择土层深厚、土质疏松、排水良好的土壤种植。根据行距开挖宽、深各80 cm左右的定植沟,沟中可填充秸秆、粪肥等,以提高土壤有机质含量。采用2 m×4 m或2 m×5 m株行距,Y字形整枝。

### 3.2 整形修剪

中油金帅主枝开张角度应适当偏小,一般两主枝夹角为60°~70°,以防主枝开张角度过大时被果实压平或下垂影响产量、品质,减少果实发生日烧。幼树在培养主枝时,注意先放后缩,放缩结合,防止主枝中下部衰弱光秃。延长枝头要多疏少截,冬剪多留健壮的长果枝,疏除细弱的短、小果枝。夏季修剪主要疏除直立徒长枝及过密的新梢。

### 3.3 果实管理

中油金帅成花容易,坐果率高,为保证果实质量,须严格疏花疏果。疏花时,将长果枝基部10 cm左右的花蕾全部疏除,留枝条上下侧的花蕾。疏果时,先疏除畸形果、病虫果,再疏过密果、小果,使果

间距保持15~20 cm。采用长枝修剪时,留长果枝中上部果,疏除下部果,长果枝留3个果,中果枝留2个果,短果枝、花束状枝留1个果或不留。

### 3.4 肥水管理

提倡秋施基肥,一般每666.7 m<sup>2</sup>施腐熟有机肥5~8 m<sup>3</sup>。为提高果实品质,可以在果实成熟前30 d,每株施2~4 kg腐熟的饼肥,结合叶面喷施2次0.3%硫酸钾,以生产出外观艳丽、风味浓郁的高档果实。

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