

无核葡萄新品种‘竹峰’的选育

李 灿,周子发*,赵景竹,赵晓东,韦静波,李 舞

(洛阳农林科学院,河南洛阳 471022)

摘要:‘竹峰’葡萄是‘巨峰’自然群体中发现变异单株而育成的新品种。果穗圆柱形或圆锥形,平均穗质量850.3 g;果粒近圆形,自然粒质量6~7 g,经赤霉素处理平均单粒质量为15 g,果皮黑色;果肉脆,味甜;可溶性固形物含量(w,后同)19.1%,品质上等。无核率90%以上。在洛阳地区8月中下旬成熟,比‘巨峰’早熟5~7 d。植株生长势强,适应性和抗病性较强,易栽培。

关键词:无核葡萄;新品种;‘竹峰’

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A new seedless table grape cultivar ‘Zhufeng’

LI Can, ZHOU Zifa*, ZHAO Jingzhu, ZHAO Xiaodong, WEI Jingbo, LI Wu

(Luoyang Academy of Agriculture and Forestry, Luoyang 471022, Henan, China)

Abstract: ‘Zhufeng’ grape is a new variety that found from a natural population of ‘Kyoho’ grape. In 2011, a variant of the ‘Kyoho’ grape was found in a natural population of ‘Kyoho’ grape in a vineyard in Lion Bridge Village, Luolong District, which is seedless and ripe 5-7 days earlier than the ‘Kyoho’. From 2014 to 2017, after the observation of the experimental units in Luolong District and Mengjin County in Luoyang, Xiuwu County in Jiaozuo, and Shangshui County in Zhoukou, it is found that the genetic trait of ‘Zhufeng’ is stable, and the comprehensive traits are excellent, which are seedless, granule, high quality, long hanging tree time and other advantages. The results of systematic observation and supporting technical research on botany characteristics, biological traits and agronomic traits show that the seedless traits and fruit quality are in line with the current breeding goals. In March 2017, it was approved by the Henan Provincial Forest Varieties Approval Committee and named ‘Zhufeng’. Fruit clusters are cylindrical or conical, with an average cluster mass of 850.3 g; The fruit grains are nearly round, the natural grain mass is 6-7 g, the average single grain mass treated with gibberellin is 15g, and the skin is black; The flesh is crisp and sweet; Soluble solids content, quality, etc. Seedless rate is more than 90%. It matured in middle and late August in Luoyang, which is 5-7 days earlier than ‘Kyoho’. Plants have strong growth potential, strong adaptability and resistance to disease, and are easy to cultivate.

Key words: Seedless grape; New cultivar; ‘Zhufeng’

葡萄是近年来洛阳地区发展最快、效益较好的树种之一。无核葡萄一直以来深受广大消费者的喜爱,而培育出无核、优质、抗病性强的葡萄新品种一直是国内外葡萄育种的主要方向^[1-4]。为了优化葡萄

品种结构,提升果品质量,更大限度地满足市场需求,同时增加果农收入,洛阳农林科学院果树研究所一直致力于选育出优质、无核的鲜食葡萄品种,经多年选育,培育出了无核葡萄新品种‘竹峰’。

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作者简介:李灿,男,高级工程师,研究方向为葡萄遗传育种。Tel: 13939919660, E-mail: canli1962@sina.com

*通信作者 Author for correspondence. E-mail: zzf19958@163.com

1 选育过程

‘竹峰’是2011年在洛龙区狮子桥村的‘巨峰’葡萄园内发现自然群体的变异优株,表现为无核、比‘巨峰’早熟5~7 d。当年对此单株上的枝条在冬季修剪时加以保存,次年进行高接,并连续进行植物学特征、生物学性状、农艺性状等系统观察和配套技术研究,结果表明其无核性状和果实品质符合当前育种目标。经2014—2017年在洛阳市洛龙区、洛阳市孟津县、焦作市修武县、商水县试点连续观察发现,‘竹峰’葡萄遗传性状稳定,综合性状优良,表现出无核、粒大、优质、挂树时间长等优点。2018年3月通过河南省林木品种审定委员会审定,命名为‘竹峰’(图1),审定编号:豫S-SV-VV-013-2017。



图1 ‘竹峰’(左)与‘巨峰’(右)果穗的对比
Fig. 1 Comparison of the clusters of ‘Zhufeng’ (left) and ‘Kyoho’ (right)

2 主要性状

2.1 果实性状

‘竹峰’果穗圆锥形,果粒着生较紧密,穗大型,平均穗质量850 g,最大穗质量1 200 g,平均单粒质量6~7 g,经处理后平均穗质量可达15 g,最大穗质量23 g,果粒圆形,平均纵径2.5 cm,横径2.5 cm,甜酸,有香味,肉较硬,无籽(仅个别有1粒种籽)。可溶性固形物含量17.5%~20%,果粉较厚,经GA₃和CPPU处理果粒大小均匀,无落花落果现象。成熟期稍早于‘巨峰’(表1)。果实挂树时间长,不易落粒。

2.2 植物学特征

嫩梢叶片黄绿色,成龄叶片中等大,近圆形,5裂,裂刻较浅。叶片正面无茸毛,叶背有稀茸毛,叶柄中等长度,紫红色。成熟枝条红褐色,枝条粗壮,

表1 ‘竹峰’与对照品种‘巨峰’果实主要性状比较
Table 1 Comparison of fruit characteristics between ‘Zhufeng’ and ‘Kyoho’

性状 Trait	竹峰 Zhufeng	巨峰 Kyoho
成熟期 Maturity	8月中下旬 Mid-late August	8月下旬 Late August
丰产性 Yield	丰产 High	丰产 High
平均穗质量 Average cluster mass/g	917	650
平均粒质量 Average berry mass/g	6~7	9.1
果粒形状 Berry shape	圆球形 Spherical	圆球形 Spherical
果皮颜色 Skin color	紫红 Purplish red	紫色 Purple
果肉质地 Flesh texture	较硬 Harder	软 Soft
w(可溶性固形物) Soluble solid content/%	19.1	17.3
w(可滴定酸) Titratable acid content/%	0.4	0.46
有无核 Seedless or not	无核 Seedless	有核 Non-Seedless

节间较短。两性花。

2.3 生物学特性

2.3.1 物候期 在洛阳地区3月下旬萌芽,5月上旬开花,8月中旬成熟,从萌芽到浆果成熟为130 d左右,浆果发育期90~100 d。

2.3.2 生长结果习性 树体生长势较强,芽眼萌发率95%,结果枝率85%以上,副梢结果能力较强,果穗在枝蔓第2~3节位着生,果枝平均结果1.68穗,早产丰产性好。

2.3.3 适应性及抗病性 该品系抗病性强,特别抗炭疽病、白腐病和霜霉病。适应性强,在沙壤土、黏土地等土质条件下均可结果良好。

3 栽培技术要点

3.1 架式与定植密度

采用双“十”字架栽培,株行距1.0 m×2.5 m,每666.7 m²定植267株。

3.2 花果管理

见花修整花序,去除3~5个副穗,穗长留10 cm。在盛花末期,用奇保1包、CPPU5支、果梗软化剂2.7 g、噬霉胺20 mL,兑水15 kg,微喷或蘸穗。保果后3 d内疏果,每穗留果50~65果粒为宜。每株保留8~10个果穗,产量控制在每666.7 m² 1 500~2 000 kg。保果后10~13 d,用奇保1包、CPPU8支、果梗软化剂4.2 g、异菌脲15 mL,兑水15 kg微喷或沾穗进行果实膨大。

3.3 病虫害防治

花前、花后和套袋前是各种病虫害防治的关键期。发芽期注意绿盲蝽的防治,硬核期注意防治霜霉病,于雨季之前(6月中旬前后)打1次80%烯酰吗啉1 500~2 000倍加80%全络合态代森锰锌800倍液,间隔10 d喷1遍奎啉铜1 500倍液。以后根据情况用药,以保护性杀菌剂为主。采果后喷等量或倍数式波尔多液保护叶片。

4 综合评价

‘竹峰’系鲜食无核品种。在生产中表现出果粒大、商品性好、果穗挂树期长、高产稳产等优点,具有良好的推广应用前景。

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