

大粒早熟葡萄新品种宝光的选育

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摘要: 宝光是常规杂交培育成的早熟、大粒、优质葡萄新品种, 其母本为巨峰, 父本为早黑宝。果穗圆锥形, 平均单穗质量 717.3 g, 果粒近圆形, 平均单粒质量 13.7 g, 最大单粒质量 25.0 g, 每果粒含种子 1~3 粒; 果皮紫黑至蓝黑色, 果粉较厚, 果肉较脆, 香气淡; 可溶性固形物含量(w , 后同)18.1%以上, 最高 23.5%; 可滴定酸含量为 0.47%, 固酸比 38.3; 品质上等。昌黎地区果实成熟期为 8 月上旬。适宜河北、山东、山西、浙江、湖北、广西等适栽地区种植。

关键词: 葡萄; 新品种; 宝光; 早熟; 大粒

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Baoguang, an early-season large berry table grape cultivar

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Abstracts: Baoguang is an early-season table grape with high quality and large berries. The cultivar was bred from a cross between Kyoho and Zaoheibao in May 2003. Initially, 3098 hybrid seeds were obtained and stratified in 2003. From these seeds, 1293 hybrid seedlings successfully established in 2004. Baoguang was selected in 2006 for its comprehensive performance and tested as C 4-6-4. Then it was evaluated in regional trials in Luannan, Tanghai, and Changli in 2008 and proved to have good fruit quality and high yield. In 2013, this selection was certificated by Hebei Province Forest Variety Certification Committee and named Baoguang. Its vines are moderate to high in vigor on their own roots. The tip of the young shoots has sparse hairs. The young leaf is in green color with yellow spots and the intensity of anthocyanin coloration in the shoot tip is medium. The mature leaf is green, not villous at lower surface and glossy at upper surface. Mature leaves are pentagonal with five lobes and shallow upper cracks. The petiole depression is half open with a "V" shape at the base. The hermaphrodite flowers are usually positioned at the fourth or fifth node. The cluster of Baoguang is large-sized, and conical in shape with no shoulder. The average bunch weight of Baoguang is 717.3 g. The cluster is 19.2 cm in length and 16.5 cm in width on average. The almost round berry has an average weight of 13.7 g, and can be up to 25.0 g in weight, 25.9 mm in width and 29.2 mm in length. The berry contains 1 to 3 seeds and the one hundred seed weight is 9.9 g. The flesh is slightly crispy. The skin is thin to medium thick with a purple- to blue-black color. The soluble solid content is 18.1% on average and can be up to 23.5%; the average titratable acid content is 0.47%; and the ratio of soluble solids to titratable acid is 38.3. In Changli, bud breaks in middle April; florescence occurs in late May and fruit matures in early August. The average period from bud burst to harvest is 117 d. The average bearing shoot ratio is 78.3% and the number of clusters in each bearing shoot is 1.48. Baoguang vines show good productivity, yield-

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ing about 28.65 tons per hectare. The vine is easy to manage and suitable for protected cultivation. The cultivar has good resistance to powdery mildew and downy mildew.

Key words: Grape (*Vitis*); New cultivar; Baoguang; Early-season; Large berry

优质、大粒、早熟型葡萄品种是当下鲜食葡萄育种领域的主要育种方向^[1]。随着葡萄设施栽培的发展,培育适宜设施环境下栽培的鲜食品种成为重要的葡萄育种目标之一^[2]。在此背景下,国内多家葡萄育种单位展开了育种工作,选育出一系列的新品种,但在生产中仍存在早熟品种果粒小、设施栽培花芽分化差、品种适应性差等问题,致使新品种利用率低。河北省农林科学院昌黎果树研究所2003年启动大规模育种工程,共获得27个杂交组合的4.1万株葡萄杂交群体,培育出一系列葡萄新品种^[3],其中宝光具有早熟、大粒、丰产、优质等特点,并适宜设施栽培。

1 选育经过

以巨峰作母本、早黑宝^[4]作父本,2003年采用人工杂交授粉方法获得杂交种子3098粒;翌年春对沙藏后的杂交种子催芽播种,杂种实生苗直接定植杂交圃,株行距0.5 m×2.2 m^[5]。2006年杂交苗结果,调查发现编号为C4-6-4的单株结果表现早熟、粒大、丰产、色艳,初选为优系;2007年即进行扩繁,2008年在河北省唐山、张家口、秦皇岛等地区试;经多点多年试验,各地综合表现优良且稳定。2013年,将该优系命名为宝光(图1),并经河北省林木品种审定委员会审定(冀S-SV-VV-017-2013)。2017年,农业部品种保护办公室授予宝光植物新品种权(CNA20140367.7)。2020年,得到农业农村部非主要农作物品种登记:GPD葡萄(2019)130041。



图1 早熟、大粒、优质葡萄新品种宝光

Fig. 1 A new table grape cultivar Baoguang featured by earliness, large berry size and good quality

2 主要性状

2.1 果实主要经济性状

宝光果穗圆锥形,单穗质量716.9 g,果穗平均长19.2 cm,宽16.5 cm。果粒着生紧密度中等。果粒近圆形,平均单粒质量13.7 g,最大单粒质量为25 g。果粒横径为25.9 mm,纵径为29.2 mm。果皮薄至中等厚,紫黑色至蓝黑色,果粉厚。果肉较脆,果汁量中等,香气淡,风味甜,可溶性固形物含量(w,后同)为18.1%,最高达23.5%,可滴定酸含量0.47%,固酸

比高达38.3。每果粒1~3粒种子,百粒质量为9.9 g。品质上等(表1)。

2.2 生长结果习性

宝光生长势中等,枝条成熟部分占年生长总量的82.5%,萌芽率高,芽眼萌发率达88.8%,每结果枝平均1.48穗;定植第2年100%结果,3年生每666.7 m²产量达到1910.0 kg。二次结果能力强,可做一年二收栽培。果实易着色,在白色果袋内可均匀着蓝黑色。

2.3 植物学特征

宝光嫩梢稍尖匍匐毛疏;幼叶绿色带有黄斑,

表1 宝光父母本间的果实性状比较

Table 1 Differences in berry characteristics between Baoguang and its parents

品种 Cultivar	果穗质量 Cluster mass/g	单粒质量 Berry mass/g	果粒形状 Berry shape	果皮颜色 Skin color	果肉质地 Texture	香型 Fragrance	w(可滴定酸) Titratable acids content/%	w(可溶性固形物) Soluble solids content/%
宝光 Baoguang	717.3	13.7	近圆形 Subcircular	紫黑-蓝黑 Purple black to blue black	较脆 Slight crisp	无 None	0.47	18.1
巨峰 Kyoho	551.0	11.0	椭圆形 Elliptic	紫黑色 Purple black	软 Soft	草莓香 Strawberry	0.64	16.2
早黑宝 Zaoheibao	542.0	7.5	椭圆形 Elliptic	紫红 Red violet	较脆 Slight crisp	玫瑰香 Muscat	0.56	15.0

上表面有光泽,叶背光滑无茸毛。成龄叶绿色,下表面无茸毛,上表面有光泽。成龄叶五角形,大,5裂,上裂刻浅。叶柄洼半开张,基部V形。叶柄锯齿两侧凸。花序着生位置4~5节、两性花。

2.4 物候期

经多年观察,在河北省昌黎地区4月16—19日进入萌芽期,5月27日—6月1日进入始花期,7月10—15日开始转色,8月7—12日左右果实充分成熟,需约117 d。

3 栽培技术要点

3.1 架式与整形

宝光适宜采用小棚架或篱架栽植。篱架叶幕采用“V”形叶幕,行距2.2~2.4 m,株距1.0~1.2 m,干高0.8~1.0 m;每666.7 m²定植232~300株。小棚架栽培以行距4~5 m,株距1.0~1.5 m为宜;每666.7 m²定植90~167株。露地及冷棚可极短梢修剪,日光温室以中短梢修剪为宜。

3.2 花果管理

宝光结实力强,花序大,注意疏除多余花穗及整形,每结果枝保留1穗果,弱枝不留果。花序分离时开始对花穗整形,去除肩部2~3个副穗,花穗上4~6片叶摘心。果粒黄豆粒大小时疏果,每花序留果量60~80粒,产量控制在666.7 m² 1500~2000 kg。建议实行果实套袋栽培,可带袋采收。

3.3 肥水管理

花期可适当浇少量水,有利于疏果工作,着色后注意控水以防裂果。施肥以有机肥为主,注意补充钙镁肥。采收后于9—10月份开沟施肥复壮树体,

一般每666.7 m²施入腐熟的农家肥2800~4800 kg,并混合50~100 kg平衡复合肥。

3.4 病虫害防治

该品种对病害的抗性与巨峰品种相近,注意灰霉病、霜霉病、炭疽病等的防控;虫害根据当地情况,加强绿盲蝽、螨虫、蓟马等的防控。结合病虫发生情况适期防治,提倡不同作用机制的农药交替轮换使用。

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