

早熟玫瑰香型葡萄新品种蜜光的选育

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摘 要: 蜜光是由巨峰×早黑宝杂交选育出的早熟优质玫瑰香型葡萄新品种。果穗圆锥形, 平均单穗质量720.6 g; 果粒近圆形, 果皮紫红色, 果肉中等脆, 具玫瑰香味; 平均单粒质量9.5 g, 最大单粒质量18.7 g; 每粒含种子2~3粒。可溶性固形物质量分数为19.5%, 可滴定酸质量分数为0.49%, 品质上。在昌黎地区8月上旬果实成熟。该品种生长势强, 易成花, 早果性及丰产性强, 抗病性较强。

关键词: 葡萄; 新品种; 蜜光; 早熟; 玫瑰香型

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A new muscat flavor early-ripening table grape variety Miguang

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Abstracts: Miguang is an early-ripening table grape with muscat flavor. Artificial hybridization pollination between Kyoho and Zaoheibao was done in 2003 at the vineyard at Institute of Changli Fruit Tree, Hebei Academy of Agricultural and Forestry Sciences, and 3098 hybrid seeds were got in this year. The seedlings were planted in 2004 and began to produce fruits in 2006. The original plant was selected in 2006 for its good eating quality and skin color and as a line C 5-4-2. From 2008 it was evaluated in regional trials under the name of C 5-4-2 in the districts of Luannan, Tanghai, and Changli. It was finally released as Miguang after the validation by the Committee of Hebei Cultivar Registration. The vigor of the vine is medium. The shoot tip is half open with heavy hair, distribution and intensity of anthocyanin coloration in shoot tip is medium, density of prostrate hairs on tip is heavy, and erect hairs on tip is very sparse. The upper surface of a young leaf is wine red color, while the under surface of a young leaf is Spinach Green color. Average intensity of anthocyanin coloration of three distal leaves prior to flowering is heavy. Density of prostrate hairs between veins at lower surface of 4th distal unfolded leaf is sparse, density of prostrate hairs between veins at lower surface is absent, erect hairs on veins at lower surface is absent, prostrate hairs on veins at lower surface is very sparse. The shape of the mature leaves is pentagonal with undulate sides, medium thickness. The blade margin is pronounced in undulation. Upper lateral sinus is open and deep, with “V” shaped. Lower lateral sinus is shallow, with “V” shaped. The petiole sinus is slight open and “U” shaped. The teeth are open and deep with both convex and straight sides, with “V” shaped. The petiole is about 9.4 cm on average and shorter than the middle vein, prostrate and erect hairs on petiole are sparse. The mature branches are smooth and reddish-brown color. The flower is hermaphrodite and usually positioned at the third or fourth node. The cluster of Miguang is conical, with an average weight of 720.6 g, average length of 16.7 cm and average width of 14.1 cm. The cluster density is medium to tight. The berry is almost circle shaped, 24.8 mm in diameter and 27.2 mm long, and the average weight is 9.5 g with the maximum of 18.7 g. The berries are uniform in shape and color, usually purplish red. The thickness of the skin is medium. The firmness of the berry is high, the flesh is juicy and

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crisp, with muscat flavor. The average soluble solid content is 19.5% and the average titratable acid is 0.49%. The number of seeds per berry is ranged from 2 to 3. In the Changli area, the time of budburst is usually in middle April, flowering at late May, and the fruit ripens in early to middle August. The average bearing shoot ratio was 53.3% and the number of clusters in each bearing shoot was 1.35. Miguang vines show good productivity with the yield of 24.75 tonnes per hectare. The vine is early fruiting, and easy to manage. Good resistance to powdery mildew and downy mildew was stated.

Key words: Grape; New cultivar; Miguang; Early-ripening; Muscat flavor

葡萄是我国四大果树之一,但葡萄品种结构不合理,市场竞争力较差,对外国品种的依赖度高,主栽设施品种夏黑、维多利亚、粉红亚都蜜、无核白鸡心等存在果粒小、着色较差、含糖低、品质差等问题;缺乏早熟、粒大、肉脆、糖高、质优的新品种;缺乏自主创新、具有自主知识产权、能够适合国内外市场的

具有中国特色的葡萄新品种^[1]。玫瑰香型、早熟、大粒等类型的葡萄品种一直是我国葡萄育种的主攻方向^[2]。针对这些现实,河北省农林科学院昌黎果树研究所2003年以早熟、大粒、优质、香味为目标开展杂交育种工作,历经11年培育成功了欧美杂交种早熟玫瑰香味葡萄新品种蜜光(图1)。



图1 玫瑰香型葡萄新品种蜜光

Fig. 1 A new table grape cultivar Miguang

1 选育经过

2003年以巨峰作母本、早熟品种早黑宝^[3]为父本进行人工杂交。获得杂交种子3098粒,进行沙藏处理,2004年催芽播种,5月中旬定植杂交苗1293株;2006年初果并初选为优系,编号为C5-4-2;2008年复选区试;经多点试验,该优系表现早果性、丰产性强,早熟,优质,抗病。2013年12月通过河北省林木品种审定委员会审定,并命名为蜜光,审定编号为冀S-SV-VV-020-2013。2017年5月通过农业部品种保护办公室审查登记,授予植物新品种权,品种权号为CNA20140366.8。2020年1月完成了中华人民共和国农业农村部非主要农作物品种登记,登记编号为GPD葡萄(2019)130043。

2 主要性状

2.1 植物学特征

蜜光嫩梢梢尖半开张,茸毛着色中,花青素条带

状分布,匍匐茸毛密,直立茸毛无或极疏;幼叶酒红色,花青素着色深,上表面有光泽,叶背主要叶脉间匍匐茸毛疏。成龄叶大,五角形,叶片绿色,中等厚,上表面有光泽,下表面茸毛无或极疏。叶片5裂,上裂刻深,开张,基部形状V形;下裂刻基部形状V形。叶柄洼轻度开张,基部U形。叶柄锯齿两侧直与两侧凸都有。成熟枝条光滑,红褐色。两性花,花序着生位置为3~4节。

2.2 果实经济性状

由表1可知,蜜光果穗呈圆锥形,穗质量720.6g,果粒着生较紧密,果实紫红色,果穗果粒着色均匀一致,在白色果袋内可充分着色;果粒近圆形,平均果粒质量9.5g,最大果粒质量18.7g,果粉中等厚,果皮中等厚,玫瑰香味;果肉硬而脆,可溶性固形物质量分数为19.0%,可滴定酸质量分数为0.49%;果粒附着力较强,采前不落粒;每果粒含种子2~3粒,多为2粒,百粒质量10.6g,种子与果肉易分离。鲜食品质上等。

表1 蜜光与父母本及早熟对照品种亚都蜜果实性状比较
Table 1 Main characteristics of Miguang, its parents and Yadumi

性状 Trait	蜜光 Miguang	巨峰 Kyoho	早黑宝 Zaoheibao	粉红亚都蜜 Yadumi
穗形 Cluster shape	圆锥形 Cone	圆锥形 Cone	圆锥形 Cone	圆锥形 Cone
果穗紧密度 Cluster compactness	较紧 Slight compact	中等紧密 Medium	较紧 Slight compact	较紧 Slight compact
平均穗质量 Bunch mass/g	720.6	550.0	540.0	610.0
果粒形状 Berry shape	近圆形 Subcircular	椭圆形 Elliptic	椭圆形 Elliptic	椭圆形 Elliptic
平均粒质量 Average berry mass/g	9.5	11.0	7.5	7.7
果肉质度 Flesh texture	较脆 Slight crisp	软 Soft	较脆 Slight crisp	较脆 Slight crisp
香型 Flavor	玫瑰香 Muscat	草莓香 Strawberry	玫瑰香 Muscat	无香味 No flavor
果皮颜色 Color of skin	紫红 Purple red	紫黑色 purple black	紫红 Purple red	紫红 Purple red
w(可溶性固形物) Soluble solid content/%	19.00	16.00	15.00	15.20
w(可滴定酸) Titratable acid content/%	0.49	0.62	0.56	0.54

2.3 生长结果习性

蜜光生长势较强,枝条成熟度高,进入结果期早,3年生666.7 m²产量为1650 kg。花芽分化好,每结果枝平均1.35穗;副梢的结实力强,容易结二次果,丰产性、稳产性均较强。

2.4 物候期

在河北昌黎地区,4月中旬萌芽,5月下旬开花,7月上中旬果实开始着色,8月上旬果实充分成熟,从萌芽至果实完全成熟需112 d左右。

2.5 抗逆性与栽培适应性

该品种对葡萄霜霉病、葡萄白腐病和葡萄炭疽病等具有较强抗性。抗逆性强,生长势较强,抗旱性强,根系发达,对土壤类型要求不严格,适宜在砂质土上栽植。

3 栽培技术要点

3.1 架式与整形

蜜光树势强,可采用V形篱架或独龙干小棚架种植。V形篱架采用株行距(0.7~1.0)m×(2.2~2.4)m,666.7 m²定植278~432株;小棚架采用株行距(1.0~1.2)m×(3~5)m,666.7 m²定植111~185株。以中短梢修剪为主。该品种副梢易萌发,应注意疏芽、抹梢和副梢摘心,以利通风透光。

3.2 花果管理

蜜光生长势较强旺,花序较大,应适当疏花疏果,强壮枝和中庸枝保留1个花序,细弱枝不留花序。开花前应进行花序整形,去除基部2~3个副穗,花穗上留4枚叶片摘心。坐果后疏除密集果粒,去除小粒。果粒大花生米大小时及时套袋。

3.3 肥水管理

以施用有机肥为主,根据植株生长发育状况,视土壤墒情,花前适量浇水,花期不浇水,落花后第一次生理落果结束开始浇水追肥,追肥以平衡肥为宜。着色后控制肥水供应,防止裂果发生。着色完

成后追施钙镁肥,果实采收后及时施肥复壮树体,施基肥后灌一次透水。采果后施足基肥,666.7 m²施有机肥3000~4000 kg、复合肥50~100 kg。

3.4 病虫害防治

该品种植株抗病性较强,主要预防灰霉病、炭疽病、绿盲蝽、蓟马、蚜虫等病虫害。落叶后结合冬季修剪,彻底清除枯枝落叶,春季芽球期用3~5 mg·kg⁻¹石硫合剂清园消毒,减少越冬病菌及虫源数量。开花前后重点防治灰霉病以及花后预防灰霉病、炭疽病、白粉病、白腐病等,防病喷药的同时加强防治绿盲蝽、蓟马、蚜虫。

4 综合评价

蜜光品种长势较强,投产快,花芽容易形成,适宜短梢修剪,自然坐果免激素保花,果肉质脆、大粒、浓香、高糖、品质极佳,成熟期早,丰产、稳产,抗病能力强;适宜保护地和观光采摘园种植,深受种植者和消费者欢迎,具有较好的应用前景。

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