

鲜食葡萄新品种丽珠玫瑰的选育

郝鹏, 王紫, 李海, 安利, 王柏秋, 纪沫, 吴玉秋

(辽宁省盐碱地利用研究所, 辽宁盘锦 124010)

摘要: 丽珠玫瑰葡萄是由紫丰葡萄为母本、纽约玫瑰葡萄为父本, 通过人工杂交选育出的早熟葡萄新品种。果穗圆锥形带副穗, 果粒整齐一致、着生紧密, 果皮紫黑色, 果面光滑, 无蜡质, 果肉肉质疏松, 酸甜适口, 汁液多, 味道酸甜、具较浓的草莓香味, 平均穗质量230 g, 最大穗质量350 g。果粒近圆形, 纵径1.71 cm, 横径1.67 cm, 单粒平均质量3.3 g, 最大单粒质量4 g, 每果实含种子粒数4粒左右, 中等大小。出汁率为71.9%, 可溶性固形物含量(w, 后同)16.59%, 总酸含量0.47%, 维生素C含量3.29 mg·100 g⁻¹; 果实生育期126 d。在辽宁省盘锦地区8月上旬成熟, 适合盘锦及近似环境地区露地以及温室栽植。

关键词: 葡萄; 新品种; 丽珠玫瑰

中图分类号: S663.1

文献标志码: A

文章编号: 1009-9980(2023)07-1494-03

A new table variety Lizhu Rose

HAO Peng, WANG Zi, LI Hai, AN Li, WANG Baiqiu, JI Mo, WU Yuqiu

(Institute of Saline-alkali Land Utilization, Panjin 124010, Liaoning, China)

Abstract: Lizhu Rose is a new grape variety with high quality, which was bred from cross between Zifeng (♀) and New York Rose (♂). More than 300 hybrid seeds were obtained by artificial cross pollination in 2007. They were planted in nutrition cups in the second year and the transplanted in the grape plot of Liaoning Institute of Saline-alkali Land Utilization. Regional trials were carried out in Yingkou, Dalian and other sites. The botanical characters, adaptability, disease resistance and yield were investigated and evaluated. It was certified by the Ministry of Agriculture and Rural Affairs of the People's Republic of China in 2022. The registration code is GPD grape (2022) 210014. Lizhu Rose belongs to hybrid of *Vitis vinifera* and *V. labrusca*. The tree vigor is very strong. Young leaves are yellow green and have medium-density white fluff. The mature leaves are nearly pentagonal in shape, with five-lobed. The leaf upper surface is flat, smooth and hairless, while the lower surfaces is covered by mediumly dense white fluff. The upper lobe is deep, while the lower lobes are shallow. The petiole depression is narrow and arched; the leaf margin is crenate with blunt teeth which are convex on both sides; and the coloration due to anthocyanin in the veins is weak. The mature shoots are dark brown. Flowers are bisexual. The average cluster weight is 230 g and can reach up to 350 g. The color of berry is purple black and the shape is long elliptic. The average berry weight is 3.3 g and may reach up to 4 g. The flesh is crisp and sweet, with a strong strawberry aroma and palatably sweet and sour flavor. The contents of soluble solids, total acid, and vitamin c was 16.59%, 0.47%, 3.29 mg·100 g⁻¹, respectively. In the Panjing area of Liaoning province, the beginning of bud-burst occurs in Early-April. Flowering takes place in mid-to-late May; berry coloration starts in early and late-July, and berry fully matures at early August. It takes about 126 d from budbreak to harvest. Therefore, it is an early maturing variety. The bud break rate is 62.5%; the average fruiting shoot rate is 72.7%. The average number of fruit branches is 1.6. Juice recovery was about 71.9%. Plants are easy to cultivate because of the strong adaptability and resistance to diseases. It is suitable for cultivation in Panjin and similar areas.

Key words: Grape; New variety; Lizhu rose

收稿日期: 2022-12-26

接受日期: 2023-02-09

作者简介: 郝鹏, 男, 助理研究员, 研究方向为葡萄育种。Tel: 0427-2836366, E-mail: 469383608@qq.com

鲜食葡萄生产是我国葡萄产业的主体^[1],通过我国葡萄育种者不断地努力,选育出一大批优质葡萄新品种,促进了我国葡萄产业的稳步健康发展^[2-4]。而具有香味、食用方便、口感较好的葡萄,是现在消费市场发展的趋势,也是我国鲜食

葡萄新品种选育的主要发展方向。为了丰富具有香味、果实品质较好的葡萄种类,满足消费者多元化的选择需求,辽宁省盐碱地研究所经过多年的工作,选育出鲜食葡萄新品种丽珠玫瑰(图1)。



图1 葡萄新品种丽珠玫瑰

Fig. 1 A new grape variety Lizhu rose

1 选育过程

丽珠玫瑰为辽宁省盐碱地利用研究所自育的鲜食葡萄新品种,于2007年开始杂交,父本为纽约玫瑰,母本为紫丰。采收杂交种子300余粒,经过冬季低温沙藏后,于第2年春季,对杂交种子进行催芽,分别种植在营养钵中,在实生苗长出3枚左右叶片时,定植于辽宁省盐碱地利用研究所试验基地葡萄试验地中。2010年开始结果,果实为紫黑色,具较浓的草莓香味,通过对其各种性状的观察,表现为综合性状优良。在营口市、大连市等地区进行区域试验。通过观察、记录、调查、评估,各种性状稳定,得出结果为丽珠玫瑰表现优良,产量性状较好,抗病性较强,果实品质优。2022年9月通过农业农村部非主要农作物品种登记[登记号:GPD葡萄(2022)210014]。

2 主要性状

2.1 植物学特征

丽珠玫瑰,属于欧美杂交种,该品种生长势较强,嫩梢颜色为绿色,幼叶正面黄绿色,具有中等密度匍匐白色茸毛。成龄叶近五角形,绿色,极小,5裂,中等厚,叶面较为平展,上表面光滑无毛,下表面

有中等密度匍匐白色茸毛,上裂刻深,下裂刻浅,叶柄洼为窄拱形,叶缘锯齿较钝,锯齿形状为两侧凸,叶脉花青素着色程度较弱。成熟枝条深褐色,花为两性花。

2.2 果实经济性状

丽珠玫瑰果穗圆锥形带副穗,平均穗质量230 g,最大穗质量350 g。果粒近圆形,果粒着生紧密,整齐均匀,纵径1.71 cm,横径1.67 cm,平均单粒质量3.31 g,最大单粒质量4.0 g。果皮紫色,有果粉。果肉软,具较浓的草莓香味,酸甜适口,可溶性固形物含量为16.59%,可滴定酸含量为0.47%,维生素C含量为3.29 mg·100 g⁻¹。每果粒含种子4粒左右,中等大小。

与亲本及对照品种果实性状鉴评比较见表1。丽珠玫瑰与父母本品种有明显差异,新梢父母本均为绿色、丽珠玫瑰为绿带红条纹。浆果始熟期父母本均为中熟、丽珠玫瑰为早熟。果实香味父本为草莓香、母本无香味、丽珠玫瑰为草莓香。含糖量分别比父母本高3.7和0.5个百分点,丽珠玫瑰果实外观和内在品质均优于亲本。

2.3 生物学特性

2.3.1 生长结果习性 丽珠玫瑰葡萄植株生长势较

表 1 丽珠玫瑰与父母本果实性状比较

Table 1 comparison of fruit characters between Rose and parents

品种 Cultivar	穗形 Cluster shape	果穗紧密度 Cluster compactness	平均穗质量 Average cluster mass/g	果粒形状 Berry shape	平均粒质量 Average berry mass	果肉质地 Flesh texture	香型 Fragrance	果皮颜色 Berry color	w(可溶性固形物) Soluble solids content/%	w(可滴定酸) Titratable acid content/%
丽珠玫瑰 Pearl Rose	圆锥形 Conical	中等紧密 Medium	230	圆形 Circular	3.40	软 Soft	草莓香 Strawberry	紫黑 Purple black	16.59	0.47
紫丰 Zifeng	双歧肩圆锥形 Conical with shoulder	中等紧密 Medium	500	圆形 Circular	4.45	软 Soft	无 None	紫黑 Purple black	16.00	0.45
纽约玫瑰 Niuyuefeigui	圆锥形 Conical	中等紧密 Medium	218	圆形 Circular	3.11	软 Soft	草莓香 Strawberry	紫红 Purple red	16.50	0.41

强,枝条上的萌芽率为76%,结果枝率73%,果枝平均果穗数1.6个。果汁占果穗质量约为71.9%。葡萄幼苗在定植第2年少量结果,第3年开始正常结果。2016年每666.7 m²产量约2 428.8 kg,2017年每666.7 m²产量约2376 kg,产量相对稳定。略高于亲本纽约玫瑰葡萄产量。

2.3.2 物候期 在辽宁省盘锦市露地栽培,丽珠玫瑰葡萄萌芽于4月上旬,始花于5月中下旬,果实膨大于6月上旬,果实开始着色于7月下旬,浆果成熟于8月上旬,果实发育期126 d左右。适合在盘锦市及近似栽培区露地以及温室栽植。

2.3.3 适应性以及抗病性 丽珠玫瑰葡萄属于欧亚杂交种,该葡萄具有较强的抗病性,对霜霉病具有较高抵抗力。抗盐碱性强,在土壤含盐量0.13%,pH为8.16的盐碱地生长良好。抗寒能力强,在盘锦市可简易防寒过冬。

3 栽培技术要点

3.1 栽培密度与定植

丽珠玫瑰葡萄栽培采用单篱架栽植模式,以南北行向种植为宜,主蔓直立整形,株行距为0.5 m×1.5 m。平均密度每666.7 m²约为890株,每年4月中旬左右,当地面下20 cm深土壤的最低温度达到10 °C时开始定植。定植沟的深度为60~80 cm,定植沟沟底宽度为20 cm。

3.2 肥水管理

一般在果实采收后秋季施基肥,最佳时间为9—10月。以腐熟有机肥为主,牛粪羊粪均可,同时加入适量过磷酸钙和微生物肥混合施用。采用沟施肥的方式施基肥,挖施肥沟的位置,位于距主干30~40 cm,施肥沟深30 cm左右,宽30 cm左右。肥施用量:每666.7 m²需施入优质腐熟有机肥8~10 t。

3.3 整形修剪

选择健壮的新梢作主蔓,为避免冬芽萌发,副梢留1枚叶片,反复摘心。秋季落叶后剪留高度为1 m左右。萌芽后抹去弱芽、不定芽和过密芽,基部30 cm以下的芽全部抹掉,植株高不超过1.5 m,营养枝生长至9~10枚叶片时摘心,留顶端1个副梢,每个副梢留2枚叶片反复摘心,其余副梢全部抹除。

3.4 病虫害防治

丽珠玫瑰葡萄抗病性相对较强,对葡萄常见的霜霉病和白粉病具有较强的抗性,在萌芽期需进行虫害的防治,药剂需要交替使用,在果实采收前期停止使用药物。对果实进行套袋处理,保持优良的果园环境,能够降低病虫害的发生。

参考文献 References:

- [1] 刘俊,晁无疾,元桂梅,刘寅喆,汉瑞峰.蓬勃发展的中国葡萄产业[J].中外葡萄与葡萄酒,2020(1):1-8.
LIU Jun, CHAO Wuji, QI Guimei, LIU Yinzhe, HAN Ruifeng. Booming development of Chinese grape industry[J]. Sino-Overseas Grapevine & Wine, 2020(1): 1-8.
- [2] 林洪,郭印山,刘镇东,李坤,李帅,王怡婷,郭修武.鲜食葡萄新品种红蜜香的选育[J].中国果树,2022(3):76-77.
LIN Hong, GUO Yinshan, LIU Zhendong, LI Kun, LI Shuai, WANG Yiting, GUO Xiuwu. Breeding report of a new table grape cultivar 'Honeyfragrance' [J]. Chinese Fruits, 2022(3): 76-77.
- [3] 章鹏,刘三军,贺亮亮,宋银花.鲜食葡萄新品种'中葡萄12号'的选育[J].果树学报,2020,37(2):289-292.
ZHANG Peng, LIU Sanjun, HE Liangliang, SONG Yinhu. Breeding report of a new table grape cultivar 'Zhongputao No. 12' [J]. Journal of Fruit Science, 2020, 37(2): 289-292.
- [4] 马丽,孙凌俊,高圣华,朱绍坤,乔军.鲜食葡萄新品种岳秀核的选育[J].果树学报,2022,39(1):141-143.
MA Li, SUN Lingjun, GAO Shenghua, ZHU Shaokun, QIAO Jun. Breeding report of a new table grape cultivar Yuexiu Seedless [J]. Journal of Fruit Science, 2022, 39(1): 141-143.