

晚熟桃新品种‘陇蜜15号’的选育

赵秀梅, 王发林*, 陈建军, 牛茹萱, 王晨冰, 王 鸿

(甘肃省农业科学院林果花卉研究所, 兰州 730070)

摘要: ‘陇蜜15号’是以‘陇蜜9号’桃为母本、‘理想’油桃为父本进行杂交培育的晚熟桃新品种。该品种果实圆形, 果顶平, 两半部对称, 平均单果质量242 g, 大果质量286 g; 果皮底色白, 50%以上果面着红色; 果肉白色, 近核处具红色素, 硬溶质, 风味浓甜; 可溶性固形物含量(w , 后同)14.6%, 可溶性糖含量10.2%, 有机酸含量0.20%, 维生素C含量5.4 mg·100 g⁻¹, 品质优良。黏核。花蔷薇型, 花粉多, 自花结实。在兰州安宁区9月初成熟, 果实生育期130~140 d。适宜在甘肃省中部、东部及南部的桃产区推广种植。

关键词: 桃; 新品种; ‘陇蜜15号’; 晚熟

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A new late ripening peach cultivar ‘Longmi 15’

ZHAO Xiumei, WANG Falin*, CHEN Jianjun, NIU Ruxuan, WANG Chenbing, WANG Hong

(Institute of Fruit and Floriculture Research, Gansu Academy of Agricultural Sciences, Lanzhou 730070, Gansu, China)

Abstract: ‘Longmi 15’ is a late ripening peach cultivar bred by artificial pollination. Its pedigree is ‘Longmi 9’ × ‘Lixiang Youtao’, made in 2005. It was initially selected in 2008 for its good taste. Through the hybrid seeds treated with low temperature stratification, 32 hybrid seedlings were obtained finally. A hybrid offspring ‘05-18-11’ in 2010 was elected the new strain. After regional adaptability testing at five sites (including Gaolan area, Anning area, Qinan area, Jiayuguan area and Huixian area, where are all peach main producing areas in Gansu province) over five years from 2011 to 2016, it was finally selected in 2016. We applied for the registration as a new cultivar in December 2016 and got identification certificate from Forestry Variety Approval Committee of Gansu Province in 2017. The tree’s growth potential is flourishing, the tree position open. Leaf is blade shape for long elliptic lanceolate. 16.6 cm in length and 3.7 cm in width. Leaf color is dark green, petiole is 0.9-1.1 cm in length, with 2-4 reniform leaf gland. Flower bud initiation section for 1-2 section. The flower is rose type, pink, pollen, pistil and stamen contour or the pistil slightly higher. The fruit is round, flat top fruit; fruit halves symmetrical, sutures shallow. Background of the fruit is white, more than 50 % of the fruit surface is covered with red. The average fruit weight is 242 g, large fruit weight is 286 g. The fruit flesh is white with red pigment around stone, hard-melting, less fiber, strong sweet. The content of fruit soluble solids, soluble sugar, organic acid and vitamin C is 14.6%, 10.2 %, 0.20 % and 5.4 mg·100 g⁻¹, respectively. Fruit stones are ellipsoid and clingstone. ‘Longmi 15’ peach cultivar in Lanzhou Anning area, generally the year by the end of March to early April flower buds began to sprout, flowering in mid-April, fruit ripening around September 5, fruit growth period 130-140 d, the leaves began to fall in early November, annual growth of about 229 d. ‘Longmi 15’ peach cultivar for cultivation environment has a strong adaptability and resistance. In the central and eastern regions of Gansu Lanzhou, Tianshui and Longnan and other places as well as areas with similar ecological conditions of cultivation. To establish

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作者简介: 赵秀梅, 女, 研究员, 从事果树育种与栽培技术研究工作。Tel: 0931-7614834, E-mail: zhaoxiumei5@gsagr.ac.cn

*通信作者 Author for correspondence. E-mail: wangfalin@263.net

new orchards, high-quality seedlings with *Prunus davidiana* as root stock should be used. Spacing in the rows and spacing between rows are 3 m×4 m for three branches open shape tree and 2 m×(4-5) m for Y shape tree. ‘Longmi 15’ is more suitable for grow in sufficient sunlight, soil deep sandy loam. ‘Longmi 15’ is a very fruitful cultivar, the fertilizer and water demand is higher, should be watered properly according to soil moisture. ‘Longmi 15’ has high rate of fruit setting in natural conditions, after about six weeks of first flowering, the fruit set should be checked and deformity fruit, injured fruit and bush fruit should be thinning. The productivity should be controlled in the 37.5 tons per hm².

Key words: Peach; New cultivar; ‘Longmi 15’; Late ripening

桃是中国第三大落叶果树，不耐贮藏，市场供应主要依靠熟期来进行调节^[1]。目前生产中仍存在着早熟和中熟品种过多而晚熟桃品质参差不齐、品种少的问题^[2]。晚熟桃较早熟桃生育期长、果实发育充分、个大并可生产出真正优质、高档的商品果^[3]。近年来，我国桃育种工作者先后育成了‘霞晖8号’^[2]、‘秦王’^[3]、‘锦枫’^[4]等优良中晚熟桃品种。由于各品种在不同地区表现不同，果实品质有一定差异，因此，培育大果、着色漂亮、硬溶质，耐贮运的晚熟桃新品种仍然是桃育种的主要目标之一。

1 选育经过

2005年以‘陇蜜9号’桃为母本、‘理想’油桃为父本，通过人工杂交获得杂交种子，杂交种子经冷藏层积处理后获得杂交种实生苗32株，2006年定植于甘肃省农业科学院林果花卉研究所桃选种圃。2008年杂种苗结果后，发现编号为‘05-18-11’的单株所结果实品质优异，被选为优良单株。经3 a连续观察，‘05-18-11’果实可溶性固形物含量(w, 后同)在14.0%以上，品质优，果个大、硬溶质、耐贮运，综合性状优良、遗传性状稳定，被复选为优系。2010年秋，对该品系繁育苗木，2011年春在甘肃省桃主产区秦安县、嘉峪关、皋兰县、安宁区、徽县等地开始多点同步区试。经5 a的区试观察、鉴评和对比，该新品系在各区试点生长结果正常，遗传稳定，具有较强的适应性和抗逆性，综合性状优良，果实品质突出，2016年被确定为桃优良新品系，命名为‘陇蜜15号’。2016年9月通过了甘肃省林木种苗管理局组织的专家现场测试；2017年12月申请通过了甘肃省林木良种审定委员会组织的审定登记，定名为‘陇蜜15号’(登记号：甘S-SV-Pp-011-2017)(图1)。

2 主要性状

2.1 果实主要经济性状

果实圆形，果个较大，平均单果质量242 g，大果



图1 桃新品种‘陇蜜15号’
Fig. 1 A new peach cultivar ‘Longmi 15’

质量286 g；果顶平；缝合线浅，两侧对称，梗洼浅；果皮底色乳白，茸毛稀、50%以上果面着红色，果皮中厚，难剥离；果肉白色，肉质致密，近核果肉花青苷多，硬溶质，汁液多，纤维少，味浓甜，可溶性固形物含量14.6%，品质优良。甘肃省农业科学院农产品质量检测中心检测的结果表明：果实水分含量84.2%，可溶性糖含量(w, 后同)10.2%，有机酸含量0.20%，维生素C含量5.4 mg·100 g⁻¹。核椭圆形，黏核(表1)。

2.2 主要植物学特征及生长结果习性

‘陇蜜15号’树体生长势强，树姿半开张。叶长椭圆披针形，叶面平展、叶尖向外翻卷；叶缘为钝锯齿；叶片长16.6 cm，宽3.7 cm，叶片颜色为深绿色，叶柄长0.9~1.1 cm，蜜腺肾形，2~4个。花芽起始节位为1~2节。花蔷薇型，粉红色；有花粉；萼筒内壁绿黄色，雌蕊与雄蕊等高或略高。枝条萌发力强，成枝率

表1 ‘陇蜜15号’与‘岗山白’果实主要经济性状比较

Table 1 Comparison of main fruit characters of ‘Longmi 15’ and ‘HaKuto’

Cultivar	Fruit shape	Ripening date	Average mass/g	Flesh type	Flesh color	w(可溶性固形物) Soluble solids content/%	风味 Flavor	核黏离性 Stone
陇蜜15号 Longmi 15	圆 Round	9月5日 Sept. 5	242	硬溶 Hard melting	白 White	14.60	浓甜 Strong sweet	黏 Cling
岗山白 HaKuto	圆 Round	9月3日 Sept. 3	206	硬溶 Hard melting	白 White	10.75	甜 Sweet	黏 Cling

高。各类果枝均能结果,幼树以长、中果枝结果为主,极丰产。

2.3 物候期

在兰州市安宁区,正常年份3月底4月初花芽开始萌动,4月中旬开花,9月初果实成熟,果实生育期130~140 d。11月上旬落叶,全年生育期229 d左右。

2.4 抗逆性及栽培适应性

该品种树体和花抗寒性均较强。多年没有发生树体冻害及花芽受冻现象。经过多年、多点试验观察,在各区试点均表现出很强的栽培适应性和较强的抗逆性。对流胶病和细菌性穿孔病有较强抗性。适宜在甘肃省中部、东部及南部的桃产区推广种植。

3 栽培技术要点

3.1 树形选择与栽植密度

主干形树形,株行距1.2 m×3.0 m;三主枝开心形树形,株行距3 m×4 m;“Y”字形树形,株行距2 m×(4~5)m。

3.2 整形修剪

重视夏季修剪,及时疏除徒长枝、过密枝,以利通风透光;冬剪以长梢修剪为主,选留中长果枝结果,疏除强旺枝、过密枝,及时更新结果枝。

3.3 肥水管理

该品种丰产性好,应加强肥水管理。产量水平37 500 kg·hm⁻²,有机肥45~60 m³·hm⁻²,氮肥(N)180~240 kg·hm⁻²,磷肥(P₂O₅)105~135 kg·hm⁻²,钾肥(K₂O)255~300 kg·hm⁻²。将全部有机肥、30%~40%的氮肥、100%的磷肥及50%的钾肥作基肥,于桃果采摘后的秋季采用开沟方法施用;其余60%~70%氮肥和50%的钾肥分别在春季桃树萌芽期、硬核期和果实膨大期分次追施。

3.4 花果管理

‘陇蜜15号’成花容易,坐果率高,必须进行严格的疏花疏果,疏果应在花后约6周,即在大、小果能明显区分时进行;疏除畸形果、病虫果和并生果,一般长

果枝留3~4个,中果枝留2~3个,短果枝留1个果。盛果期每hm²产量控制在37 500 kg以内。

3.5 病虫害防治

该品种无特殊病虫害。萌芽前喷施3~5 mg·kg⁻¹石硫合剂,消灭和减少越冬害虫和病源。生长期根据病虫害的发生规律,适时喷药防治。该品种因成熟期晚,果实易受病虫害危害,后期树冠过密不利于着色,因此在果实发育后期应加强病虫害的防控,并注重夏季修剪,保持树体通风透光,有利于果实着色和品质的提高。

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