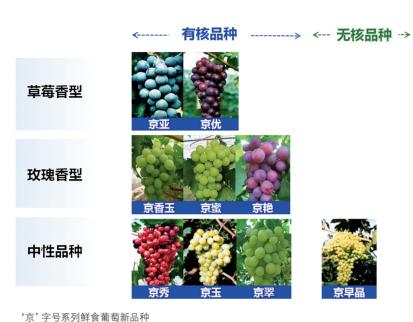
葡萄种质创新与新品种选育推广

Grape Breeding Innovation and Extension

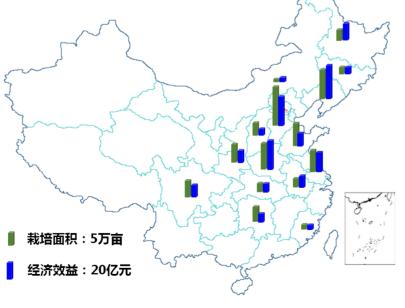
成果简介:

针对葡萄与葡萄酒产业国家重大需求,中国科学院植物研究所在葡萄资源收集评价、特异种质挖掘、果实主要品质性状遗传规律等领域开展了系统性研究,特别在优质早熟鲜食葡萄育种和高抗优质酿酒葡萄育种上取得了突破性成果,培育出的14个品种通过品种审定委员会的审定。9个'京'字号系列鲜食葡萄品种早熟和极早熟,改善了我国鲜食葡萄产业的品种结构,填补了我国早熟葡萄市场空白,推动了我国葡萄产业的快速发展。5个'北'字号系列高抗优质酿酒葡萄品种高抗寒旱,冬季不需埋土防寒能安全越冬;抗病,减少植保用量至少80%;以'北'字号系列酿造品种为原料酿制的葡萄酒,品质优风味独特,正引领着我国酿酒葡萄产业的发展。



Introduction:

To meet national demand of grape and wine industry, Institute of Botany, Chinese Academy of Sciences (IBCAS) makes systematical studies on grape germplasm collection and evaluation, and inheritance of berry quality traits, and specially makes great breakthroughs in breeding high quality early-mature table grape cultivars, and wine-making grape cultivars with high quality and resistance. Among them, nine early-mature 'Jing' serial table grape cultivars fill the gaps of early-mature grape market, and promote the rapid development of grape industry. Five 'Bei' serial wine-making grape cultivars are high-resistant to cold, drought and disease, do not need to be buried under the soil in winter, and reduce at least 80% of agricultural chemicals. 'Bei' serial red wines are characterized by excellent quality and specific pleasant flavor, leading the development of grape industry in China.



鲜食葡萄品种种植面积(2016)和累计经济效益(2014-2016)

'ling' serial table grape cultivars

Table grape cultivation area (2016) and cumulative production value (2014-2016)

推荐单位 / Recommended Units

中国科学院植物研究所 Institute of Botany, Chinese Academy of Sciences

完成单位 / Accomplished Units

中国科学院植物研究所

Institute of Botany, Chinese Academy of Sciences

合作单位/The Main Cooperation Units

中国科学院武汉植物园

Wuhan Botanical Garden, Chinese Academy of Sciences

社会效益和经济效益:

选育的新品种在全国大面积推广应用,产生了重大的经济效益。据不完全统计,团队选育的鲜食品种在辽宁等 15 个省(市、自治区)2016 年种植面积 97.16 万亩,2014-2016 年累计产生经济效益 246.06 亿元,为农民致富做出了突出贡献。特别是'京亚',已成为我国三大主栽品种之一,也是我国唯一自主选育的主栽品种。团队选育的酿酒品种推广应用面积超过 1.1 万亩,'北红'和'北玫'酿造的干红葡萄酒获得 10 余项国际大奖。'京秀''京亚''京早晶'3 个品种成为鲜食葡萄育种的核心亲本,作为亲本国内外已选育出 26 个葡萄新品种。团队在国际上具有重要影响力,2014 年承办了第 11 届国际葡萄遗传与育种大会,团队带头人担任大会主席,是该大会举办 44 年来首个亚洲科学家担任大会主席。

Economic and Social Benefits:

Grape cultivars bred by IBCAS have been widely extended in China, and makes significant economic benefits. Nine 'Jing' serial table grape cultivars were grown over 64.8 thousand ha in 2016, and produced the cumulative production value of 24.6 billion RMB from 2014-2016, making great contribution to farmer income. In particular, 'Jingya' is the only Chinese cultivar among the three main table grape cultivars planted in China. Five 'Bei' serial wine-making grape cultivars were grown over 733.3 ha in 2016, and red wines won more than 10 international prizes. 'Jingxiu', 'Jingya' and 'Jingzaojing' are the core breeding parents, and so far have been parents for 26 new grape cultivars. IBCAS hosted the Eleventh International Conference of Grape Genetics and Breeding, with Dr. Shaohua Li as the first Asia Convener.

巨峰(日本,中熟) 红地球(美国,晚熟) 京亚

国家葡萄产业体系2012年葡萄产业技术发展报告

'京亚'是我国三大主栽品种中唯一自主选育品种

'Jingya' is the only Chinese cultivar among the three main table grape cultivars planted in China



'北'字号系列品种是冬季不需埋土防寒的高抗优质 ^{酿酒品种}

Vines of 'Bei' serial high cold-resistant wine-making grape cultivars do not need to be covered under the soil in winter





'北红''北玫'干红葡萄酒获多个国际大奖

International awards of 'Beihong' and 'Beimei' red wines

团队成员 / Team Members:



李绍华 Li Shaohua

中国科学院植物研究所

主要贡献:项目的整体设计、新品种培育与应用 推广。

Institute of Botany, Chinese Academy of Sciences

Main contribution: Program design; Grape breeding and extension.



范培格 Fan Peige

中国科学院植物研究所

主要贡献: 种质资源收集、新品种培育与应用 推广。

Institute of Botany, Chinese Academy of Sciences

Main contribution: Grape germplasm collection, Grape breeding and extension.



梁振昌 Liang Zhenchang

中国科学院植物研究所

主要贡献: 种质资源收集、葡萄果实品质遗传 研究。

Institute of Botany, Chinese Academy of Sciences

Main contribution: Grape germplasm collection, Inheritance of berry quality traits (sugar, organic acids, anthocyanins and volatile compounds).



王利军 Wang Lijun

中国科学院植物研究所

主要贡献: 种质资源收集、葡萄白藜芦醇遗传和

机理研究。

Institute of Botany, Chinese Academy of Sciences

Main contribution: Grape germplasm collection, Inheritance and regulation mechanisms of resveratrol in berry.



吴本宏 Wu Benhong

中国科学院植物研究所

Institute of Botany, Chinese Academy of Sciences

(sugar, organic acids, anthocyanins and volatile



辛海平 Xin Haiping

中国科学院武汉植物园

主要贡献:葡萄抗寒旱性基因调控研究。

Wuhan Botanical Garden, Chinese Academy of Sciences

Main contribution: Genetics control of cold and drought resistance.



段伟 Duan Wei

中国科学院植物研究所

主要贡献: 种质资源收集和评价。

Institute of Botany, Chinese Academy of Sciences

Main contribution: Grape germplasm collection and reservation.



黎盛臣 Li Shengchen

中国科学院植物研究所

主要贡献:葡萄新品种培育。

Institute of Botany, Chinese Academy of Sciences

Main contribution: New grape cultivars breeding.



杨美容 Yang Meirong

中国科学院植物研究所 主要贡献:葡萄新品种培育。 Institute of Botany, Chinese Academy of Sciences

Main contribution: New grape cultivars breeding.



主要贡献:葡萄果实品质遗传研究。

Main contribution: Inheritance of berry quality traits compounds).



李前隽 Li Qianjun

中国科学院植物研究所

主要贡献:葡萄酒酿造工艺研究。

Institute of Botany, Chinese Academy of Sciences Main contribution: Wine-making technology.