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黑龙江省高皂甙大豆种质资源筛选

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摘要： 为了筛选黑龙江省高皂甙种质资源，采用酶标仪比色法分别检测了黑龙江省15份野生大豆(Glycine soja)、55份栽培大豆(Glycine.max)的皂甙含量。结果表明：不同类型大豆皂甙含量有明显遗传差异，变幅为1156-97~3977.84 μgg^{-1}。栽培大豆的皂甙含量高于野生大豆，筛选出高皂甙含量的野生大豆种质资源1份、栽培大豆种质资源3份。

Abstract: To screen the high saponins content soybean germplasms, 15 accessions of Glycine soja and 55 accessions of lycine from Heilongjiang province were determined.The results showed that there was obvious genetic variation of saponins content in different type of soybean germplasm. The mean content of saponins in cultivated soybean was higher than that in wild soybean, with the range of 1156.97-3977.84 μgg^{-1}.One accession of G. soja and three accessions of G.max with high content of saponins were detected.

参考文献/References:
[1]刘晓庚，陈梅梅，陈学恒.大豆皂甙的研究初步[J].中国粮油学报，2000，15(4)：18-2.(Liu X G，Chen M M，Chen X H.Preliminry research on soyasaponins[J].Journal of the Chinese Cereals and Oils Association，2000，15(4)：18-22.)
[2]龙彭年. 大豆营养保健研究应用现状和发展策略[J]. 世界农业，2003，287（3）：43-45. （Long P N.Present situation of study on soybean nutrient value to health protection and its development strategy[J]. World Agriculture，2003，287（3）：43-45. ）
[3]唐传核，杨晓泉，彭志英.大豆皂甙最新研究概况[J].大豆科学，2001，20(1):60-65.(Tang C H ，Tang X Q，Peng Z Y.Survey of recent researches on soyasaooni [J].Soybean Science，2001，20(1):60-65.)
[4]郁利平. 大豆皂甙的抑瘤效应[J]. 白求恩医科大学学报，1992，18（4）：333-335. (Yu L P.Inhibiting effect of total soysaponin on tumor cells[J]. Journal of Norman Bethune University of Medical Science，1992，18（4）：333-335.)
[5]孙学斌. 大豆皂甙及其抗肿瘤作用[J]. 木本植物研究，2000，7：328-331. (Sun X B.Soy saponins and its unticarcinogenic effect[J].Bulletin of Botanical Research，2000，7：328-331.)
[6]江燕，高旭年.复方大豆皂苷胶囊对高脂模型大鼠的降血脂作用[J].中药材，2004，10：758-760.(Jiang Y，Gao X N.The decrease effect of blood lipid of mixed soybean saponin capsule on mice with high blood lipids [J].Chinese Medicine，2004，10:758-760.)
[7]王银萍.大豆皂苷和人参茎叶皂苷的抗糖尿病动脉粥样硬化作用[J].白求恩医科大学学报，1994，6:881-884.（Wang Y P.The Effect of Antidiabetes Artherosclerosis with Soyasaponin and Panaxoside [J].Journal of Norman Bethune University of Medical Science，1994，6:881-884.）
[8]陈曾三.大豆皂苷功能性[J].粮食与油脂，2000，2：48-49.(Chen Z S.Functions of soybean saponin [J].Grain and Oil，2000，2：48-49.)

[9]滕燕平，张玉梅，刘颖，等.分光光度法测定大豆总皂甙的含量[J].中国食品卫生，2000，12(4):7-9.(Teng Y P，Zhang Y M，Liu Y，et al.Determination of soybean saponins by the method of spectrophotometry.[J].Chinese Journal of Food Hygiene,2000，12(4)：7-9.)

相似文献/References:

[1]高越,刘辉,陶波.抗草甘膦野生大豆筛选及其抗性生理机制研究[J]. (darticle.aspx?type=view&id=201301018)大豆科学,2013,32(01):76.[doi:10.3969/j.issn.1000-9841.2013.01.018]
GAO Yue,LIU Hui,TAO Bo.Screening and Physiological Mechanisms of Resistance to Glyphosate in Wild Soybeans (Glycine soja)[J].Soybean Science,2013,32(04):76.[doi:10.3969/j.issn.1000-9841.2013.01.018]
[2]王军卫,侯立江,李? 登,等.野生大豆紫色酸性磷酸酶PAP1基因的克隆及分析[J]. (darticle.aspx?type=view&id=201305004)大豆科学,2013,32(05):596.[doi:10.11861/j.issn.1000-9841.2013.05.0596]
WANG Jun-wei,HOU Li-jiang,LI Deng,et al.Cloning and Sequence Analysis of Purple Acid Phosphotase PAP1 Gene in Wild Soybean[J].Soybean Science,2013,32(04):596.[doi:10.11861/j.issn.1000-9841.2013.05.0596]
[3]王军卫,侯立江,李 登,等. 野生大豆紫色酸性磷酸酶PAP1基因的克隆及分析[J]. (darticle.aspx?type=view&id=201305004)大豆科学,2013,32(05):596.
WANG Jun-wei,HOU Li-jiang,LI Deng,et al. Cloning and Sequence Analysis of Purple Acid Phosphotase PAP1 Gene in Wild Soybean[J].Soybean Science,2013,32(04):596.
[4]王丽燕.硅对野生大豆幼苗耐盐性的影响及其机制研究[J]. (darticle.aspx?type=view&id=201305017)大豆科学,2013,32(05):659.[doi:10.11861/j.issn.1000-9841.2013.05.0659]
WANG Li-yan.Effects of Silicon on Salt Tolerance of Glycine soja Seedlings and Its Mechanism[J].Soybean Science,2013,32(04):659.[doi:10.11861/j.issn.1000-9841.2013.05.0659]
[5]陈丽丽 ，王明玖 ，何丽君 ，等.野生大豆ISSR体系的优化及其在远缘杂交后代鉴定中的利用[J]. (darticle.aspx?type=view&id=20130406)大豆科学,2013,32(04):459.[doi:10.11861/j.issn.1000-9841.2013.04.0459]
CHEN Li-li,WANG Ming-jiu,HE Li-jun,et al.Optimization for ISSR Reaction System of Wild Soybean and Its Utilization in Distant Hybrid Identification[J].Soybean Science,2013,32(04):459.[doi:10.11861/j.issn.1000-9841.2013.04.0459]
[6]徐艳平,胡翠美,张文会,等.干旱胁迫对野生大豆幼苗光合作用相关指标的影响[J]. (darticle.aspx?type=view&id=201303013)大豆科学,2013,32(03):341.[doi:10.11861/j.issn.1000-9841.2013.03.0341]
XU Yan-ping,HU Cui-mei,ZHANG Wen-hui,et al.Effect of Simulated Drought Stress on Photosynthesis Related Indexes at Seedling Stage of Wild Soybeans[J].Soybean Science,2013,32(04):341.[doi:10.11861/j.issn.1000-9841.2013.03.0341]
[7]王 旻,梁 玉,王欣欣,等.即墨野生大豆主要成分及其营养价值分析[J]. (darticle.aspx?type=view&id=201303016)大豆科学,2013,32(03):355.[doi:10.11861/j.issn.1000-9841.2013.03.0355]
WANG Min,LIANG Yu,WANG Xin-xin,et al.Assessment on Nutritional Compositions and Value of Jimo Wild Soybean [J].Soybean Science,2013,32(04):355.[doi:10.11861/j.issn.1000-9841.2013.03.0355]
[8]程鹏,徐鹏飞,范素杰,等.野生大豆接种大豆疫霉根腐病菌后过氧化物酶（POD）活性变化[J]. (darticle.aspx?type=view&id=201302013)大豆科学,2013,32(02):197.[doi:10.3969/j.issn.1000-9841.2013.02.013]
CHENG Peng,XU Peng-fei,FAN Su-jie,et al.Response of POD Activity in Glycine soja ?Inoculated by Phytophthora sojae [J].Soybean Science,2013,32(04):197.[doi:10.3969/j.issn.1000-9841.2013.02.013]
[9]吴 倩,张 磊,黄志平,等.转录组测序及其在野生大豆基因资源发掘中的应用[J]. (darticle.aspx?type=view&id=201306025)大豆科学,2013,32(06):845.[doi:10.11861/j.issn.1000-9841.2013.06.0845]
WU Qian,ZHANG Lei,HUANG Zhi-ping,et al.Transcription Sequencing and Its Application on Discovering the Gene Resources of Wild Soybean[J].Soybean Science,2013,32(04):845.[doi:10.11861/j.issn.1000-9841.2013.06.0845]
[10]袁翠平,赵洪锟,王玉民,等.利用SSR标记评价抗胞囊线虫野生大豆种质的遗传多样性[J]. (darticle.aspx?type=view&id=201402001)大豆科学,2014,33(02):147.[doi:10.11861/j.issn.1000-9841.2014.02.0147]
YUAN Cui-ping,ZHAO Hong-kun,WANG Yu-min,et al.Genetic Diversity of Wild Soybean(Glycine soja)Resistant Germplasms to Soybean Cyst Nematode Revealed by SSR Markers[J].Soybean Science,2014,33(04):147.[doi:10.11861/j.issn.1000-9841.2014.02.0147]
[11]郑世英,萧蓓蕾,金桂芳.NaCl胁迫对野生大豆和栽培大豆叶绿素及光合特性的影响[J]. (darticle.aspx?type=view&id=20130411)大豆科学,2013,32(04):486.[doi:10.11861/j.issn.1000-9841.2013.04.0486]
ZHENG Shi-ying,XIAO Bei-lei,JIN Gui-fang.Effect of NaCl Stress on Chlorophyll Content and Photosynthetic Characteristics of Glycine soja and Glycine max[J].Soybean Science,2013,32(04):486.[doi:10.11861/j.issn.1000-9841.2013.04.0486]
[12]胡卫静,何丽君,何劲莉,等.NaCl胁迫对野生与栽培大豆杂交后代株系生理指标的影响[J]. (darticle.aspx?type=view&id=201303015)大豆科学,2013,32(03):349.[doi:10.11861/j.issn.1000-9841.2013.03.0349]
HU Wei-jing,HE Li-jun,HE Jin-li,et al.Effects of NaCl Stress on Physiological Characters of Soybean Hybrids from Glycine max × Glycine soja[J].Soybean Science,2013,32(04):349.[doi:10.11861/j.issn.1000-9841.2013.03.0349]
[13]郑世英,郑建峰,张秀玲,等.NaCl胁迫对野生及栽培大豆渗透调节物质含量的影响[J]. (darticle.aspx?type=view&id=201105015)大豆科学,2011,30(05):786.[doi:10.11861/j.issn.1000-9841.2011.05.0786]
ZHENG Shi-ying,ZHENG Jian-feng,ZHANG Xiu-ling,et al.Effect of NaCl Stress on the Content of Osmotic Regulation Substances in Glycine soja and Glycine max[J].Soybean Science,2011,30(04):786.[doi:10.11861/j.issn.1000-9841.2011.05.0786]
[14]马光,郭继平,魏淑珍,等.干旱胁迫下野生大豆和栽培大豆生理特性比较[J]. (darticle.aspx?type=view&id=201106036)大豆科学,2011,30(06):1057.[doi:10.11861/j.issn.1000-9841.2011.06.1057]
MA Guang,GUO Ji-ping,WEI Shu-zhen,et al.Comparison on Physiological Characteristics of Glycine soja and Glycine max under Drought Stress[J].Soybean Science,2011,30(04):1057.[doi:10.11861/j.issn.1000-9841.2011.06.1057]
[15]李发院,田 芳,张晓可,等.栽培大豆和野生大豆及其回交后代苗期耐盐性分析[J]. (darticle.aspx?type=view&id=201204016)大豆科学,2012,31(04):593.[doi:10.3969/j.issn.1000-9841.2012.04.016]
LI Fa-yuan,TIAN Fang,ZHANG Xiao-ke,et al.Analysis of Seedlings Salt Tolerance of Backcross Hybrids of Glycine maxand Glycine soja[J].Soybean Science,2012,31(04):593.[doi:10.3969/j.issn.1000-9841.2012.04.016]
[16]纪展波,蒲伟凤,李桂兰,等.野生大豆、半野生大豆和栽培大豆对苗期干旱胁迫的生理反应[J]. (darticle.aspx?type=view&id=201204017)大豆科学,2012,31(04):598.[doi:10.3969/j.issn.1000-9841.2012.04.017]
JI Zhan-bo,PU Wei-feng,LI Gui-lan,et al.Physiological Reaction of Glycine soja,Glycine gracilisand Glycine max to Drought Stress in Seedling Stage[J].Soybean Science,2012,31(04):598.[doi:10.3969/j.issn.1000-9841.2012.04.017]
[17]高小宽,刘国杰,白丽荣.聚乙二醇（PEG）模拟干旱胁迫对野生大豆与栽培大豆萌发的影响[J]. (darticle.aspx?type=view&id=201206037)大豆科学,2012,31(06):1027.[doi:10.3969/j.issn.1000-9841.2012.06.037]
GAO Xiao-kuan,LIU Guo-jie,BAI Li-rong.Effect of Polyethylene Glycol(PEG)Simulated Drought Stress on Seed Germination of Wild and Cultivated Soybeans[J].Soybean Science,2012,31(04):1027.[doi:10.3969/j.issn.1000-9841.2012.06.037]
[18]王岚.野生与栽培大豆某些性状的比较及其在大豆育种中的利用[J]. (darticle.aspx?type=view&id=201004006)大豆科学,2010,29(04):575.[doi:10.11861/j.issn.1000-9841.2010.04.0575]
WANG Lan.Comparsion of Several Character between Glycine soja and Glycine max and Its Utilization in Soybean Breeding[J].Soybean Science,2010,29(04):575.[doi:10.11861/j.issn.1000-9841.2010.04.0575]
[19]梁江,陈渊,汤复跃,等.利用18S rRNA基因部分序列研究大豆种质资源的进化关系[J]. (darticle.aspx?type=view&id=201004008)大豆科学,2010,29(04):586.[doi:10.11861/j.issn.1000-9841.2010.04.0586]
LIANG Jiang,CHEN Yuan,TANG Fu-yue,et al.Reveal the Evolutionary Relationship of Soybean Germplasm by Comparing

18S rRNA Gene Sequences[J].Soybean Science,2010,29(04):586.[doi:10.11861/j.issn.1000-9841.2010.04.0586]
[20]蒲伟凤,李桂兰,张敏,等.干旱胁迫对野生和栽培大豆根系特征及生理指标的影响[J]. (darticle.aspx?type=view&id=201004015)大豆科学,2010,29(04):615.[doi:10.11861/j.issn.1000-9841.2010.04.0615]
PU Wei-feng,LI Gui-lan,ZHANG Min,et al.Effects of Drought Stress on Root Characteristics and Physiological Indexes of Glycine soja and Glycine max [J].Soybean Science,2010,29(04):615.[doi:10.11861/j.issn.1000-9841.2010.04.0615]

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