草业科学 2012, 29(09) 1384-1389 DOI: ISSN: 1001-0629 CN: 62-1069/S

植物生产层

尖叶胡枝子种子贮藏蛋白分析

王清郦，孙启忠，赵淑芬，郭艳艳，周国栋

摘要：

摘要：对3个不同类型尖叶胡枝子(Lespedeza hedysaroides)的种子贮藏蛋白进行SDS PAGE比较分析。结果表明，3个不同类型尖叶胡枝子的盐溶蛋白和贮藏蛋白谱带表现出丰富的多态性，分子量10.75～154.53 KDa。盐溶蛋白的特征蛋白谱带共19条，多态性条带13条，多态率68.42%；贮藏蛋白的特征蛋白谱带共28条，其中9条为多态性条带，多态率32.14%。利用盐溶蛋白和贮藏蛋白的条带信息进行聚类分析，供试材料可分为两类：Ⅰ类为普通型和浓绿型尖叶胡枝子；Ⅱ类为高杆型尖叶胡枝子。由此认为，种子贮藏蛋白电泳技术可以作为研究胡枝子属种内变异的重要研究手段。

关键词： 尖叶胡枝子 种子贮藏蛋白 SDS PAGE

Analysis on seed storage protein of Lespedeza hedysaroides

WANG Qing li, SUN Qi zhong, ZHAO Shu fen, GUO Yan yan, ZHOU Guo dong

Abstract:

Seed storage proteins of three Lespedeza hedysaroides were analyzed by SDS PAGE technique. Results indicated that SDS PAGE of salt soluble proteins and seed storage proteins were practical and reliable methods for determining relationships among three L.hedysaroides. Salt soluble protein and seed storage protein in the common type and deep green type L.hedysaroides were significantly different from those in the tall type. The protein molecular weight ranged from 10.375 KDa to 155.53 KDa. 6 bands were shared and 13 bands were polymorphism (68.42%) of total 19 salt soluble protein bands. 19 bands were shared and 9 bands were polymorphism (32.14%) of total 28 seed storage protein bands. Clustering showed that three L.hedysaroides were divided into two groups. The common type and the deep green type were classified as the first group and the tall type one was second group. Therefore, SDS PAGE technology is an important method to study intraspecies variation among Lespedeza species.

Keywords: Lespedeza hedysaroides seed storage protein SDS PAGE

收稿日期 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者:

作者简介:

作者Email:

参考文献：

本刊中的类似文章

1．YANG Xiu fang, YU Zhu, XU Miao yun, SUN Qi zhong, Li Feng.2种不同类型的尖叶胡枝子光合-光响应特性研究[J]. 草业科学, 2009,26(07): 61-65

2．刘晓云,戴燕燕,郭振国,肖 猛,张 斌.三叶草根瘤菌SDS PAGE分析及结瘤试验分子验证[J]. 草业科学, 2010,27(1): 79-84

3．司丙文，王宗礼，孙启忠，张慧杰，李 峰.尖叶胡枝子青贮微生物数量变化及发酵特性[J]. 草业科学, 2012,29(04): 650-657