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作者： 王永[1] (KeySearch.aspx?type=Name&Sel=王永)； 兰青阔[1] (KeySearch.aspx?type=Name&Sel=兰青阔)； 张莉[2] (KeySearch.aspx?type=Name&Sel=张莉)； 赵新[1] (KeySearch.aspx?type=Name&Sel=赵新)； 朱珠[1] (KeySearch.aspx?type=Name&Sel=朱珠)； 程奕[1] (KeySearch.aspx?type=Name&Sel=程奕)
1天津市农业科学院中心实验室，天津300381；
2天津市畜牧兽医研究所，天津 300112

Author(s): WANG Yong[1] (KeySearch.aspx?type=Name&Sel=WANG Yong)； LAN Qing-kuo[1] (KeySearch.aspx?type=Name&Sel=LAN Qing-kuo)； ZHANG Li[2] (KeySearch.aspx?type=Name&Sel=ZHANG Li)； ZHAO Xin[1] (KeySearch.aspx?type=Name&Sel=ZHAO Xin)； ZHU Zhu[1] (KeySearch.aspx?type=Name&Sel=ZHU Zhu)； CHENG Yi[1] (KeySearch.aspx?type=Name&Sel=CHENG Yi)
1Central Lab of Tianjin Academy of Agricultural Sciences,Tianjin 300381;
2Tianjin Institution of Animal Husbandry,Tianjin 300112, China

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摘要： 以转基因抗草甘膦大豆为研究材料，分别采用改良Chelex-100法和常规CTAB法提取基因组DNA，以提取DNA的浓度和纯度，同时以PCR扩增大豆的内源基因（lectin）及外源特异性序列（CaMV35S，nos，Cp4-epsps）的效果对两种方法进行比较和评价。结果表明：虽然改良Chelex-100法DNA提取纯度不高，但是提取效率与常规CTAB法相当，而且改良Chelex-100法能够快速在1 h之内从大豆中提取DNA，所提取的DNA可以直接用于PCR扩增反应，PCR扩增产物电泳条带清晰。因此，改良Chelex-100法可以替代CTAB法提取DNA用于转基因检测，该方法具有经济、简便、快速的特点。

Abstract: Improved Chelex-100 method and conventional CTAB method were applied to extract total DNA from transgenic roundup ready soybean.Both improved chelex-100 method and CTAB method were compared in this study, and quantity and purity of the extracted DNA were evaluated by PCR amplification result of the endogenous gene (lectin) and foreign specific sequence (CaMV35S、nos and Cp4-epsps).Despite the lower quality of DNA,the Improved Chelex-100 method can quickly extract the DNA from soybean within 1 hour.The DNA can be directly applied to the following step-PCR amplification as DNA template.Therefore,Chelex-100 is economic,simple and rapid,which can be replaced CTAB for transgenic DNA detection.

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作者简介：王永（1977-），男，助理研究员，主要从事农产品安全质量分子检测技术研究。E-mail: wyzl2007@yahoo.com.cn。

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