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研究报告

冬枣与临猗梨枣杂交子代果实裂果特性研究

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Research on the Characteristics of Fruit Cracking in the Hybrid Progenies Between *Ziziphus jujuba* ‘Dongzao’ and ‘Linyi Lizao’

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摘要 研究影响枣裂果的因素对选育抗裂果品种和开发防裂措施具有重要意义。对冬枣 × 临猗梨枣的F1 子代分离群体进行裂果率和裂果指数测定，并进行石蜡制片和显微观测，探讨同一分离群体的不同基因型个体间成熟果实表皮结构与裂果的关系。结果显示，48-LS-33，47-LS-22，II-13-15 为极抗裂株系；抗裂株系比易裂株系果实表皮厚，果实表皮厚度和裂果率呈显著负相关，抗裂类型果实表皮细胞排列较紧密，角质层沉积导致的表皮第一层细胞垂周状变化明显，而角质层厚度与裂果无明显相关性。

关键词： 枣 裂果 表皮 角质层

Abstract： Exploring the mechanisms underlying jujube fruit cracking is essential for the development of new cultivar with high cracking resistance and also provides important reference to overcome the problem. In this study, the hybrid seedlings between ‘Dongzao’ and ‘Linyi Lizao’ were chosen to investigate of the rate of fruit cracking and to reveal the anatomy structure through the paraffin section analysis. Furthermore, the relationship between fruit epidermal structure and fruit cracking susceptibility were analyzed. The results showed that 48-LS-33, 47-LS-22, II-13-15 were the genotypes with highest cracking resistance and that there showed a significant negative correlation between the thickness of fruit epidermal cells and cracking rate. The fruit of cracking resistant type had tighter arrangement of epidermis cells than that of cracking sensitive type. The anticlinal changing in first layer epidermis cells caused by cuticle deposition is obvious in the fruit of resistant cracking type, whereas the cuticle thickness was not found to be related to the cracking rate.

Keywords： jujube, fruit cracking, epidermis, cuticle

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