

园艺园林科学

黄金梨雄性不育的细胞学研究

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摘要:

【研究目的】为研究黄金梨雄性不育的早期表现和细胞学特征;【方法】采用石蜡切片法,观察分析了黄金、爱宕和圆黄(对照)的花粉形成过程中,花药和小孢子发育过程的细胞学特征。【结果】黄金梨花粉败育主要发生在小孢子阶段单核晚期;【结论】花粉败育的主要原因是四分体分离后形成的早期花粉细胞,因绒毡层提前解体,花药维管束细胞木栓化,二者共同导致营养供应困难,致使花粉败育。而对照可育品种花粉经由小孢子阶段很快发育成熟。

关键词: 黄金梨 雄性不育 小孢子 细胞学

Cytological Study On Male Sterility In Pyrus Pyrifolia Naka

Abstract:

【OBJECTIVE】Male sterility and cytological features of Pyrus pyrifolia(Burm. F. ) Nakai 'Whangkeumbae',【METHOD】the features of its and CK breed 's anther were examined by the method of paraffin sectioning, and cytological features of anther and microspore in the formation process were investigated.【RESULTS】The results showed abortion mainly occurred in the late microspore stage of monocyte.【CONCLUSION】Pollen abortion was dominant reason that the separation of tetrasporophytes was formed early pollen cells, which were due to the disintegration of tapetum in advance, cork-based vascular cells. The two sides contributed to lack of nutrition coordination, resulting in pollen abortion.

Keywords: Whangkeumbae male sterility microspore cytology

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