

园艺—研究报告

黑籽南瓜种间杂交研究

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摘要:

通过调整播期克服了南瓜属种间花期不遇的问题, 以美洲南瓜、中国南瓜、印度南瓜3个种共12个材料与黑籽南瓜进行了种间杂交试验。黑籽南瓜为母本不结实, 以其他3个种为母本则均可结实。美洲南瓜×黑籽南瓜及印度南瓜×黑籽南瓜杂交获得的果实内均无种子。获得了18株中国南瓜×黑籽南瓜F1植株。种间杂种F1植株雄蕊退化, 以其作为母本以中国南瓜或黑籽南瓜为父本进行回交, 可结实但无种子。中国南瓜×黑籽南瓜F1形态为双亲中间型偏父本, 其抗病性、抗虫性不及父本黑籽南瓜而倾向于母本中国南瓜。

关键词: 种间杂交

Research of Distant Hybridization between Fig-leaf Gourd (*Cucurbita ficifolia*) and Three Mainly Cultivated Species in *Cucurbita*

Abstract:

Asynchronous flowering period in different species of *Cucurbita* was overcome by the means of adjusting sowing time. The experiment of interspecific hybridization was done between 12 materials of three mainly cultivated species (*C. pepo*, *C. moschata* and *C. maxima*) and fig-leaf gourd (*C. ficifolia*). It was no fruit when the fig-leaf gourd act as female parent, and it was fruiting when the other three mainly cultivated species did. There were no seeds in the fruits when *C. pepo*×*C. ficifolia* and *C. maxima*×*C. ficifolia*. 18 F1 plants of *C. moschata*×*C. ficifolia* were obtained. The stamens were degenerate in the plants of the interspecific hybrids F1. It was fruiting but no seeds when the interspecific hybrids F1 as female parent and backcrossing using *C. moschata* or the *C. ficifolia* as male parent. The plant morphology of F1 of *C. moschata*×*C. ficifolia* was intermediate type of parents and had a tendency to the male parent. Disease resistance and insect resistance of the F1 were worse than *C. ficifolia* of male parent and approached *C. moschata* of female parent.

Keywords: interspecific hybridization

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