

研究简报

转基因741杨节肢动物群落主要害虫及天敌的动态变化

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摘要 在时间序列过程中, 转基因741杨对目标害虫鳞翅目食叶害虫表现出持续的抗性, 其数量明显减少, 高抗和中抗741杨之间差异不大。研究表明, 转基因741杨对目标昆虫和非目的植食性害虫存在负效应, 而对天敌和中性节肢动物组成和发生无明显负作用。因而在制定害虫综合治理策略和途径上宜采取与对照741杨不同的措施, 抗性株系应以生态调控为主。

关键词 [转基因741杨](#); [节肢动物群落](#); [生态风险评价](#); [害虫和天敌动态](#)

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Impacts of transgenic insect-resistance hybrid poplar 741 on the population dynamics of pests and natural enemies

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Abstract During the investigations in several years, the transgenic insect-resistance hybrid poplar 741 presented a continuance resistance on target pests, lepidopter, causing significant decrease in pest population. There was no obvious impact on the population of pest between high and medium insect-resistance hybrid poplar 741 stands. Transgenic insect-resistance hybrid poplar 741 had negative effect on target and non-target phytophagous pests, but had positive effect on natural enemies and neutral arthropod. These results demonstrated that different control strategy and measure should be taken in integrated pest management of transgenic insect-resistance hybrid poplar 741, compared to those of the parental hybrid poplar 741, and the high insect-resistance clones had better be used as plantations for the ecological regulation.

Key words [transgenic](#) [insect-resistance](#) [hybrid poplar 741](#) [arthropod community](#) [ecological safety assessment](#) [population dynamics of pests and natural enemies](#)

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