

研究报告

尖角突脐孢菌与化学除草剂混用防治稻田稗草效果的研究

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摘要

用平板表面萌发法测定化学除草剂对尖角突脐孢菌菌株X27分生孢子萌发的影响,在温室研究该菌分生孢子干粉与化学除草剂的相互作用,在田间评价其混剂的除稗效果.结果表明,二氯喹啉酸和苄嘧磺隆对分生孢子的萌发影响不明显,其它除草剂均有不同程度的影响.在温室条件下,菌X27干粉与二氯喹啉酸混用具有明显的增效作用,与敌稗混用具有加成作用;在水田条件下,单用菌X27干粉防除稗草效果差,防效只有60%,而与低量的二氯喹啉酸混用,防效明显提高,达90%以上.

关键词 [尖角突脐孢菌,稗草,化学除草剂,增效作用,水稻](#)

分类号

Prevention efficiency of *Exserohilum monoceras* with chemical herbicides against *Echinochloa crus-galli* in paddy field

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Abstract

This paper studied the impact of several herbicides on the conidium germination of *Exserohilum monoceras* strain X27 in petri dish, and the synergistic effects of the pathogen and chemical herbicide quinclorac or propanil against *Echinochloa crus-galli* in greenhouse. The prevention efficiency of the tank-mixture of pathogen and quinclorac was also evaluated in paddy field. The results showed that test herbicides except quinclorac and bensulfuron-methyl could inhibit conidium germination and hypha growth to different degree. A significant synergism was observed between the pathogen and quinclorac. Adding quinclorac could obviously increase the prevention efficiency against *Echinochloa crus-galli*. Under field condition, the single use of pathogen could only control about 60% of the weed, while the efficiency of pathogen-quinclorac mixture could reach 90%.

Key words

[Exserohilum monoceras](#) [Echinochloa crus-galli](#) [Herbicide](#) [Synergism](#) [Paddy field](#)

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