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ONLINE ISSN : 1349-0923

PRINT ISSN : 1348-589X

Journal of Pesticide Science

Vol. 28 (2003) , No. 1 pp.33-36



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Macromolecular Insect Chitinase Inhibitors Produced by Fungi: Screening and Partial Characterization

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(Received: May 10, 2002)

(Accepted for publication: September 6, 2002)

Culture broths of fungal strains were screened for novel insect chitinase inhibitors using the *Spodoptera litura* chitinase inhibitory assay. The culture filtrates of 5 strains showed potent and specific inhibitory activity against the insect chitinase. Partial characterization showed that the active compounds produced by these strains were water-soluble macromolecular compounds which had not been hitherto reported as chitinase inhibitors. These novel chitinase inhibitors are, therefore, expected to be potential agents for insect control.

Keywords:

insect chitinase inhibitor, insect growth regulator, *Spodoptera litura*, static culture, polysaccharide, protein



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“Macromolecular Insect Chitinase Inhibitors Produced by Fungi: Screening and Partial
Characterization”. *J. Pestic. Sci.* Vol. **28**, pp.33-36 (2003) .

doi:10.1584/jpestics.28.33

JOI JST.JSTAGE/jpestics/28.33

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