

meric structure of the receptors, as postulated by other authors; anyhow, the possibility of an uncomplete purification, cannot be ruled out. In order to clarify this point other approaches, such as the use of monoclonal antibodies or of photoaffinity labels, are under investigation.

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PRODUCTION OF ENNIATIN B BY *FUSARIUM AVENACEUM* AND ITS TOXICITY TO *ARTEMIA SALINA* L.

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Investigations on a strain of *Fusarium avenaceum* (Fr.) Sacc. (ITEM-620) from wheat kernels collected in Yugoslavia, producing highly toxic extracts to brine shrimp (*Artemia salina* L.) larvae when grown on maize kernels in laboratory, led to the isolation of enniatin B.

Enniatin B was purified in yields of 121 mg/Kg of culture by CC and preparative TLC, using brine shrimp bioassay to monitor the toxicity of the fractions, and characterized essentially by ¹D ¹H- and ¹³C-NMR and by EI-HRMS and FAB-MS. Moreover its physical properties resulted very consistent with the literature data. The 50% lethal dose of enniatin B on *A. salina* was calculated in 8.6 µg/ml of sea water.

These results prompt to extend the investigation on enniatin B production by 13 *F. avenaceum* isolates on different substrates (corn, wheat). Enniatin B was produced (20 to 167 mg/Kg) by 5 isolates and higher yields were obtained on wheat.

In considering its toxicity, it appears that enniatin B could represent serious problems especially for wheat crops.

TOXIC METABOLITES OF *PYRENOPHORA GRAMINEA*

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Leaf-stripe of barley (*Hordeum vulgare* L.), caused by *Pyrenophora graminea* Ito et Kuribayashi, occurs throughout the world and can induce serious yield losses. Until now the control of the pathogen, which is essentially seed-transmitted, has