

BIORÓŻNORODNOŚĆ TOKSYN *BACILLUS THURINGIENSIS* I ICH ZASTOSOWANIE

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Wpłynęło w kwietniu 2005 r.

1. Wprowadzenie. 2. Charakterystyka toksyn *Bacillus thuringiensis*. 3. Docelowe organizmy i ich receptory. 4. Poszukiwania nowych toksyn *B. thuringiensis*. 5. Rozwój oporności na delta-endotoksyny. 6. Genetyka *B. thuringiensis*. 7. Ekologia *B. thuringiensis*. 8. Bezpieczeństwo *B. thuringiensis* dla człowieka. 9. Podsumowanie

Biodiversity of toxins of *Bacillus thuringiensis* and their application

Abstract: Crystal toxin proteins from *B. thuringiensis* are used extensively to control insect pest. The success of these toxins is caused in large part by their high toxicity toward insects but no toxicity toward other animals. During the past 5 years *B. thuringiensis* has been subject of intensive research. These efforts have yielded considerable data about the complex relationship between the structure, mechanism of action, and genetics of the organism's pesticidal crystal proteins. Other studies have focused on the ecological role of the *B. thuringiensis* toxins, their performance in agriculture and other natural settings. Now, with the tools of modern bio-technology, researchers can construct more useful toxins and formulation. Cognition of environmental conditions of growth of *B. thuringiensis* strains is important because of practical and technological application. Easy technique of isolation these bacteria reduce high costs of production of bioinsecticides.

1. Introduction. 2. Characteristic of *B. thuringiensis* toxins. 3. Target organisms and their receptors. 4. New endotoxins research. 5. Development of resistance to endotoxins. 6. Genetics of *B. thuringiensis*. 7. Ecology of *B. thuringiensis*. 8. *B. thuringiensis* safety. 9. Summary

Słowa kluczowe: biopreparaty, delta-endotoksyny, owadobójczość
Keywords: biopreparates, delta-endotoxins, insecticide

Polskie Towarzystwo Mikrobiologów

PL ISSN 0079-4552

Tom 44 Zeszyt 3 2005 CODEN: PMKMAV 44 (3) 2005

<http://www.pm.microbiology.pl>