



The chemical composition of egg plugs deposited by *Sitophilus granarius* L. females on grain.

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Streszczenie

Over 20,000 egg plugs collected from infested wheat grain were subjected to chemical analysis. Elemental analysis showed a relatively high content of nitrogen (about 9%). It suggested that the predominant constituent of egg plugs is a protein. Spectrum obtained in ESI-MS analysis showed a series of peaks characteristic corresponding to protein of molecular weight 30073 Da. The appearance of other peaks in this spectrum suggests that studied protein is not homogenous. A sample of egg plugs incubated with pepsin yielded a complex mixture of peptides. The most abundant peak in the ESI-MS spectrum of enzymatic hydrolysis products corresponds to peptide Mw 4560.76 Da. Chemical analysis indicated that the main component of egg plugs is protein.

Słowa kluczowe

egg plugs, chemical composition, *Sitophilus granarius*

Adres publiczny

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