

Characterization and Protective Properties of Lactic Acid Bacteria Intended to Be Used in Probiotic Preparation for Honeybees (*Apis mellifera* L.)—An In Vitro Study

Aleksandra Leska, Adriana Nowak, Justyna Rosicka-Kaczmarek, Małgorzata Ryngajło, Karolina Henryka Czarnecka-Chrebelska

Table 5 Ability of *P. pentosaceus* 14/1 cell-free supernatant (CFS) to protect Caco-2 cells against the cytotoxicity of insecticides. Results for viability are presented as mean \pm standard deviation (SD). The protective effect of CFS on Caco-2 cells against cytotoxicity has been tested using the Kruskal–Wallis test (KW test), followed by a multiple comparison test (MCT) to indicate significant differences between the groups at $p < 0.05$. Statistical differences are

	Chlorpyrifos 50 $\mu\text{g/mL}$	Chlorpyrifos 25 $\mu\text{g/mL}$	Coumaphos 25 $\mu\text{g/mL}$	Coumaphos 12.5 $\mu\text{g/mL}$
Without initial incubation with CFS	65.83 \pm 9.47	61.63 \pm 12.28	45.95 \pm 5.35*	60.5 \pm 4.81
Incubation with 0.1 mg/mL CFS	61.21 \pm 19.12	60.45 \pm 13.84	58.09 \pm 3.72	63.45 \pm 7.82
Incubation with 1.0 mg/mL CFS	68.61 \pm 4.63	64.00 \pm 3.93	63.18 \pm 2.84	79.82 \pm 16.91*

indicated with * ($p=0.003$).