

Title:

Purification of a Novel Pesticidal Sugar-Binding Protein to Confirm *Caenorhabditis elegans* Efficacy

Abstract:

Many toxins are discovered from environmental samples. In the present study, we investigated a novel sugar-binding toxin isolated from a bacteria because it appeared to be the primary component that displayed efficacy against *Caenorhabditis elegans*. Our goal was to confirm the activity of this toxin when recombinantly expressed in *Escherichia coli* which was purified using an affinity column. In conclusion, the recombinant protein reproduced a near identical activity compared to the native protein.