Enhancement of Spinosad Toxicity to *Cydia pomonella* Neonates by Monosodium Glutamate Receptor Agonist

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Recently, we reported that monosodium glutamate (MSG) is a feeding stimulant and an enhancer of pesticide toxicity against neonates of the codling moth. Herein, we show that a MSG alternative, *trans*-1-aminocyclobutane-1,3-dicarboxylic acid (*trans*-ACBD), alone or in the presence of spinosad (Success®), increases leaf tissue consumption by codling moth neonates. In contrast to MSG, *trans*-ACBD maintains its feeding stimulatory properties in the field even after 20 mm of simulated rain, and effectively increases spinosad efficacy in both laboratory and field experiments.
KEY WORDS: Larvae; insect feeding; glutamate receptors; NMDA receptors; *trans*-ACBD.

Received Dec. 14, 2003; accepted Feb. 16, 2004; http://www.phytoparasitica.org posting July 14, 2004.
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