Section VII Foliage & Seed Insects

POTENTIAL OF SPINOSAD FOR CONTROLLING COLORADO POTATO BEETLE

G. Xu and G. E. Long Department of Entomology Washington State University Pullman, WA 99164-6382 509/335/5504

Spinosad (proposed common name) was recently discovered and developed by scientists at DowElanco. Spinosad is a mixture of two spinosyn factors called A and D. Spinosyns are naturally derived metabolites from a new species of Actinomycetes bacterium, <u>Saccharopolyspora spinosa</u>, which demonstrate potential in insect control.

Field trials of Spinosad were conducted in 1995 at the Washington State University Othello Research Station, Othello, Washington. The effects of Spinosad on the Colorado potato beetle, <u>Leptinotarsa decemlineata</u> (Say), and beneficial organisms were evaluated. Results demonstrated that Spinosad provided excellent control of beetle larvae under field conditions. This compound appeared to be inactive on major predators and parasitoids on potato foliage. As a new bioinsecticide, Spinosad has high potential for integrated management practices for the beetle.