NOTE: Systemic Effects of a Spinosad Insecticide on *Liriomyza huidobrensis* Larvae

Phyllis G. Weintraub*,[1] and Norma Mujica[2]

In an effort to expand the spectrum of larvicides effective against *Liriomyza huidobrensis* (Blanchard), the effect of spinosad was studied on the mortality of the leafminer under laboratory conditions. Bean plants infested with various leafminer stages (egg through third instar) were treated by dipping leaves in a liter of water containing 24, 48 or 96 mg a.i. spinosad or by drenching the soil of plants with 200 ml of water containing 12 mg, 24 mg or 48 mg a.i. spinosad. In general, leaf dipping was more efficacious and adverse effects were observed sooner than with soil drench. All concentrations of spinosad significantly reduced the number of adults that emerged except leaf dip of third instar; only the highest concentration caused significant reduction of pupae and adults. Spinosad would likely be a valuable insecticide for control of the pea leafminer, *L. huidobrensis*.
KEY WORDS: *Liriomyza huidobrensis*; spinosad; systemic effects by soil drenching; leaf dipping.

Received June 7, 2005; accepted Aug. 4, 2005; http://www.phytoparasitica.org posting Nov. 4, 2005.
[1]Dept. of Entomology, ARO, Gilat Research Center, M.P. Negev, 85280, Israel. *Corresponding author [Fax: +972-7-9926485; e-mail: phyllisw@volcani.agri.gov.il].
[2]International Potato Center (CIP), Integrated Crop Management Division, Apartado 1558, Lima 12, Peru.