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MONITORING ADULT POPULATIONS WITH SEX PHEROMONE TRAPS FOR TIMING OF INTERVENTIONS AGAINST DEFOLIATORS IN ONIONS

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The lack of effective surveillance and monitoring tools to time interventions results in unnecessarily high frequency of spraying to control insect defoliators in onion grown after rice. Field studies were conducted in Bongabon, Nueva Ecija during the 2001 and 2002 dry seasons to evaluate the effectiveness of sex-pheromone baited traps as indicator for timing of insecticide applications against onion defoliators, *Spodoptera litura* (F.) and *S. exigua* (Hubner) (Lepidoptera: Noctuidae). In both years, peaks in adult trap catches were recorded between 25-59 days after transplanting. One to three insecticide applications at 3, 5, and 7 days after peaks in sex pheromone trap catches resulted in crop yield and leaf damage similar to those of weekly sprayed plots. Plants in all treatments yielded significantly higher than plants in the untreated plots. Use of sex pheromone-baited traps can reduce insecticide applications substantially, from weekly spraying, to only 1- 3 applications in a cropping season without reducing yields. It also reduces farmers, exposure to pesticides and minimizes adverse effects on natural enemies of pests. The use of sex pheromone-baited traps can be a key tool in developing cost-reducing technologies to manage pests in rice-onion vegetable cropping system.