



## PESTS IN ORGANICALLY-MANAGED *Crotalaria juncea* IN WESTERN PUERTO RICO

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### INTRODUCTION

In Puerto Rico there is increasing interest in the use *Crotalaria juncea* as a cover crop for soil improvement, weed and nematode suppression, and seed production. As more area is sown with *Crotalaria juncea*, pests start to appear in this leguminous plant in relatively large abundance.

The objective of this poster is to report the most commonly found pests in organically-managed *Crotalaria juncea* in experimental plots Lajas and Isabela, Puerto Rico, in the years 2008 and 2009.

### MATERIALS AND METHODS

During 2008 and 2009, in the Ag Experiment Station of the UPR-Mayaguez, frequent pest scouting was conducted in plots of *Crotalaria juncea* where experiments of accession evaluation, production practices, and seed multiplication were being conducted. Frequently observed pests were captured and identified.

### RESULTS

*Iguana iguana*, *Diabrotica balteata*, *Cerotoma* spp., *Utetheisa ornatix*, and *U. bella* were the pests more commonly found in *Crotalaria juncea* in western Puerto Rico in 2008 and 2009 (Table 1).

### CONCLUSIONS AND FUTURE WORK

*Iguana iguana*, *Diabrotica balteata*, *Cerotoma* spp., *Utetheisa ornatix*, and *U. bella* were the most abundant pests found in the study.

Our findings indicate management of *Utetheisa* warrants immediate research in *C. juncea* for seed production.

Table 1. Common pests in *Crotalaria juncea* in western Puerto Rico, 2008- 2009.

	<p><b><i>Iguana iguana</i></b> In Lajas, during the first four weeks after plant emergence, green iguanas (<i>Iguana iguana</i>) were found eating the tops of plants in the external rows of the plots. Iguanas seemed to prefer eating from the accessions 'Tropic Sunn' and 'São Paulo' as compared to other accessions growing in the same location.</p>
<p>1 </p> <p>2 </p>	<p><b><i>Diabrotica balteata</i><sup>1</sup> and <i>Cerotoma</i><sup>2</sup> spp</b> In Lajas and Isabela, these beetles were found eating the leaves of plants of all ages. Attacks were more intense before the flowering stage. Beetles were effectively managed with neem extracts and Ecotrol®.</p>
	<p><b><i>Utetheisa bella</i> and <i>U. ornatix</i></b> During the reproductive stage of <i>C. juncea</i>, heavy infestations of the pod borers <i>Utetheisa bella</i> and <i>U. ornatix</i> were found in both Isabela and Lajas. Young larva of <i>Utetheisa</i> fed on leaves, and later perforated the pods and ate the developing seeds of <i>C. juncea</i>. Unchecked attack of <i>Utetheisa</i> caused an estimated average seed yield loss of 50%.</p>

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