

DEVELOPMENT OF BEST MANAGEMENT PRACTICES AND INTEGRATED PEST MANAGEMENT FOR POINSETTIAS IN PUERTO RICO

Dania Rivera¹ and Ada N. Alvarado Ortiz²

¹Associate Professor, Ornamental Specialist, ²Professor, IPM Specialist of Agro-environmental Sciences Department, University of Puerto Rico, Mayagüez Campus. Call Box 9000, Mayagüez, PR 00681-9000. danial.rivera@upr.edu

Ornamental plants are the third commodity of economic importance in Puerto Rico and in the past 25 years have maintained itself as one of the top five from the total agricultural income across the island. Due to the heterogenic production, the pest management is complex and the use of pesticides can increase the tolerance of existing pests. The objectives of this project is (1) Gather island wide data through a survey to poinsettia plant growers related to current patterns of pesticide use, pesticide use safety, Integrated Pest Management (IPM) and Best Management Practices (BMP) knowledge. (2) Prepare educational materials to train personnel and growers about IPM and BMP. (3) Prepare and publish Pest Alert and fact sheets about IPM and BMP and (4) Measure the increase of knowledge in IPM and BMP. To achieve this, the project will prepare a survey to gather information that will be used to prepare an IPM guide and a BPM manual and presentations. The information will be offered to the personnel and farmers in trainings, field days and shared using a google site. Also, a demonstrative poinsettia production will be developed to educate the audience. Short publications will be distributed containing all the information, pest alerts and fact sheets. During the trainings and field days we will measure the increase of knowledge in IPM and BMP. The first year, a survey was created and used to interview poinsettia growers. To this day, seventeen growers have been interviewed in Aibonito, Barranquitas and Comerío municipalities. According to the obtained data 35% of the growers indicated that they do not know what IPM is. All of them indicated that they control weeds inside and outside of their greenhouse and that they identify the pests by experience. About 12% of the growers do not remove damaged foliage by diseases, do not use preventive applications and do not follow the label instructions. However, 65% of them indicated that have a registry of the pesticide use with the doses, frequency and date of application. The growers reported the use of 32 different products for the poinsettia management in the interview. This data confirms the importance of continuing the education in IPM and BMP to reduce pesticide use and avoid chemical control over use. This data will be use to prepare the educational materials for the poinsettia growers in the next years.