



Georgia Extension Vegetable News

The University of Georgia

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Contents...

Light Fall for Diseases/New Stuff for 2006
Resistance Management in Diamondback Moth

Light Fall for Diseases/ New Stuff for 2006

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The fall of 2005 has proven to be a light one for diseases of vegetables. Low rainfall is likely the main reason for this. Although some diseases such as downy mildew of cucurbits showed up sporadically, diseases really didn't take off and cause many losses. Hopefully this hasn't caused growers to become lax in their disease prevention plans for the upcoming year.

New tools for 2006 that I have and will provide will be the updated section of the Pest Control Handbook (PCH) in which you will find a new efficacy guide for succulent legume vegetables. Also, the brassica disease prevention guide is attached to the e-mail that distributes this newsletter.

Resistance Management in Diamondback Moth

Stormy Spoarks
Extension Entomologist - UGA

As all producers of cole crops know, insecticide resistance in the diamondback moth is a constant threat to production of all susceptible crops, particularly cabbage and collards. We have already had at least three cases of severe resistance to spinosad (SpinTor) in Georgia despite a relatively short use history. These problems were somewhat predictable with the first highly efficacious new insecticide labeled being the only choice when full control was truly needed. With the recent additions of Avaunt and Proclaim to our arsenal I was hoping that resistance would be much easier to manage, but we have had reports of reduced efficacy of both of these products and have documented a 'decrease in susceptibility' to Avaunt in one population.

A number of factors contribute to our potential for resistance problems, but two cause me the greatest concern. In the most severe cases, growers had started year-round production of greens about 1 to 1 ½ years prior to detection of the problem and had relied heavily on a single chemistry. In the two most severe cases, the year-round production consisted of sequential plantings within a stones-throw from each other. Market demands may require expanded production, but where plantings can not be separated in time, separate them as much as possible in space. Resistance in diamondback moth can be developed,

or selected for, on a field by field basis. Making these insects move to find new hosts as the old hosts mature can increase 'mixing' with other populations and hopefully dilute any resistance that may have been developed within a field. This will never replace a host free period for resistance management, but it can help (it all depends on overall management within the area).

Rotation of chemistries is essential for resistance management. When SpinTor was first registered, there simply were not many options for rotation. We now have three highly efficacious insecticides for diamondback moth (except where we select for resistance) and should be using all three along with some of the older chemistries as well (particularly Bt insecticides). I have had two recent problems reported with two products (Avaunt and Proclaim in one case and Avaunt and SpinTor in another). In both cases, the third product had been eliminated from use for one reason or another. At this point, I would encourage producers to try and work all three products into their diamondback moth management programs when possible. Of course we still recommend use of any insecticide only when needed and would also encourage use of older chemistries when they are capable of doing the job (i.e. pyrethroids provide excellent and economical control of loopers and imported cabbageworm if they are the primary pest targeted, but I would not use them if diamondback were common in the field).

With some luck, we will soon have two new products registered to aid in management of diamondback moth and we will let everyone know as soon as this happens. However, for now we need to do all we can to maintain the efficacy of the products we currently have. They should be used only when needed and rotated so that sequential generations of diamondback moth are not exposed to the same product. With the three products we currently have, a rotation of two sequential applications of each product, with a minimum of one week between applications, will easily accomplish this during most of the year.

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County Extension Agent _____