
What's New In Pesticides and Fertilizers

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WHAT'S NEW IN INSECTICIDES?

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Pesticide registration and re-registration activities constantly change the availability and proper use of insecticides in vegetables. In 2007, a new active ingredient was labeled for use in vegetables and labels of several registered products were expanded to add new vegetable crops.

Spinetoram, a new active ingredient from Dow AgroSciences, is now labeled for use in a wide variety of vegetables under the trade name Radiant. Spinetoram is produced through a modification of spinosad, the active ingredient in SpinTor, and activity of this new insecticide is similar to spinosad. The changes in the molecule were designed to increase the spectrum of activity, in terms of the species of insects controlled, and to extend the residual control. In Georgia, this product will likely be used primarily for control of caterpillar species, similar to SpinTor, but should show increased activity on some species, such as armyworms, and longer residual activity. The increased residual appears to be measured in days (1 to 3 days longer than SpinTor) and is likely to be rate dependant. Preliminary research with this product in onions has indicated improved control of thrips, as compared to SpinTor, and Radiant is registered for use on onions. The improved thrips activity will influence its use on a variety of vegetables. A word of caution, Radiant has the same mode of action as SpinTor, and should be considered identical as far as resistance management is concerned.

Products receiving significant expanded labels in 2007 include Platinum, Actara, Assail,

Avaunt, and Brigade. Platinum's most notable change was an increase in the maximum use rate. As with other soil applied neonicotinoid insecticides, higher use rates increase the residual control, thus this increase allows for longer activity from a single application. The Actara label had numerous crops added, with the most significant for Georgia producers probably being the cucurbit crops and fruiting vegetables. Assail also added the cucurbit crops to its label. These two foliar applied neonicotinoid insecticides provide the potential for excellent control of whiteflies with foliar applications; however, potential resistance to the neonicotinoid insecticides threatens the efficacy of this entire group. The Avaunt label also added new crops in 2007, with the most significant for Georgia being the Leafy Brassica. This reestablishes the use of this product for control of diamondback moth, however, new use restrictions have been added for Georgia to help prevent emerging resistance problems. Brigade, which has replaced Capture, added several new vegetables to its label, including okra and sweet potato. The generic bifenthrin products will also add these crops, but individual labels should be checked for these additions. The addition of okra provides a broad spectrum product for this crop. The addition of sweet potato provides a long residual soil insecticide for control of soil inhabiting insect pests. In addition to registrations received in 2007, several new insecticides may receive registration early in 2008. These potential registrations, and the products efficacy and potential use, will be discussed.