Assail (30SG and 70WP) is not a new insecticide for cranberry. It has been registered on cranberry since 2008. It is marketed by United Phosphorus Inc. (UPI) under two formulations 30SG (30% active ingredient by weight, soluble granule) and 70 WP (70% active ingredient by weight, wettable powder). Assail is a neonicotinoid insecticide with the active ingredient acetamiprid. It has activity against eggs, larvae and adults of several insect pests through contact and ingestion. Assail is rapidly absorbed by the plant tissue and quickly moves via systemic translaminar activity.

Both Assail formulations are registered for control of cranberry fruitworm, spanworms, flea beetle, gypsy moth, fireworm (suppression), sparganothis fruitworm, and cranberry tipworm.

We have had Assail in our insecticide trials for about a decade now and it has shown good activity against flea beetle (>80% control); fruitworm, sparganothis fruitworm, spanworms, fireworms, leafhoppers (70-80% control), and tipworm (60-70% control).

It may be applied by ground equipment, by chemigation, and by air. For chemigation, use only on cranberries after foliage has emerged and only through overhead sprinkler irrigation systems.

Assail is highly toxic to bees. Do not apply immediately before or during bloom.

Assail is highly toxic to aquatic organisms and birds and must be kept out of water.

Restrictions on maximum residue limits (MRLs) of Assail for some export processed fruit have been removed by some handlers; however, you are still encouraged to check with your handler.
before using this product.

And as always, make sure to read the label before using any pesticide. Here are the links to each label:

Assail 30SG: [http://www.cdms.net/LDat/ld8I003.pdf](http://www.cdms.net/LDat/ld8I003.pdf)
Assail 70WP: [http://www.cdms.net/LDat/ld8Ij003.pdf](http://www.cdms.net/LDat/ld8Ij003.pdf)

### Address Correction

If you have any address corrections, additions, or deletions, please let us know.

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(We will also remove your name from the paper copy list.)

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Evidence of Yellow Vine. See *Observations in the Field*, p. 4.
ALTACOR INSECTICIDE:  
A Good Fit for Cranberry IPM Programs  
By Suzanne Arendt  
RedForest Crop Consulting, LLC

The year 2012 marked the first year of Altacor, active ingredient Rynaxpyr, use in Wisconsin cranberries. This tool for insect pest management made Cranberry Fruitworm (CFW) management a little less challenging in 2012 and continues to prove to be a very effective weapon to reduce and maintain tolerable CFW pest populations. As a consultant, I was initially cautious in recommending Altacor because of its newness to our industry but I was also excited to see it applied on a large-scale basis. Over the last two years, I have seen the biggest benefit of Altacor in managing Cranberry Fruitworm (CFW) during and after bloom. Altacor performed just as good as or better than Intrepid during bloom on new hatchings of blackheaded fireworm (BHFW) and new hatchings of CFW. When mixed with Diazinon 600 post bloom, control of CFW was adequate enough to not have to treat again. A single application of Altacor post bloom preceded by either Altacor or Intrepid also maintained sufficient CFW and BHFW control. Altacor will provide the best control of newly hatched larvae so timing is critical. Applications during bloom occurred approximately around 50% out of bloom and either before CFW larvae were present in the fruit or at the onset of egg hatch. Altacor should also be used in rotation with other insecticides and modes of action to ensure control of the extended hatch period. This practice will also aid in maintaining a multi-pronged approach to insect management and reduce resistance potential. Residual effectiveness of Altacor is showing to be at least 10 to 14 days as long as the spray was not compromised. This residual is optimum, however, tends to not be long enough to rely on one application for the entire CFW hatch period on established plantings.

Applications by ground equipment should be applied at full rates using 30 gallons of water per acre to get the best coverage, although I have seen good control at the 4 oz rate. Agitation is very important as it is a water dispersing granule. Some applications were at 20 gallons of water per acre and these, too, were effective; but, I think 30 gallons of water provided better coverage. Adding a drift control to the mix is not required but is a good practice to ensure proper placement of the insecticide.

Altacor is labeled for control of Sparganothis fruitworm, Blackheaded fireworm, Cranberry Fruitworm, and Green spanworm. I found the best economic fit to be with CFW management. Using Altacor as an early season control measure for Sparganothis fruitworm yields only suppression on Sparganothis fruitworm from my field observations. The key to success with this insecticide is most likely going to be when the applications are made to new hatchings and when not solely relied upon. Altacor fits in well with our IPM programs because of several reasons. It is in a new chemical class called Diamide which when ingested by labeled insects affects receptors that control muscles. So, the insect basically stops feeding, becomes paralyzed and dies. None of the other labeled insecticides have this mode of action so the insects are seeing something they never have before. Altacor also has low toxicity to humans, fish, and birds and has very little impact on beneficials, including pollinators. Handlers have also reported no residue problems with Altacor to date but may have restrictions to use. All of this, along with good pest control, makes Altacor a good choice in a well-rounded Integrated Pest Management Program. We are continuing to learn and experiment with Altacor targeting different pests at varying stages of larval development. The cost per acre of Altacor is higher than most other insecticides ranging from $48 to $56/ac; and, when mixed with another insecticide, significantly increased the cost possibly beyond what may be economically justifiable during these oversupply times. Altacor doesn’t necessarily eliminate a spray but it seems to provide superior CFW control of any bee-safe product to date and allows growers to keep their bees for a further extended period, if desired. I have hopes that the cost per acre will reduce so more growers can use this product and see how Altacor is a perfect fit for our Integrated Pest Management Programs.
OBSERVATIONS FROM THE FIELD
Jayne Sojka, Lady Bug IPM, LLC

The week of July 14th we started to see Cranberry Flea Beetle in the Beds. At this point in time, they are working the weeds. Earlier in the month, we first saw Japanese Beetles. I understand that we may see MORE of this pest in 2014 because they overwintered well.

Growers are always asking me why I encourage Confirm, Intrepid or Altacor applications. First of all, it is bee friendly; and second, they are all good products in controlling our cranberry fruitworm as well as early sparganothis fruitworm. Most importantly, we find that with the use of growth regulators we see the predator population increase. For example: damselflies, dragonflies, green lacewing, syrphid flies and parasitic wasps are very active on these marshes. These beneficial insects feed on PESTS. What a wonderful “Natural” way of controlling our cranberry challenges. By the way, dragonflies eat mosquitoes and deer flies too and scouts LOVE that!

With the HOT HUMID weather coming watch for Yellow Vines. We typically see YV when growers use Casoron and we have a very WET spring. Remember that Casoron is a root inhibitor so our cranberry plant roots are actually pruned so when we get excessive amounts of rain creating a very wet environment those plants have more difficulty taking up nutrients.

In 2007, Carolyn DeMoranville from UMass Cranberry Station wrote an excellent article sharing her thought of what causes Yellow Vines. I quote, “The YV symptoms are most likely due to nutritional imbalances in the cranberry plants.” She continues, “But fertilizer management is not the cause of the problem. Instead, we believe that the nutrient imbalance is secondary to root problems caused by stress. The stress involved is most often water stress (too much OR too little) but may also involve herbicide stress. These stress conditions lead to poor root development.”

Carolyn shared that when visiting marshes with patches of YV they found that the soil water content in the YV areas is either much higher or much lower than that in the surrounding green areas. The consistent finding has been that the rooting depth in YV areas is shallower than that in unaffected areas. In drought conditions uneven distribution of water occurs due to reliance on sprinkler irrigation and varying distance to the underlying water table. Put this together with the high nutrient demand during fruit development and nutritional problems may be the result. Fertilizer tends to be washed away from the roots during irrigation and areas with poor rooting may not be able to move enough minerals and water to meet the demands of both shoots and fruit. This sets u a competition for resources in which the developing fruit and younger leaves are the best competitors, leaving the older leaves showing symptoms of nutrient stress, in this case. “Yellow Vines.”

If you see YV in the next few weeks keep these thought in your mind and see if it fits your scenario.

For more information check out http://www.umass.edu/cranberry

The article was August 2007 from Cranberry Station Newsletter.

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Visit to a Cranberry Reservoir

References to products in this publication are for your convenience and are not an endorsement of one product over similar products. You are responsible for using pesticides according to the manufacturer’s current label directions. Follow directions exactly to protect the environment and people from pesticide exposure. Failure to do so violates the law.
The 2014 season was slow to develop, but cranberry fruitworm populations appear to be thriving. Trap-counts have been high and sustained (see CFW figures below). Getting 70+ moths per-trap repeatedly over several weeks suggests there are some hot spots out there.
Fortunately, our mating disruption project using SPLAT is doing quite well at suppressing CFW trap-catch. If the males cannot find the pheromone-baited traps, then they can’t find females. If they can’t find females, then eggs don’t get fertilized and caterpillars don’t attack fruit. Our data show a ~75% reduction in CFW trap-catch, which suggests that 75% of males are being prevented from finding females. Under heavy pressure, this is a good sign, and helps growers deal with a much smaller fruitworm population.

Based on historical flight data and degree-day accumulations, the CFW flight is ~80% complete. What this means is that it is time to look for larvae in fruit. Rosy pink fruit early in the season are often ‘marked’ as being infested with a caterpillar.
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