

# The Blueberry Bulletin

*A Weekly Update to Growers*

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- ❖ Visit the Blueberry Bulletin webpage at [njaes.rutgers.edu/blueberry-bulletin](https://njaes.rutgers.edu/blueberry-bulletin)
- ❖ The 2022 Commercial Blueberry Pest Control Recommendations for New Jersey is available on [njaes.rutgers.edu](https://njaes.rutgers.edu)
- ❖ The Blueberry Bulletin will now be emailed to those who request it. We will no longer be mailing hard copies out. If you are not on our current list and would like to receive a copy, please call the office at (609) 625-0056.

## BLUEBERRY CULTURE

**Dr. Gary C. Pavlis, Ph.D**

**Atlantic County Agriculture Agent**

Blueberry buds are pushing this week so bloom is just around the corner. This is an important time for growers because it is the perfect time to apply the NPK application that blueberry plants need. In the old days, fertilizer applications were made when the plants were still dormant. This is inefficient because if the plant is dormant it isn't taking up nutrients. Stands to reason. The problem is, where is the fertilizer by the time uptake begins. The hope is that it has moved down to the root zone and is available to the plant. The reality is that some of it is and some of it has been washed away or moved past the root zone and is lost.

Lost fertilizer is lost money. As readers of this newsletter are aware, our research has shown that applying NPK when the plant can pick it up will increase yield dramatically. To put a finer point on it, when the blueberry plant is supplied with NPK a little at a time over the six week period starting at bud break the results will be the highest yield possible. It is probably not feasible to apply the needed NPK every day over that six week period but some form of that small dosing would be recommended. Most growers using fertigation apply NPK once a week for the six weeks. This is probably the best method we have right now though "spoon feeding" the plants even more would probably be beneficial.

Lastly, I cannot emphasize more strongly that if you are not taking leaf samples to monitor your nutrient regime your fertilizer program is not efficient and it is costing you money with reduced yield. Doing what you always have done or just using a soil analysis is not in the long run a sustainable practice.



Gary C. Pavlis, Ph.D.  
Atlantic County Agricultural Agent

## HERBICIDES

APRIL 6, 2023, [THIERRY BESANCON](#), PH. D ASSOCIATE PROFESSOR AND EXTENSION WEED SCIENCE SPECIALIST

### Alion herbicide received 24(c) Special Local Need label for use on Highbush Blueberry

Thanks to field research conduct by the Rutgers Specialty crops Weed Science lab and funded by Rutgers NJAES, Bayer CropScience, and the NJ Blueberry and Cranberry Research Council, Alion® herbicide received a FIFRA 24(c) Special Local Need label from the EPA and the NJDEP for use **ONLY** on **dormant** highbush blueberry in sandy soils containing **greater than 1% organic matter**. The new 24(c) Special Local Need label can be found on the Agrian website [here](#).

Alion® (indaziflam) is a Weed Science Society of America (WSSA) group 29 cellulose biosynthesis inhibitor in the alkylazine family. The FIFRA Section 3 label of Alion® allows its use on blueberries that have been established for at least one year but prevents its use on soil with  $\geq 20\%$  gravel content or on sandy soil, regardless of soil organic matter content. Thus, prior to receiving the new 24(c) Special Local Need label, Alion® could not legally be applied on New Jersey blueberries that are primarily planted on sandy soils.

The new 24(c) Special Local Need label allows directed application to the soil beneath blueberry bushes planted on sandy soils with some important restrictions:

- **Only apply Alion Herbicide to soil as a dormant application in late fall through early spring before bud swell.**
- **Do not** use Alion® in highbush blueberry crops grown in sand containing  $<1\%$  organic matter content.
- **Do not** use on soils with 20% or more gravel content.
- **Do not** apply more than a total of 10 fl oz product/A (0.13 lb ai/A) per year on sand containing  $\geq 1\%$  organic matter content in a 12-month period when used in any highbush blueberry.
- **Do not** allow spray to contact green stems, foliage, flowers, or berries or unacceptable injury may occur.
- When making more than one application per year, allow a minimum of 90 days between applications.

Alion® provides excellent and season-long residual control of annual grasses and broadleaf species due to its long soil persistence with half-life greater than 150 days and low water solubility under acidic soil conditions. Results of a 3-years study conducted on three different blueberry cultivars (Duke, Bluecrop, and Elliott) at the Rutgers P.E. Marucci Center demonstrated that repeated fall or early spring applications of indaziflam at the 5 fl oz/a labeled rate did not cause injury or reduce commercial yield of blueberry grown on sandy acidic soil. Data generated through this research also showed that fall application of indaziflam consistently provided better weed control than spring applications for species such as horseweed, large crabgrass or narrowleaf goldentop. This suggests that Alion® applications in New Jersey should be restricted to dormant bushes during the fall season in order to maximize weed control effectiveness while maintaining the highest level of crop safety as compared to spring application. **Alion® has no activity on sedge species or perennial weeds.** Therefore, it is important to consider rotating to different herbicide modes of action after 1 or 2 years of Alion® application to avoid selecting for weeds that are not controlled by Alion® and prevent potential development of herbicide resistance to indaziflam.

# PEST MANAGEMENT

Dr. Cesar Rodriguez-Saona, Extension Specialist in Blueberry Entomology, Rutgers University  
 Ms. Carrie Mansue- Senior Program Coordinator

The Table below shows the activity periods of insect pests of blueberries in New Jersey. Bars show the period when scouting (in grey) and management (in black) of the pest is most important.

	dormant	budbreak- prebloom	bloom	1 <sup>st</sup> post - pollination	later post- pollination	fruit maturation	post-harvest
Scale	█			█	█		
Cranberry weevil		█	█				
Leafrollers		█	█	█	█	█	
Spanworms		█	█	█			
Gypsy moth		█	█	█			
Thrips			█	█	█		
Gall midge			█	█	█		
Plum curculio			█	█	█		
Cranberry fruitworm				█	█		
Aphids				█	█	█	█
Leafhoppers				█	█	█	█
Leafminers				█	█	█	
Oriental beetle					█	█	█
Blueberry maggot					█	█	█
Spotted wing drosophila					█	█	█
Japanese beetle						█	█
BB bud mite							█

## Cranberry Weevil

Out of 65 fields monitored using beating trays, weevil counts averaged 0.144 adults per bush, with a high of 2.6. As bloom approaches, weevils should no longer be of a concern.

## As We Approach Bloom

We want to make growers aware that the “NJ Pesticide Control Regulations at N.J.A.C. 7:30-9.11 allow beekeepers to voluntarily register their bee yards with the DEP and **require pesticide applicators to notify those beekeepers at least 24 hours prior to the application of any pesticide labeled as toxic to bees if any registered bee yard is located within three miles of the application site.**” (DEP = Department of Environmental Protection).

This means that, if a registered bee yard is located within 3 miles of the application site, growers are required to notify the beekeepers at least 24 hours prior to any application of a pesticide labeled as toxic to bees. For more information and for a list of officially registered bee yards, please visit the following site: <https://www.nj.gov/dep/enforcement/pcp/bpo-bee.htm>