Managing Anthracnose Fruit Rot

As fruit begins to develop and ripen, growers should focus on plans to minimize and manage fruit fungal diseases. Anthracnose fruit rot is the most prevalent and significant winter and early spring disease in Florida.

Anthracnose fruit rot (AFR) is caused by the fungus *Colletotrichum gloeosporioides*. Its development is highly dependent on favorable weather conditions, including extended leaf wetness duration. Symptoms typically begin to appear as berries start to ripen, including the development of sunken lesions, shriveling, and fruit softness, along with the eruption of orange or salmon colored spores. In some cases, symptoms do not appear until after the fruit is harvested and stored. However, infection can occur as early as bloom.

Anthracnose fruit rot sporulation on infected berry.
Credits: A. Gama, UF/IFAS

Fungicide applications from bloom through harvest prevent significant ripe rot losses most years when coupled with frequent hand-harvesting and rapid-cooling practices that are standard for SHB growers in Florida. Pre-harvest fungicides are especially important in years where there is a high incidence of disease in the field coupled with warm, wet weather, which can promote disease development. Suggested fungicides include azoxystrobin, captan, cyprodinil + fludioxonil, pyraclostrobin + boscalid, fluazinam, and others. However, resistance to QoI fungicides such azoxystrobin and pyraclostrobin has been observed in Florida fields and resistance to boscalid has been observed in the lab. Also, resistance to Switch® (cyprodinil + fludioxonil) has been confirmed in Georgia, but has not yet been observed in Florida. If growers suspect Switch® resistance, please submit a sample for confirmation to the UF Plant Diagnostic Center (https://plantpath.ifas.ufl.edu/extension/plant-diagnostic-center/). Be sure to follow all label instructions including season limits for max cumulative application rates.

Many Florida growers use a calendar-based spray program, although the Blueberry Advisory System is a tool that will alert growers when there is a higher risk of disease development. In field trials on nine blueberry farms over the 2018-2019 seasons, the BAS was shown to provide
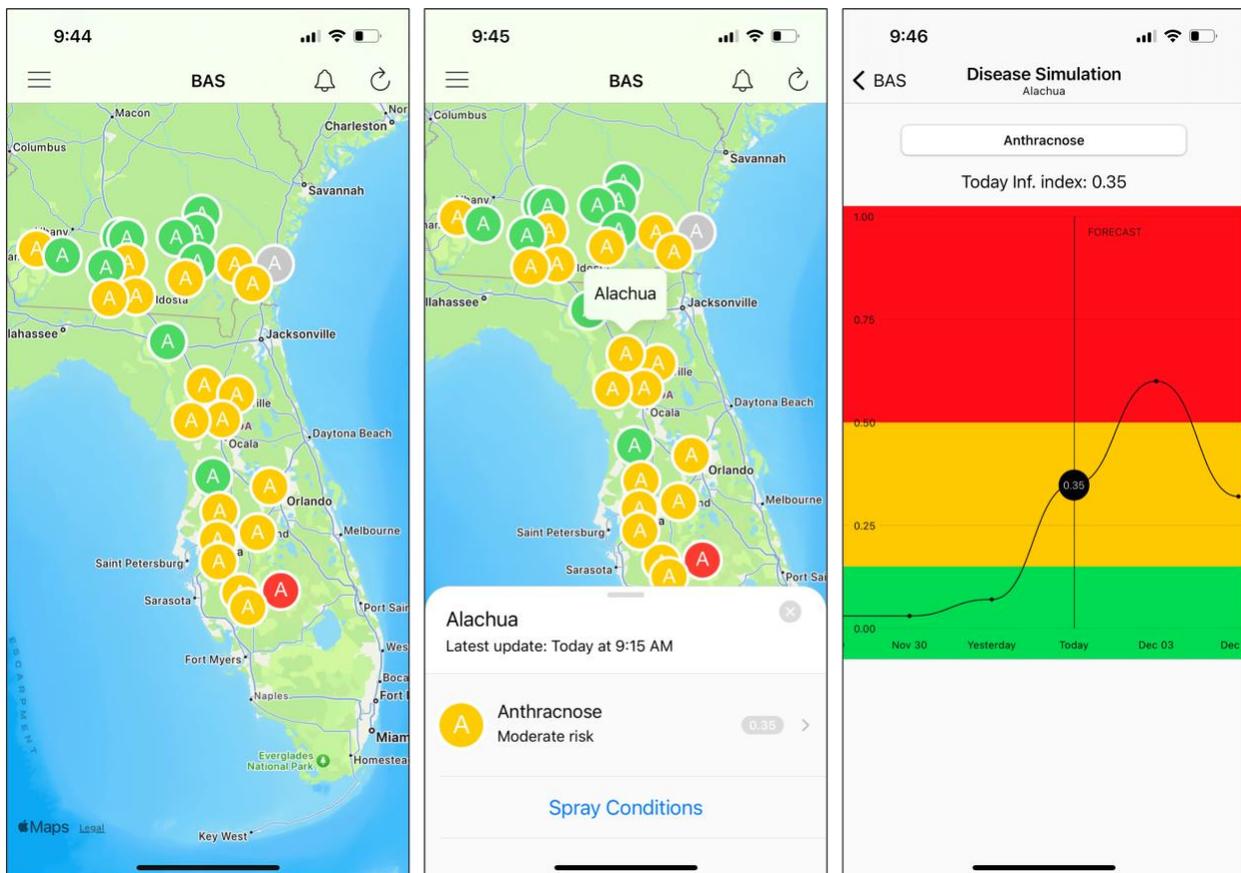
comparable levels of AFR control in most cases (when conditions were favorable for AFR development) with fewer fungicide applications compared to existing grower practices. Growers can also use these risk assessments to choose whether to use a less expensive fungicide (such as Captan) when disease risk is moderate, or a more expensive product that may have greater efficacy during periods of high risk.

For more information on anthracnose fruit rot see Anthracnose on Southern Highbush Blueberry (https://edis.ifas.ufl.edu/publication/PP337) and 2024 Florida Blueberry Integrated Pest Management Guide (https://edis.ifas.ufl.edu/publication/HS380).

The BAS was originally developed for the AgroClimate web platform (https://cloud.agroclimate.org/tools/bas/), but is now also available as a mobile phone app, for both iOS and Android operating systems, available for download at:

iOS: https://apps.apple.com/br/app/blueberry-advisory-system/id6464521352
Android: https://apps.apple.com/br/app/blueberry-advisory-system/id6464521352

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