

Southern Red Mite Management

The peak in southern red mite populations vary depending on the region in the state where the blueberry planting is located. If your planting is in north-central Florida (Alachua, Marion, Columbia, and Putnam counties) the peak is typically during late September and October. However, if you are in the central or south-central region (Polk, Hardee, Hillsborough, Highlands, and DeSoto counties) the peak occurs later, from late November to February when temperatures are still high and rainfall is low, as they prefer dry, dusty conditions. Drought stressed plants can be more susceptible to infestations. Their life cycle can be completed within two weeks under optimum conditions. Adults are about 0.4 mm in length and are red or brown to deep purple, with lighter colored legs. Southern red mites primarily live on the underside of leaves, feeding on plant tissues by removing leaf cell contents. This results in a bronzing of leaves (Figure 1), and a decrease in photosynthesis. The mites shed their skins, resulting in an accumulation of white skins on the underside of leaves when populations are high (Fig. 2).



Figure 1. Bronzing damage from southern red mite
Credits: D. Phillips, UF/IFAS



Figure 2. Shed skins from southern red mite
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Growers should scout frequently for the presence of adult mites, especially during fall/winter months. Southern red mites can be seen with a 10X hand lens. The underside of leaves should be closely examined, looking for adults and shed skins. Mites can also be monitored by looking for discolored bronze leaves. However, once symptoms have begun to appear, a moderate to severe infestation of mites is likely already present. Early identification of mite infestations and implementing management strategies before populations increase is recommended to avoid yield impacts. Water should be regularly applied to roadways or other dusty areas during hot dry periods, and sufficient irrigation is particularly important during periods of mite activity.

Three miticides, Magister® (fenazaquin), Portal® (fenpyroximate), and Kanemite® (acequinocyl) are registered for use in highbush blueberries. In field trials Magister and Portal were the best performing miticides in terms of suppressing southern red mite populations and allowing bushes to recover from mite injury. Growers can only make one application per year using Magister and two applications per year with Portal and Kanemite. Predatory mites may also be an important management tool for southern red mite control. Additional research is needed in this area.

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