AN IMPORT MESSAGE ABOUT INSECTS IN THE LANDSCAPE

None of us wants to be overrun by insect pests, nor do we want to be exposed unnecessarily to the insecticides used to manage them. The most difficult problem we face with many of the pests that attack our landscape plants (whiteflies, mites, thrips, aphids), invade our homes (termites, cockroaches, bed bugs) or attack us or our pets (mosquitoes, flies, fleas) is that they have developed a tolerance to pesticides. In some cases, many pesticides have resistance issues even before they receive label expansions for legal use in the landscape. Resistance has developed broadly in commercial agriculture and spread to our landscapes on infested plant materials. Sometimes it can work in the opposite direction.

Pesticides are a valuable commodity that must be protected so we can count on them when needed. This implies that pesticides are sometimes used in unnecessary ways. Unfortunately, this happens enough to cause some real problems. They may be applied to plants when no pests are present, or the wrong products are used, or they are applied without regard to preserving beneficial insects or non-target insects.

We are currently seeing an invasion of a group of whiteflies that are significantly more damaging than the rugose spiraling or ficus whiteflies in the big picture. We collectively refer to them as *Bemisia*, or silverleaf whitefly **B**-biotype and **Q**-biotype. These "biotypes" look identical, but are genetically different in important ways. These whiteflies are arguably the most damaging pest to agriculture world-wide. People are starving in Africa because of them. In Florida, they are a major limiting factor in the production of tomatoes and other vegetables. *Bemisia* attacks more than 900 host plants and vectors at least 111 plant virus specie. . Worldwide agricultural production losses have grown because new, more virulent and less pesticide-sensitive *Bemisia* strains have spread to all continents except Antarctica. Very few countries have escaped its establishment.

We are receiving calls and emails from many professional pest control operators and landscapers from the Keys to Palm Beach County that report difficult to control whiteflies are in landscapes. This is a serious and very concerning situation because the reports indicate that pesticides are not working. The quality of our landscapes is being impacted and the production of many vegetable crops is threatened. In the early 1990's in the United States, crop failures, displacement of farm workers, and the costs associated with managing this pest surpassed $500 million dollars. These new strains present a potentially similar threat and the University of Florida, USDA, the Florida Department of Agriculture and Consumer Services, city governments and our industry colleagues are working to manage the threat.

We cannot do it alone! WE NEED THE HELP OF THE GENERAL PUBLIC AND ALL POTENTIALLY IMPACTED INDUSTRIES.

WHAT CAN THE PUBLIC AND LANDSCAPERS DO?

- Report any whitefly populations that seem to be excessively high and difficult to control (contacts below).
- For whitefly control recommendations, contact your local County Extension office for help. Applying the wrong pesticide for this pest and some others could cause more problems than benefits.

USEFUL LINKS

- You can find your UF/IFAS Extension county office at: http://bit.ly/1Q8wguw.
- http://mrec.ifas.ufl.edu/lso/Whiteflies.htm
- http://mrec.ifas.ufl.edu/lso/bemisia/bemisia.htm
- http://mrec.ifas.ufl.edu/lso/bemisia/DOCUMENTS/WhiteflyManagementProgram_1-15-15.pdf
- **http://mrec.ifas.ufl.edu/lso/bemisia/DOCUMENTS/LANDSCAPE-Active-Ingredients.pdf)**
- http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Plant-Industry-Publications/Pest-Alerts/Pest-Alerts-Bemisia-Tabaci-Gennadius-biotype-Q

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