

house where temperatures commonly exceed 74°F. As a result, fuchsia flower initiation is delayed and the number of fuchsia flowers per plant is reduced from 6 per node to 2 per node.

Similarly, zonal geraniums have optimal temperatures for flower development which are substantially lower (approximately 10-20°F) than that for New Guinea Impatiens, yet these two crops are often grown side by side in a greenhouse. Clearly, the quality of one crop is unknowingly sacrificed for the quality of the other crop!

To produce the highest quality crop in the shortest amount of time, you must know what the optimal temperature for each stage of development. We are currently working to deter-

mine the optimal temperatures for flower initiation of cyclamen, cineraria, calceolaria, poinsettia, etc.

Interestingly, to complicate matters, the optimal temperatures for each stage of development may be more dependent on the day temperature or the night temperature. For instance, flower initiation of poinsettia is primarily dependent on night temperatures. In contrast, flower initiation of fuchsia is primarily dependent on day temperature.

Clearly, we have a lot to learn when it comes to what environment is 'best' for plant growth. Our job, at the universities, is to get you this information. Your job is to use it!

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"B-TYPE" WHITEFLY IS NEW SPECIES

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Reprinted from the American Vegetable Grower, Vol. 41, No. 2

The "B-type" or "poinsettia" whitefly that has wreaked massive amounts of damage on vegetable crops in the southwestern U.S. has been identified as a previously unknown species, not just a variant of the common sweetpotato whitefly.

Since the insect causes a disease in squash called squash silverleaf, it should be named the silverleaf whitefly, say Dr. Thomas M. Perring and other University of California (UC) entomologists. They released their findings in the January issue of the journal *Science*.

Although the pest has been identified as a separate species, scientists are quick to note this does not change the current control methods. But, the designation will make a difference in the long-term effort to find predators and other biological methods to control the whitefly, says UC spokeswoman Kathy Barton.

The insect attacks melons, lettuce, broccoli, cauliflower, carrots, celery, asparagus, squash and tomatoes. It sucks nutrients out of plants and secretes a sticky material that promotes growth of fungi.

The Same, But Different

The research team noted that outwardly, the silverleaf species looks exactly like the various strains of sweetpotato whiteflies that have been a troublesome, but relatively routine, pest for years.

Perring and his colleagues conducted experiments showing the silverleaf whitefly is genetically distinct and reproductively isolated from the cotton strain of the sweetpotato and silverleaf whitefly. No eggs were fertilized when scientists tried to cross the two species. They also found the sweetpotato and silverleaf whiteflies wouldn't copulate despite showing courtship behavior.

The name of the new species was carefully chosen. The bureaucratic-sounding "B-type" was selected 2 years ago because such names as "poinsettia" and "sweetpotato" whitefly offended certain grower groups.

"We chose silverleaf very carefully," Perring said. "It is diagnostic and grower-friendly."

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