TEXAS A&M UNIVERSITY KINGSVILLE

NEWSLETTER

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NEW CITRUS PEST CONTROL GUIDE

The new 2007/2008 Guide listing the registered chemicals recommended for citrus pest and disease control will soon be available to growers. The new guide has been expanded considerably not only listing chemicals used to control traditional long standing insect/ mite pests and diseases, but also to include chemicals available for control of citrus psyllids, thrips and root weevils. Added to the list is Admire Pro ® (Imidacloprid) replacing the former Admire 2F formulation, applied as a tree trunk or soil drench gives effective control of scale insects, citrus leafminer, citrus psyllid and blackfly. Assail 70WP ® (Acetamiprid) is added for control of citrus leafminer and thrips. Also, added is Capture 2EC® (Bifenthrin), which when applied as a soil drench beneath the tree canopy provides effective control of root weevil larvae (neonates). Recently, Mustang Max ® (Seta-Cypermethrin) was given a Section 18 Crisis Exemption Registration most specifically to control *Diaprepes* root weevil adults in Texas citrus orchards. Malathion 57 EC ® is listed as an alternative pesticide for suppression of armored and soft scales and thrips.

Envidor 2 SC ® (Spirodiclofen) highly effective for the control of citrus rust mite and spider mites, is now listed on the new guide. It is important to note that Envidor is restricted to one spray application per season in Valley orchards. Citri-King ® (citrus oil) a possible alternative to petroleum spray oil appears for the first time on the guide. While it alone provides some initial knockdown of spider mites, brown soft scale, citrus leafminer and citrus psyllids its greatest potential is as an additive in tank mixes with Envidor, Agri-Mek EC ® (Abamectin) and Micromite WGS ® (Diflubenzuron)—increasing the efficacy and extending the residual effectiveness of these miticides. Adding significance to this was recent loss of the Kelthane MF ® (dicofol) registration—a

UPDATES ON TRISTEZA AND GREENING

The recent discovery of tristeza-infected trees in the California Citrus Clonal Protection Program is of concern to Texas since we have obtained many of the varieties in the Texas program from California. At the Lindcove Station in California, 44 trees in the field collection were found to be infected, and four more in the screen-protected area. All our field trees are tested annually, and again this year none was

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caught in traps and prevents its spread outside the quarantine area for the past five years, the continuous detection of the weevil is worrisome and calls for a more aggressive strategy. The need to implement other pest suppression strategies along with chemical application was recognized by a panel of scientists from the Citrus Center and the Texas Cooperative Extension (TCE). The release of a wasp parasitoid that attacks the eggs of Diaprepes has been suggested as a viable strategy. Not only does this biological control agent allow for targeting this pest in places where application of chemical pesticides is problematic, such as in residential areas, they offer the possibility to control another development stage of the root weevil and thus hold promise as an IPM tactic. We obtained a permit from USDA APHIS PPQ Pest Detection and Management Laboratory, Edinburg TX (Permit No P526P-07-04678) for the release of the wasp parasitoid, *Quadrastichus haitiensis* that has proven to provide at least moderate levels of parasitism in Florida, Puerto Rico and other Caribbean and West Indian islands. This egg parasitoid was obtained from the USDA-ARS Subtropical Insects Research Unit, U. S. Horticultural Research Laboratory in Fort Pierce, FL and introduced into Texas in May 2007. Once received, sealed shipments of adult parasitoids were brought to the USDA APHIS PPQ quarantine laboratory where they were opened to ensure they were free of any contamination prior to their release in the quarantine area. Thus far, 27,000 parasitoids have been released this year, and additional releases are planned in the near future. Evaluation of the parasitoid establishment will be conducted starting this fall through a joint collaboration between scientists of the Citrus Center, TCE, and USDA APHIS PPQ.

Diaprepes root weevil wggs(top) and the wasp *Quadrastichus haitiensis* that parasitizes these egg**s**

Mamoudou Sétamou, J. Victor French and Boris Castro

TWO STUDENTS WHO STARTED AT THE CITRUS CENTER GRADUATE FROM THE VEGETABLE AND FRUIT IMPROVEMENT CENTER, TEXAS A&M UNIVERSITY

Jose Luis Perez was born and raised in McAllen, Texas. He received his Bachelor's in biology from University of Texas Pan-American at Edinburg, Texas. During his college days he was constantly in search for a job that he would enjoy doing every day. In that search he got an opportu-

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