

Citrus Center



Weslaco, Texas

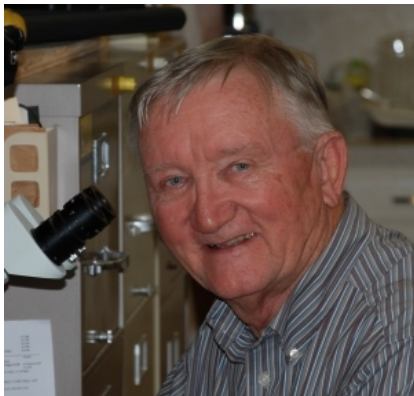
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NEWSLETTER

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Victor French Retires

John da Graca & Mani Skaria



Dr Victor French, entomologist and professor at the Citrus Center is retiring after 35 years service to the Center, the University and the Texas citrus industry.

Vic was born in Colorado, and after obtaining his BS and MS from Colorado State University, he worked as a research technician at the University of California (Riverside) before moving to Michigan State University to work towards his PhD. He joined the Citrus Center in 1973 as an assistant professor, was promoted to associate professor in 1977, and full professor in 1982. He also served as interim Center Director for two years from 1994 to 1996 after the retirement of Dr Richard Hensz.

Vic's research was always directed to solving problems encountered by citrus growers, and his work resulted in the registration of at least eleven pesticides

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Teddy Medrano Retires

Elias Hernandez & John da Graca



Teodoro (Teddy) Medrano, Farm Foreman at the Citrus Center, is also retiring this Spring. Teddy joined the Center in 1970, and in his 38 years he has witnessed many changes

which have occurred, and has seen the hard freezes, droughts, diseases and pests which threatened the trees he cared for. Teddy was born and raised no more than a ¼ of a mile from the Center, and has lived just 3 miles away from it most of his life.

For many years he was the right hand man of Bert Davis, the former Farm Superintendent, and since 1994 he performed the same role for Elias Hernandez. His knowledge of citrus orchard care in general, and the details of the Citrus Center farm in particular, especially where various waterlines are buried, have been invaluable. In 2000 he was chosen by his peers as the Citrus Center's Employee of the Year. His highly professional work attitude was a tremendous asset which enabled our scientists to conduct their field experiments, generating reliable data. Dr French was one of those who worked closely with Teddy, and with both retiring, we are losing over 70 years of combined experience.

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(Agrimek, Lorsban, Logic, Orthene, Supracide, Talstar, Temik, Vendex, Vydate, Nexter, and most recently Envidor), and Section 18 for several other compounds. He was also a strong advocate for biocontrol, and his contributions towards control of blackfly in particular were significant. He was also a regular contributor to scientific literature, and authored or co-authored over 60 refereed papers, with at least 6 more currently in press, review and preparation.

His dedication to commercial citrus growers and homeowners is shown by always being available to visit their orchards or backyards, and to advise them on pest control. He always contributed to this newsletter, and made presentations at enumerable extension meetings

Although Vic French did not have a formal teaching appointment, he gave many classes to students at the University of Texas-Pan American, continuing education classes to growers, and guest lectures in other faculty's courses. He also supervised several graduate students, including Barbara Storz, county extension agent in Edinburg, who was one of the first MS students at the Center.

Vic has always been a team player, and with his technicians, Daniel Davila and the late Jim Villarreal, he worked closely with his colleagues at the center over the years, as well as with entomologists at the A&M Experiment Station, USDA-ARS, USDA-APHIS and UTPA. At the Citrus Center, those he worked closely with included Pete Timmer (especially on Temik), and John Fucik. He served on numerous university committees, and was the Center's safety officer.

In 2001 the Rio Grande Valley Horticultural Society honored Vic by presenting him with the Arthur T. Potts Award, and in 2003 he received the Texas Citrus Mutual Special Award for outstanding service.

Although he is officially retiring, Vic will remain active within the community. He has already been asked to advise growers, grove care companies and agricultural chemical companies, and has been presenting talks at AgriLife Extension and Customs & Border Protection meetings. We thank Vic for his tremendous contributions and his friendship, and we wish Vic and his wife Lee Ann well for the future. We also look forward to continue working with him on specific projects in the coming years.

Pink Hibiscus Mealybug Confirmed in Texas

Boris A. Castro and Carlos E. Bográn
Texas AgriLife Extension Service

The pink hibiscus mealybug (PHM), *Maconellicoccus hirsutus*, was recently confirmed in Texas in the Port Aransas area on September 10th, 2007. The PHM is a potentially serious pest for many important ornamentals, vegetable and fruit trees in Texas, including citrus. It is an exotic pest first reported in the U.S. in Florida in 2002. This invasive species feeds by sucking the sap from more than 300 species in 74 plant families. PHM live congregated in waxy covered colonies often located in the new growth of plants. It disperses by crawling from plant to plant, by movement of infested plant material, with the wind currents, or even when stuck on clothing.

PHM adults and nymphs look much like other mealybug species already present in the U.S. Female adults have no wings and are covered by white wax. Several characteristics may help distinguish the



Fig. 1PHM Adult Note lack of wax filaments
(photo by D. Hall, USDA-ARS)

PHM from other common mealybug species. These include body color, adult female PHM are reddish brown or pink, absence of white wax filaments surrounding their bodies which are present in other species, and production of abundant egg masses (ovisacs) containing bright-pink to orange eggs. The tip of the abdomen of adult PHM has two distinct white "buttons" of wax; when pierced, the PHM bleeds a reddish-brown fluid. PHM infestations also can be distinguished by their effect on plants. Feeding causes new leaves to curl; young stems stop elongating and become thick, giving a 'bunchy-top' appearance. This is caused by a toxin that is injected into the plant when the mealybug feeds. None of the other common mealybugs in Texas will cause this

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Fig 2. Bunchy-top damage by PHM on citrus. (photo by Edwin Myers)

type of severe plant damage. Colonies and egg masses are protected by wax accumulations, making the control of the pink hibiscus mealybug with contact insecticides difficult. Systemic insecticides may provide some control but are not always effective because



Fig 3. PHM infestations; eggs, nymphs and adult. Note pink-colored eggs (photo by Jeffrey W. Lotz, FL DOACS)

eggs and young crawlers can escape exposure. Insecticides are also toxic to natural enemies that help to keep populations under control. Long-term management of this pest will rely on biological control. Two species of parasitic wasps have proven effective in Florida and are also being released in Texas by the Texas Department of Agriculture in areas where the PHM has been detected.

It is not known what effect if any, the PHM will have on the Texas citrus industry. The insect has had no impact so far on commercial citrus production in Florida. However, invasive species may behave differently as they arrive into new territories. It will be extremely important to be on the alert for this new pest and become familiar with its biological characteristics to minimize its spread and potential damage. For additional information please visit the website <http://mrec.ifas.ufl.edu/LSO/PinkMealybug.htm> and consult the Texas AgriLife Extension publication number E-454, [Pink Hibiscus Mealybug: A New Pest in Texas](#).

Citrus Psyllid and Greening Updates

John da Graca, Mani Skaria, J. Victor French & Mamoudou Setamou

Much attention is now being given by the Texas citrus industry to the Asian citrus psyllid, the vector of greening disease. The following is an update on some recent developments in Texas and elsewhere.

Last year our survey concentrated on the Lower Rio Grande Valley, and residential sites throughout Corpus Christi and selected areas in Houston. No typical greening-like symptoms were observed, and the pathogen was not detected in any of the nearly 300 leaf samples sent to the USDA lab in Gastonia NC. Surveys in east Texas, the Big Bend area of west Texas and the Dallas-Ft Worth area did not detect any psyllids, indicating that the insect had not spread significantly beyond the areas it was detected in 2006. We are now in the process of entering the 2007 data into the National Agricultural Pest Information System. Depending on funding, we hope to continue the surveys in 2008, conducting further urban sampling in Houston, San Antonio and other cities, and attempting to determine whether the psyllid has spread beyond the 32 counties where it has already been recorded. The Texas Department of Agriculture now requires that any nursery trees propagated in any of these counties must have been treated for psyllids prior to shipping to other counties.

The Citrus Center is undergoing certification by the USDA to enable it to conduct greening diagnostic tests on suspicious leaf samples using real-time PCR. We are also about to conduct a USDA-APHIS funded demonstration project in cooperation with several growers to evaluate IPM strategies for area-wide management of the psyllid. Several research projects are now underway, many in collaboration with Texas A & M AgriLife, the USDA and the University of Florida. These include identifying what factors attract psyllids to some host species more than others, psyllid population dynamics and sampling methods, evaluation of pesticides and organic treatments, biotyping of psyllids from different regions, and the possible use of psyllids to sample for greening diagnosis.

In recent months, we have conducted training sessions on psyllid and greening detection in Hidalgo, Laredo and Los Indios for Customs and Border Protection inspectors from all ports of entry between Brownsville and Del Rio in attendance. A training session for USDA-APHIS-International staff from Mexico was also held at the Citrus Center late last year.

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Teddy will be missed by all at the center, and we all thank him for his loyal service, and wish him and his wife Consuelo the very best in his retirement.

Some recent developments elsewhere are giving some cause for concern. Greening has been confirmed in Cuba, and psyllids have been intercepted in California in bags of curry leaves (*Bergera koenigii*) from Hawaii, despite a requirement that these leaves be fumigated before dispatch. The curry leaf tree is a citrus relative. California will no longer allow importation of curry leaves from Hawaii. In Mexico, the psyllid is now widespread, but there have been no reports of the presence of greening. From Florida comes news that the greening bacterium may be seed transmitted. The proportion of seedlings that have tested positive for the greening bacterium is small, and none of the seedlings has developed symptoms so far. Nevertheless, the USDA has banned the importation of citrus seed from anywhere that greening exists.

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