

Memo

TO: Michael G. Hearst, Interim District Manager
FROM: Robert Cummings, Scientific Technical Services Director
DATE: April 8, 2010
RE: Scientific Technical Services Section, 4/2– 4/8

American Mosquito Control Association (AMCA) Update:

I attended the AMCA Conference last week in Lexington, Kentucky, where I listened to a number of presentations on topics ranging from updates on new biological control agents, environmental regulations that will restrict the use of older, less-selective pesticides, worldwide vector-borne disease concerns, and a dengue fever outbreak in Key West, Florida, last year. One new insecticidal product, Natular™, is made from a naturally-occurring soil bacterium and is proving to be highly effective against mosquitoes and other insects. It is commercially available now for mosquito control and is undergoing efficacy evaluations by vector control agencies.

I also listened to presentations about the recent dengue fever outbreak in Florida last fall. Dengue fever is a mosquito-transmitted disease carried by humans that has exploded around the world in the last 35 years, with continuous epidemics in the Caribbean islands. Twenty-two cases of dengue fever were confirmed in Key West between July and October of 2009; these were the first locally-transmitted cases in Florida since the 1930s. The local vector control district and other state, county, and federal agencies helped contained the epidemic.

Two species of mosquitoes in the U.S. are good vectors of this virus and are prime candidates for re-establishing this disease in warm areas of the country. One species, the Asian tiger mosquito, *Aedes albopictus*, has been introduced twice in Orange County recently (2001 and 2004), but the District eliminated it before it became established. With plenty of international travel in the world, most experts believe it is inevitable that outbreaks will occur in the U.S., especially in the southeastern U.S. where these two types of mosquitoes are abundant.