SUBJECT: Detections of Orange Rust of Sugarcane, *Puccinia kuehnii* (W. Krüger) E.J. Butler, in Palm Beach County, Florida

TO: STATE AND TERRITORY AGRICULTURAL REGULATORY OFFICIALS

On July 17, 2007, USDA’s Animal and Plant Health Inspection Service (APHIS) confirmed the detection of orange rust of sugarcane, *Puccinia kuehnii*, in commercial sugarcane fields in Palm Beach County, Florida. This outbreak is considered to be transient, actionable, and under surveillance, therefore, APHIS and the Florida Department of Agriculture and Consumer Services (FDACS) are conducting surveys to delimit the distribution of the disease.

The orange rust is known to occur in the Asian-Oceania region (Australia, China, Japan, Philippines, India, Indonesia, Malaysia, Pakistan, Taiwan, Thailand, Vietnam, and other countries in the region). This particular rust has not previously been found in the Western Hemisphere.

APHIS has established a technical working group of experts to discuss survey and control strategies in response to the orange rust detection. The group will continue to meet on a regular basis to address this developing situation and consider mitigation strategies.

The initial symptoms of orange rust are minute, elongated yellow lesions which take on a pale yellow-green halo as they increase in size. As the lesions grow, an orange to orange-brown color develops. Unlike common brown rust, orange rust lesions are never dark brown. Pustules of orange rust tend to occur in groups on the affected leaf surface with most pustules on the lower surface and more lesions toward the leaf base. Wind and large air masses can rapidly spread the pathogen. Also unlike common brown rust, which is more prevalent during the spring, environmental conditions conducive for the development of orange rust include warm, humid summer and cool fall conditions.

This disease has the potential to cause significant economic losses to the Florida sugarcane crop. In 2000, orange rust caused extensive yield losses in susceptible varieties of sugarcane in Australia. The primary long-term control strategy for the disease is the planting of resistant sugarcane varieties.

For additional details on the Federal response to the detection of the orange rust, you may contact William Newton, Senior Regional Program Manager, at (919) 855-7335 or Wendy Beltz, Acting Staff Officer, at (301) 734- 8247.

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