

# PROTECTING TEXAS AGRICULTURE FROM EMERGING AND INVASIVE PESTS

## FY 2018 & 2019 Exceptional Item

**T**he Texas livestock industry is facing serious threats from pervasive and invasive animal diseases such as bird influenza, Rift Valley fever, and West Nile virus. The increased cross-border movement of vegetables, fruits and plants greatly increases the probability of new pests and plant diseases, such as Sugarcane Aphids or Roundup resistant weeds, invading the state.

It is critical to have well-equipped diagnostic laboratories and trained pest management educators to work with farmers and the agricultural industry to identify the pests and to develop management strategies.



### Program Description

- Texas A&M AgriLife Extension Service will undertake an intensive effort using the latest research in veterinary science and pest management to reduce risks and maintain the health of major crops and livestock.
- Increased AgriLife Extension efforts in veterinary science will be used to assist ranchers, feedlots, dairies and poultry operations to cope with new regulations and to protect the health of our food animals both on the farm and in confined animal operations.
- We will extend research findings and practical, science-based information to key stakeholders, as well as providing a boots-on-the-ground presence to detect emerging pests and to develop and deploy management strategies, many developed within AgriLife, to reduce risks to crops and livestock.

AgriLife Extension is charged with bringing solutions to vexing problems in agriculture. The impartial application of science based solutions makes AgriLife Extension a trusted source of information for agricultural producers seeking answers for emerging problems.



TEXAS A&M  
**AGRI**LIFE

**Requested Amount  
 (Biennial)  
 \$5 million**

### Objective

- Strengthen our state's protection of **agriculture**, which benefits all Texas consumers and **contributes 8.5% of the state GDP**.
- Engage in an intensive effort using the latest research in veterinary science and integrated pest management (IPM) to reduce risks and **maintain the health of major crops and livestock across Texas**.
- Enhance AgriLife Extension's field presence through the **addition of veterinary and integrated pest management specialists**.



# The Threat is Real

## Old World Boll Worm

Scientists project the imminent arrival of the Old World Boll worm, a pest which devastates a wide cross section of crops, potentially causing much more damage to many crops than current bollworms.

The **old world bollworm is a major pest in cotton, soybean, corn, wheat** and other crops, currently not found in the US.

It is estimated that the cost of this insect on cotton crops in Australia is around \$140 per acre. In the US, this could equate to a staggering figure of **\$840 million for cotton alone**, not to mention the other crops involved. Damage in cotton from Old World Boll worm can be up to 100% in unmitigated fields and 10-20% yield loss with conventional pesticide management is typical.



## Ticks

Texas's extensive international border with Mexico has created special situations in transboundary veterinary medicine and public health. The threat of ticks that affect domestic animals, movement of wildlife (i.e., feral hogs, white-tailed deer, and mule deer) between the border who can act as **reservoirs for diseases (i.e., classical swine fever virus and foot and mouth disease)**, or the migration of wildlife to transmit diseases from the Caribbean into Texas (i.e., egrets carrying the Amblyoma maculatum tick for Heartwater) are a real danger to the prosperity of our animal industries.

The economic impact of transboundary pests and diseases goes beyond the immediate impact on agricultural producers of Texas. The most direct economic impact will be the **loss or reduced efficiency of agricultural production, with subsequent price and market effects.**



## Sugarcane Aphid

The sugarcane aphid, **a major pest of sorghum**, was first found in economically damaging numbers in Texas in 2013.

An economic study of four counties showed a loss of \$31 million. Extrapolated over the state, the **loss was around \$200 million.**

It is estimated the sugarcane aphid caused a total loss of \$31 million to the Valley's sorghum industry in the 2014 and 2015 growing seasons.

But at the same time, growers were able to avoid another \$35 million in potential losses by following control recommendations released by AgriLife Extension.



For more information, contact:

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## What is Texas A&M AgriLife?

It's a family of agencies that brings world-class research, education and service to Texans as a part of the Texas A&M University System.