Texas Marketer Testifies at National Expo on Stopping Avian Flu

MIKE WELCH PROVIDES INFORMATION ABOUT USE OF POULTRY FLAME STERILIZER

Texas marketer and TPGA member Mike Welch, WelchGas, testified at the Sunbelt Agricultural Exposition in mid-October about his client's use of a Poultry Flame Sterilizer. WelchGas started using the Poultry Flame Sterilizer in early 2004 and received a call from Pilgrim Pride asking them to burn two farms in Sulphur Springs, Tex. that had developed the avian flu. Pilgrim had been told by the Texas Animal Health Commission that the poultry operations affected by the disease needed to use a form of flame sanitization before they could reopen their houses for production.

"Since burning these houses, we have not seen any avian flu outbreaks," Mike Welch testified. "We have found that in using the flame burner there is a reduction in mortality rate, which, in turn, increases production. All of my growers report they have seen an average weight gain of at least 1/8 pound per bird." WelchGas is currently burning 17 farms, which includes 107 poultry houses.

Avian Flu

There are at least 15 different types of avian influenza that routinely infect birds around the world. The most recent outbreak overseas was caused by a strain known as H5N1, which is highly contagious among birds and rapidly fatal. Unlike many other strains, it can be transmitted to humans, causing severe illness and death.

There is concern over influenza viruses because they are highly unstable and have the ability to mutate rapidly, potentially jumping from one animal species to another. Scientists fear the bird virus could evolve into a form that is easily spread between people, resulting in an extremely contagious and lethal disease.

In rural areas, the H5N1 virus is easily spread from farm to farm among domestic poultry through the feces of wild birds. The virus can survive for up to four days at 71 F (22 C) and more than 30 days at 32 F (0 C). If frozen, it can survive indefinitely.

Avian influenza outbreaks among poultry occur worldwide from time to time. Since 1997, for example, more than 16 outbreaks of H5 and H7 influenza have occurred in poultry in the United States.

The Red Dragon

The Red Dragon, a new implement from Flame Engineering Inc. (LaCrosse, KS), utilizes six liquid propane torches that project intense, sweeping flames underneath a sturdy steel hood to kill bacteria. The heat from the flames stays constant at approximately 1400° F, which is hot enough to effectively eliminate a host of harmful pathogens.

Mike and Wes Welch of WelchGas started demonstrating the Red Dragon in April 2004 and were called on to help with the avian flu dilemma. Since the treatment, there has not been a reoccurrence of the disease. This may mean good things for both the propane and poultry industries.

"I think flame sanitization will really help the poultry industry," said Wes Welch. "Growers are getting tired of chemical treatments that are now becoming less and less effective."

Operating at one-half mile per hour, the poultry house sanitizer consumes approximately 35 gallons of propane to treat a 16,000-square-foot house. There are approximately 54,500 broiler and turkey farms in the country, each with at least one poultry house, according to the U.S. Department of Agriculture.

According to a 2003 PERC-funded study, poultry producers annually spend $13,600 on propane, most of which goes for heating farm buildings including poultry houses. The study also revealed that more than 75 percent of poultry producers believe propane is a reliable, versatile, safe, environmentally friendly, and easily stored energy source.

"Because of the poultry industry's confidence in propane, the propane industry is optimistic that poultry house sanitization using propane will become a widely accepted practice," Leitman said. However, he acknowledged that the propane industry will have to coordinate their efforts to educate the poultry industry on the performance, economic, safety, and environmental benefits of propane for poultry house sanitization.

In addition to controlling avian flu, research on the effectiveness of the poultry house sanitizer conducted by Dr. Susan Watkins at the University of Arkansas showed that exposure to heat dramatically reduced other pathogens such as salmonella, E. coli, and coliform. The results of this research confirm that heat is a consistent pathogen killer, as these microorganisms cannot build up a resistance to its cell-rupturing effects.

"Nearly every grower who has used the flame sanitizer in their poultry houses has seen an improvement in their birds," said Wes Welch.

Most notably, the growers are seeing increased livability in the third and fourth week, when they most need it, says Wes Welch. The 30-35 day livability rate is important because high mortality at that age has a direct negative effect on feed-conversion rate and the grower's bottom line.

The poultry house sanitizer also flames off the ammonia vapors in the litter, allowing for the first three weeks of production to be virtually ammonia-free.

According to Flame Engineering, most growers see a full return on their investment in the first 12 to 18 months. One grower saw the machine increase his profits enough after the first flock to completely pay for itself. For more information on the Red Dragon, visit www.flameengineering.com or call (800) 255-2469.

(Left to right) Mike Welch, Mark Leitman, Steve Koke and Brian Bader