

*Adding measurable value to U.S. Pork***June Totals Round Out Remarkable First-Half Run for U.S. Pork**

Pork exports enjoyed a record-setting first half of 2008 according to the latest export figures released by USDA. Pork and pork variety meat exports in June totaled 192,667 metric tons valued at \$451 million — double the volume exported in June of last year. This drove year-to-date pork exports to 1,018,467 metric tons valued at \$2.3 billion — 67 percent above the first six months of 2007 in terms of volume, and 58 percent higher than last year in terms of value.

China/Hong Kong is now the largest volume destination for U.S. Pork and pork variety meats. Exports to this region in the first half of 2008 jumped 324 percent over last year to 254,445 metric tons valued at \$439.8 million. Exports to this region alone accounted for 6 percent of this year's U.S. pork production, as 24 percent of pork and pork variety meats produced in the United States are now destined for foreign markets.

Other strong-performing markets for pork exports (including variety meats) in the first half of 2008 included:

- Japan: Up 21 percent in volume over last year to 221,081 metric tons, valued at \$712.3 million. Japan remains the single largest market for U.S. pork in terms of value.
- Mexico: Up 23 percent in volume over last year to 163,307 metric tons, valued at \$270.4 million.
- Russia: Up 137 percent in volume over last year to 93,531 metric tons, valued at \$197.7 million.
- Canada: Up 22 percent in volume over last year to 80,253 metric tons, valued at \$258 million.
- Korea: Up 35 percent in volume over last year to 72,058 metric tons, valued at nearly \$150 million.
- Association of Southeast Asian Nations (ASEAN): Up 431 percent in volume over last year to 31,532 metric tons, led by the Philippines (16,173), Vietnam (10,168) and Singapore (4,985).

*For more information, contact John Hinnners, [JHinnners@usmef.org](mailto:JHinnners@usmef.org), 303-623-6328.*

**Providing the scientific research that allows pork production to be measured objectively and that maintains U.S. Pork as a safe, high-quality and high-value product**

**PCVAD Update-Viricidal Activity of Common Disinfectants against Porcine Circovirus type 2**

There have been many advances in the area of protection of susceptible pigs from PCV2. Even with the recent availability of PCV2 vaccines, the disease remains an economic threat to the swine industry worldwide. In addition to interventions such as vaccines, meticulous animal husbandry and hygiene practices play a proven role in disease prevention. However, little research on the effectiveness of commercially available disinfectants against PCV2 has been reported. With this in mind, this update will review some of the available research.

Martin, et al., conducted a trial evaluating the sensitivity of PCV2 to nine commonly used disinfectants. They also aimed at determining the concentrations at which these disinfectants would be effective against the virus. To conduct this experiment Martin, et al., chose nine disinfectants commonly used in the animal industry to test. PCV2 virus stock was combined with each one of the nine disinfectants at the concentration recommended by each of the disinfectant's manufacturers. The virus remained in contact with the disinfectant for 30 minutes at 20 degrees Celsius. After this time, the reaction was stopped and the ability of the virus to infect was tested by measuring the virus' infectivity on a specific laboratory cell tissue line derived from porcine kidney (PK15) cells. The researchers further tested the minimal concentration at which the disinfectants were effective against PVC2. They found that neither phenol, nor iodine-based disinfectants were capable of destroying the PCV2 virus. However, sodium hydroxide proved to be effective at one-fourth the recommended concentration. Sodium hypochlorite also was effective at one-half the recommended concentration. However, Martin, et al., stress the need to test these disinfectants in the field.

Royer, et al., conducted a similar set of experiments using the disinfectants ethanol, Weladol®, 1-Stroke Environ®, Tek-Trol®, Roccal® D Plus, Fulsan®, Clorox® bleach, Virkon® S, DC&R®, sodium hydroxide and Nolvasan®. The disinfectants were prepared at twice the manufacturers'

recommended concentration and combined with the virus at a 1:1 ratio. The disinfectant/virus mixture sat at room temperature for 10 minutes after which time the reaction was stopped and the infectivity of the treated virus was tested by inoculating it into a laboratory porcine kidney cell line (PK15). Royer, et al., found that Virkon S was the most effective disinfectant, followed by sodium hydroxide, Roccal D Plus, Clorox bleach, 1-Stroke Environ, Fulsan, Tek-Trol, Ethanol, Weladol, DC&R and Nolvasan. Like Martin, et al., Royer, et al., stress the need for testing to be done in a field setting.

A review of viral inactivation agents and mechanisms of inactivation is presented in Dr. Jill Bieker's Ph.D. thesis, *Chemical Inactivation of Viruses*. Data presented in the thesis showed that a new disinfectant foam, DF-200, developed by Sandia National Laboratories (at the request of the Department of Defense) was highly effective against bovine enterovirus, bovine coronavirus, various group A influenza viruses and the foot and mouth disease (FMD) virus. A major advantage of this disinfectant foam is that it is less caustic than other disinfectants that were tested. DF-200 is now marketed under the trade name EasyDECON™ and is expected to be highly effective against PCV2. However, to date, no studies proving the effectiveness of DF-200 on PCV2 inactivation have been published.

This and other PCVAD briefs are available online from [pork.org](http://pork.org). Visit the For Producers tab and click on Swine Health. Dick Hesse of Kansas State University collaborates with the Pork Checkoff to offer monthly updates on the state of PCVAD in the U.S. and global swine industry.

## PORK CHECKOFF IN THE SPOTLIGHT

### **Pork Checkoff and Soybean Checkoff Partner for Joint Success**

The Pork Checkoff and Soybean Checkoff continue to partner on mutually beneficial research despite the challenges of high feed costs. As soybean meal prices have followed other protein products upward, it has become more important for livestock and poultry producers to extract every ounce of nutrition available from their soybean meal.

“Livestock and poultry are our number one customer, consuming 98 percent of the U.S. soybean meal used domestically,” says Phil Bradshaw, United Soybean Board (USB) Animal Agriculture Team Lead and a soybean farmer from Griggsville, Ill. “The U.S. pork industry specifically uses about 25 percent of the domestically used soybean meal, so there is a strong partnership between soybean farmers and pork producers.”

That partnership has led to collaboration among the United Soybean Board (USB), the National Pork Board and QUALISOY to fund two very important research projects. The North American Swine Energy System, a two-year research program evaluating the use of net-energy systems for U.S. feedstuffs. This project is set to conclude in August, while the three-year Development of an Allergenicity Model in Swine project will conclude next May.

“Net energy for swine becomes more important as corn becomes more expensive,” says Tom Brown, USB director and a soybean farmer and pork producer from Morral, Ohio. “Increasing energy from soybeans may provide added nutritional value, so the soybean checkoff is funding research to look at this issue.”

“The National Pork Board appreciates the working relationship we have developed with the United Soybean Board,” said Everett Forkner, a Missouri pork producer and member of both the National Pork Board and its Animal Science Committee. “Especially during this time of rising feed costs, net energy is a new look at how feeds can be formulated to meet the needs of pigs as well as a way to possibly save producers money. This research is going to help us be much smarter with our feed.”

The Soybean Checkoff's focus on animal nutrition and feed improvement led to the development of the Animal Nutrition Working Group in 2006. This group of 14 animal nutritionists advises the Soybean Checkoff on prioritization of potential improvements in soybean traits that could address environmental concerns, improve available energy, reduce allergens, and improve the overall benefits of soy as a feed ingredient for the livestock and poultry industries.

The Soybean and Pork Checkoff programs have partnered in the past to spread the word on the importance of animal agriculture, both to crop producers and to rural communities learn more about how animal agriculture and soybean markets are interdependent, visit [www.animalag.org](http://www.animalag.org).

For more information, contact Mark Boggess, [MBoggess@pork.org](mailto:MBoggess@pork.org), 515-223-2606.