

Managing pigs through **HEAT STRESS**

Few things in life are as unpredictable as the weather, but one thing we can be sure of every year is we are going to get some hot weather! During this time, an animal can suffer from heat stress if the temperature, humidity, or activity is beyond where they can balance their heat production and heat loss. As pigs cannot accumulate body heat and can't sweat, this results in stress on the body.

Heat stress is estimated to cost global agriculture \$200 billion annually. In swine production we feel these losses in:

- Reduction in feed intake
- Reduction in growth rate
- Reduced market weight
- Higher abortion rates
- Reduction in litter performance at birth and reduced milk production of 15-30%
- Increase in sow and pig mortalities
- Intense oxidative stress



Here are a few strategies to help prevent heat stress and support animals during the summer months.

1

Ventilation

- a. Verify the temperature in the barn at the animal level
- b. Verify the air flow and adjust according to the seasons
- c. Check for drafting and hot spots
- d. Minimize variation of the temperature; anticipate overnight temperature drops
- e. Manage sprinkler cooling systems. A light mist is sufficient; too much moisture increases the humidity in the barn



2

Water Management

- a. Prepare for heat by flushing your lines with peroxide or chlorine to reduce biofilm
- b. Analyze for microbial content (bacteria, yeasts and moulds)
- c. Analyze the chemical profile (minerals, hardness, etc)
- d. Make sure water is readily available (water flow rate, pressure and number of drinkers) and maintain a temperature as low as possible
- e. Adjust drinker heights appropriately for the size of pigs and check daily

3

Nutrition

- a. Reduction of crude protein can reduce the heat production of the animal
- b. Balanced ratios of amino acids in the feed to support the needs of the animal
- c. Support animals with the use of an antioxidant product in your feed
- d. Keep feed very palatable to stimulate feed intake
- e. Watson S. and the Trouw Nutrition Sow Model can support your nutrition decision making

Your Trouw Swine Nutrition Advisor or Feeding Specialist can help evaluate these factors and recommend strategies to reduce the impacts of heat stress on your farm.