



arbourdale™

**Huwa-San®**

*A sustainable way of disinfection*



2022  
**CASE STUDY**  
Improved Water Quality

### About Us

Arbourdale is Canada's premier importer and distributor of environmentally responsible products for water, agriculture, livestock, and pets.

Arbourdale is the Exclusive Distributor of Huwa-San for Livestock use in Canada and the United States.

### The Problem:

A Swine producer in Southern Ontario was experiencing higher than expected mortality rates in their nursery barn. The farm was delivering swine drinking water directly from the well with no treatment.

Insufficient or absent disinfection of livestock water permits the formation of biofilm and the proliferation of water borne pathogens, which can lead to serious health issues for swine.

- **Case Study 2022 – Nursery Barn Swine Trial**

- **Objective:** Treat nursery barn water to optimize water quality, increase water consumption, and decrease overall mortality.

## The Challenge

Drinking water systems in a swine barn are an ideal environment for the establishment and reproduction of bacteria and biofilm. The continuous biological push-back from the pigs, the high temperatures, and the medications/vitamin additives delivered through the drinking water support and enhance bacterial micro-organisms.

In this case, the initial water sample had high counts of *E. coli* and coliforms, as well as high mineral counts.

## The Solution

The value of clean drinking water in a swine barn is often underestimated. Our solution to ensuring clean drinking water for livestock is to treat the barn water supply with Huwa-San.

Huwa-San Stabilized Hydrogen Peroxide boosts herd performance with reduced mortality rates by improving water quality/productivity, improving gut health, and managing risk.

### **The composition of Huwa-San works in two ways:**

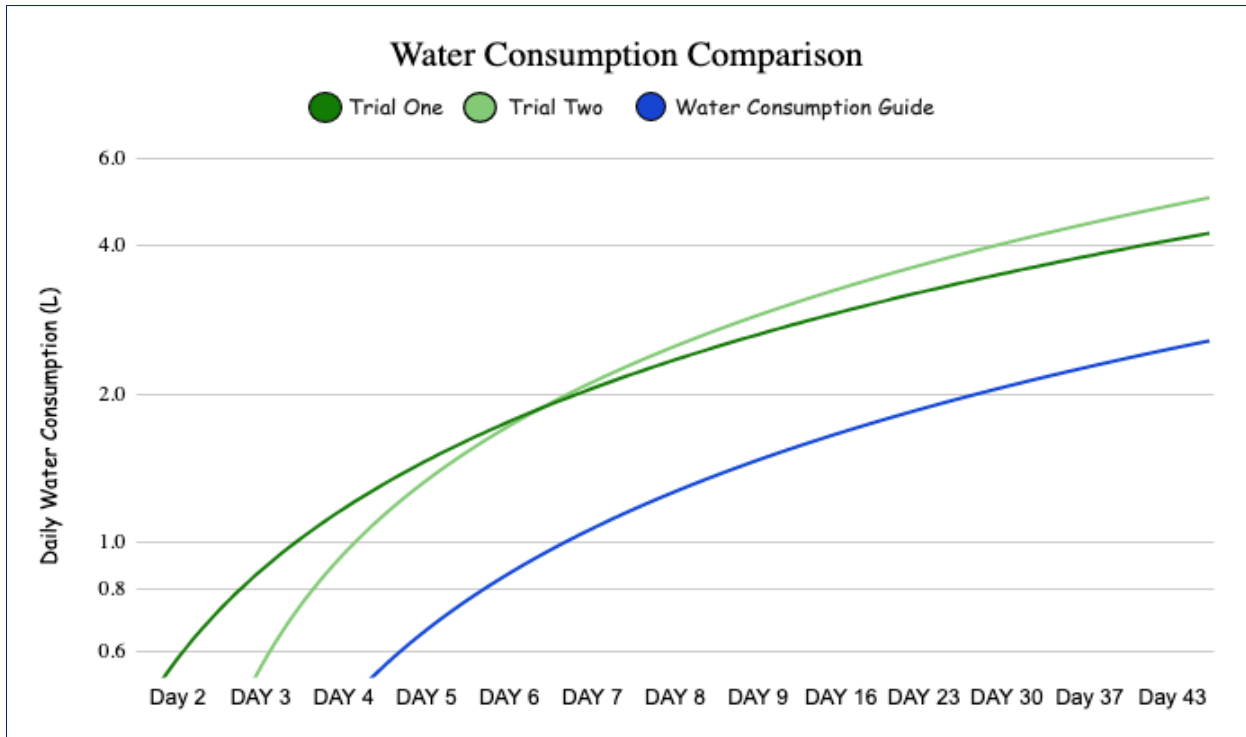
Deactivates the respiratory chain of harmful micro-organisms

Deactivates the metabolic chain of micro-organisms, leading to its oxidation and death.

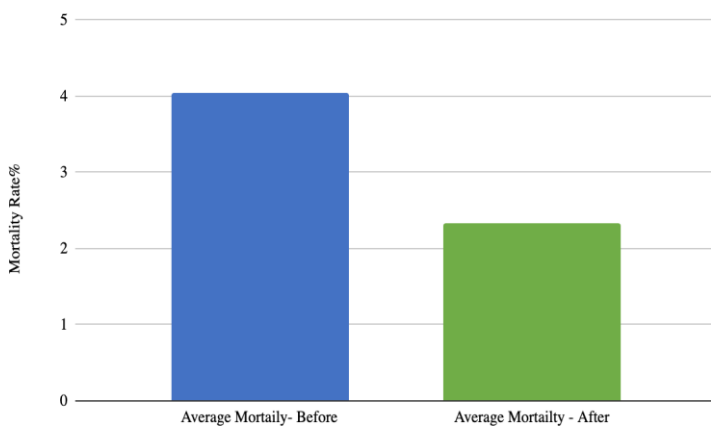


# The Results

- By treating the drinking water with Huwa-San TR-25, at a rate of 25ppm, the *E. coli* and coliform counts were completely eliminated. Throughout the trial, water consumption increased while mortality decreased by an average 41.25 pigs per crop.



Average Mortality Rates - Before and After Treatment



**Reduction in Mortality 42.75%**

Average Extra pigs per crop	41.25
Average feeder pig value	\$75
Total Sale Value	\$3,093.75
Average Cost HSP per crop	\$740.00

**Added Profit per Crop (net) \$2,353.75**



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## Additional notes

When considering water treatments there are several water characteristics that need to be considered:

- Microbiological Characteristic – bacteria levels such as *E. coli*
- Chemical Characteristics – mineral levels such as iron and calcium
- Physical Characteristic – taste and odour
- A comprehensive water test is always recommended prior to commencing any water treatment program.
- Each characteristic can affect sufficient consumption, the absorption of vitamin, vaccine, and medication additives, and the overall digestion process.

Arbourdale would like to gratefully acknowledge the support of SouthWest Vets in the execution and monitoring of this trial.

Box 1091 Mount Albert, Ontario, L0G1M0  
905-235-9619 info@arbourdale.com  
www.arbourdale.com