



EFFICACY STUDY

The Effect of Hydrite PAA Treatments on the Populations of non-pathogenic *Escherichia coli* surrogates on Pig Carcasses

OVERVIEW OF EFFICACY STUDY - HYDRISHIELD PA 22 HP

Study was conducted to test the effect of Hydrite Hydrishield PA 22 HP treatments on non-pathogenic *E. coli* surrogate inoculum on pig carcasses.

METHODS

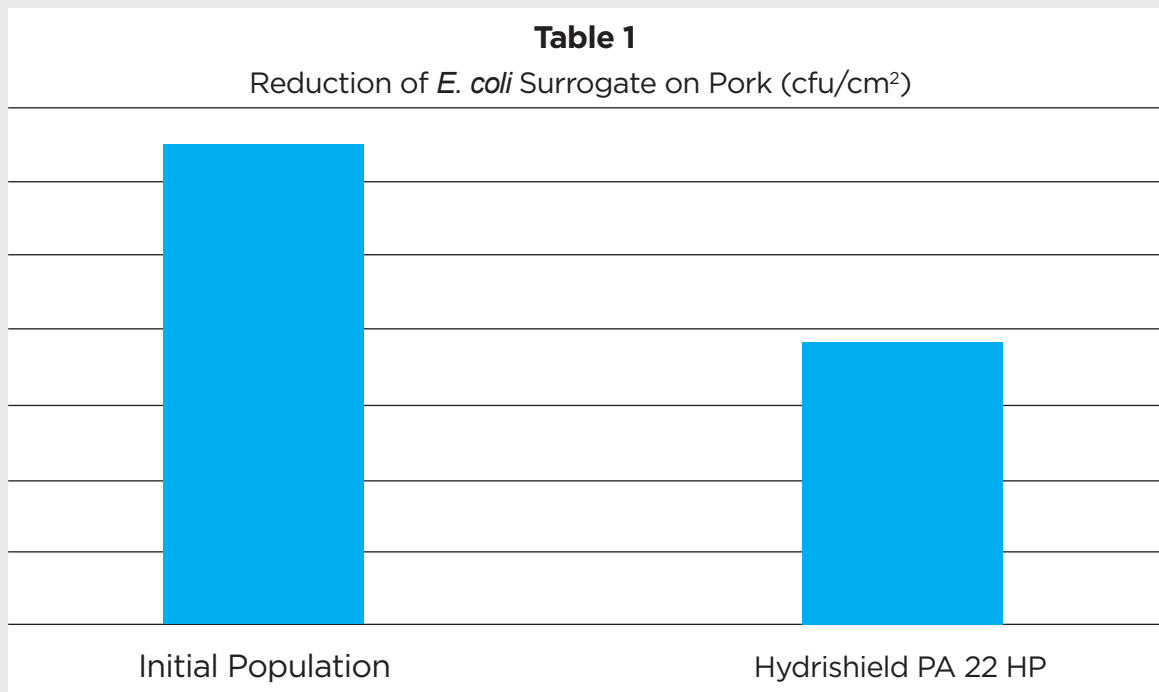
Five strains of non-pathogenic *E. coli* surrogates were surface inoculated onto jowls of pork carcasses to obtain an initial population of approximately 10^4 colony forming units (CFU)/cm². The inoculum was allowed to attach for 10 minutes at ambient temperature.

The inoculated jowls were sprayed with 400 ppm Hydrishield PA 22 HP using a low-pressure sprayer with sufficient volume to assure entire surface coverage. The experiment was independently replicated three times.

Samples were excised and analyzed immediately after treatment and tested using standard methods of selectivity and recovery of injured bacteria.

RESULTS

Hydrite Hydrishield PA 22 HP reduced the *E. coli* population by an average of 1.32 logs (Table 1).



Research conducted at Iowa State University under the direction of Dr. James Dickson, Professor, Department of Animal Science.

Full study available upon request