

# PH MATTERS

by JONES-HAMILTON CO

FALL 2024



## CONVENIENT APPLICATION AND BETTER PERFORMANCE MAKES PLT® THE LEADING CHOICE

*Limitations on application timing is a misconception about PLT that emerged during its more than 30 years on the market. PLT can be applied any time you want. Period.*

*Twenty-four to 48 hours of pre-heating is necessary to create the right environment for young birds. That heat also causes ammonia to volatilize out of the litter. Any litter amendment applied before pre-heating will activate before birds arrive. So how do you ensure ammonia control for the incoming flock if you want the convenience of applying before pre-heat?*

### APPLYING LITTER AMENDMENTS FOUR DAYS BEFORE PLACEMENT

A trial by Dr. Hong Li and Dr. Stephen Collier at the University of Delaware was designed to assess the efficacy of PLT as compared to liquid alum over two flocks when applied four days before bird placement at the rates of 150 lb and 35 gal per 1,000 sq ft. Litter pH, ammonia levels, energy use, paw quality, and bird performance parameters were measured.

### PLT KEEPS PH LOWER FOR CHICK PLACEMENT

Across both flocks, PLT lowered pH more and for longer than liquid alum with the PLT-treated houses reaching a pH of less than 3 in the brood and non-brood areas on day of placement (Figure 1).

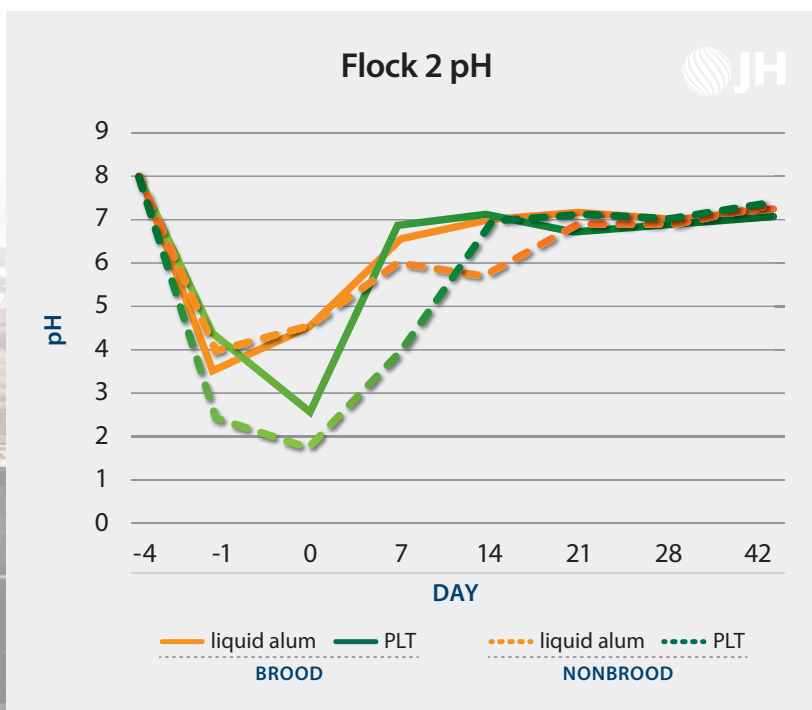


Figure 1. Litter pH measurements through Flock 2

## BIRDS PERFORMED BETTER IN PLT-TREATED HOUSES

Across both flocks, livability and feed conversion were better in the PLT-treated houses as compared to liquid alum with a total FCR improvement of five points across two flocks (Figure 2).

	PLT	Liquid alum
Livability, %	97.5	97.0
FCR	1.57	1.62

Figure 2. Two-Flock Average of Livability and Feed Conversion

## PLT-TREATED HOUSES USED LESS FUEL

PLT-treated houses had lower electricity and gas consumption as compared to liquid alum (Figure 3). Houses using liquid alum treatment required 6.8% more ventilation and 4.6% more heating or drying and ventilation during pre-chick placement conditioning due to the product's high-water content.

	PLT	Liquid alum
Electricity kWh/ton weight	103	111
Gas, cft/ton weight	952	998

Figure 3. Two-flock Average of Electricity and Gas Use

## PLT IS TOP PERFORMER AT ANY TIME

Even with early application, PLT outperforms liquid alum when applied at a similar rate. All litter amendments should be applied at a rate that accounts for the ammonia volatilization that will occur during pre-heat.



AS AN EPA SAFER CHOICE PRODUCT, PLT IS THE ONLY LITTER TREATMENT THAT CAN BE APPLIED MID-FLOCK, EVEN ON TOP OF BIRDS, TO HELP LOWER PH DURING AN OUTBREAK. IN ADDITION, THIS STUDY SUGGESTS APPLYING PLT AT A HIGHER RATE FOLLOWING AN OUTBREAK COULD HELP BREAK THE CYCLE OF INFECTION FOR FUTURE FLOCKS.



888-858-4425  
JonesHamiltonAg.com