



Spring and Summer Economic Benefits: The Effect of PLT® on Fuel Cost, Bird Performance, Ammonia and Litter pH on Broiler Farms

High levels of ammonia lead to poor bird performance, increased culls and condemnations, reduced disease resistance and a wide variety of other negative effects to broiler production. In this study, PLT® treated houses had notably lower ammonia levels. The low ammonia levels allowed producers to greatly reduce fan times and conserve energy, especially during the critical brooding period. Control houses had higher ammonia, more ventilation and greater fuel usage.

PLT® Pays For Itself In Fuel Savings Alone

Average fuel savings when using PLT® for all 16 farms is 68% compared to no litter treatment. This represents a significant cost savings, even during the spring and summer months.

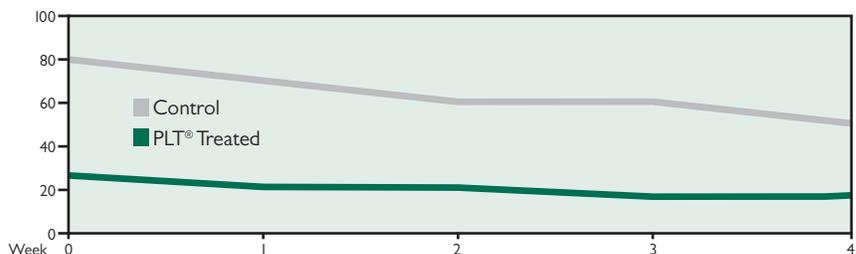
Protocol

Sixteen two-house broiler farms (32 houses total) were used for this trial with a major poultry integrator. All houses measured 40 X 500 feet. PLT® was applied in one house on each farm at a rate of 50-lbs/1000 sqft. The control house on each farm was left untreated. Litter age on the farms varied from 3 flocks to 10 flocks (litter age same in both houses on each farm).

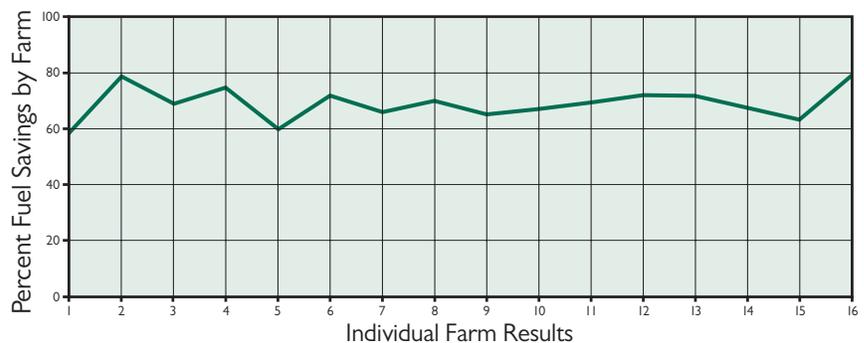
Breeder flock sources were paired between the houses on each farm to reduce variables. Ventilation systems were identical in both houses on each farm. Some farms had traditional summer ventilation with curtain sided houses and some farms had tunnel ventilation in both houses. Daytime outside temperatures varied from 64 F to 97 F during the trial period from April 1 through August 31.

Data was collected from each house before and after PLT® application and during the seven week grow-out.

Fuel Usage (gals.) During Grow-out



Fuel Savings from PLT® Application



Bird Performance: PLT® Versus Controls

Numbers represent averages for all 16 farms

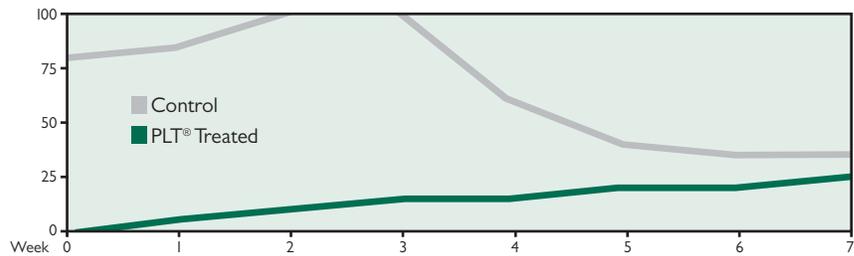
	PLT®	Control	PLT® Advantage
% Livability	97.40	95.50	1.90
% Total Condemnations	1.23	1.68	.45
% Airsac	.07	.29	.22
% IP	.05	.14	.09
Adjusted Feed Conversion	2.012	2.037	2.5 pts.
Total Bird Weight per house (lbs.)	241,051	233,774	7,277 lbs.

Birds in the PLT® treated houses gained more weight due to minimized stresses, especially during the critical brooding period. PLT reduced ammonia and acidified the litter, helping to reduce challenges. Birds in the PLT treated houses gained more weight because their energy (feed) input was used to add weight instead of fighting stressors.

Ammonia: A Year-Round Concern

It's important to note that this trial demonstrates that ammonia levels were very high, even during a time of year when most broiler producers feel that ammonia is not a concern. Ammonia reduces flock performance year-round.

Ammonia (ppm) Levels During Grow-out



Litter Cost Savings

PLT® dramatically reduces litter pH and ammonia levels. This allows for safe litter reuse at a savings of about \$1,700 per house in litter material costs.

Average Litter pH Immediately After PLT® Application

Control houses

pH 8.79

PLT treated houses

pH 1.55



Poultry Litter Treatment

The Science of Litter Management

Summary

PLT® isn't just for winter ammonia control. It's proven effective year-round for ammonia control, litter acidification, fuel savings, and improved bird performance. PLT more than pays for itself with improved bird performance, reduced culls and condemnations, extended safe litter reuse and fuel savings. Use PLT to dramatically cut production costs from one season to the next.

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