



Litter Life

Application and Trial Protocol

Whenever you try a new product in your poultry house, there is always some question of how to do it right and what to expect. The purpose of this document is to make it clear what you need to do to put litter life down properly and what you can expect to see once you have put it down correctly.

Disinfectants

We encourage you to disinfect your walls and equipment if that is part of your normal routine. Do not apply a disinfectant to the litter itself. Disinfectants kill bacteria including the beneficial biology in Litter Life. Litter Life is a competitive exclusion product. Litter Life will push harmful bacteria out of the litter in a much more effective manner than a disinfectant.

Insecticides

Some insecticides are known to cause issues with the effectiveness of Litter Life. In most cases Litter Life will make insecticides work much better because of the biological breakdown. However we have witnessed harsher pesticides actually kill microbiology

- We recommend applying insecticides, if necessary, as long after Litter Life application as possible.
- Most insecticides, such as Tempo, will effectively “pause” the work of Litter Life for 7 days. This happens due to our biology breaking down the insecticide.
- Litter Life itself will act as an insecticide and target the larvae of the darkling beetle.
- A 38% Pyrethrin or Permethrin works well.

Darkling Beetles



Litter Life is known to greatly hamper the Darkling Beetle. This phenomenon is not notable at first because the adult beetle is not killed. After a couple of days it is apparent that the beetles hate the biology in Litter Life as they begin to leave. They will settle back into the Litter Bed, typically by day four.

At the conclusion of the flock many farmers notice that there are fewer litter bugs to contend with. After a couple of cycles we often hear “I have my litter bugs under control for the first time!”

- Darkling Beetles do not like the Litter Life biological profile.
- Litter Life rapidly decays all litter and feed. This is robbing the litter bug of its food supply.
- Litter Life dries litter beds thereby hampering the larvae of the beetles.
- Litter Life contains diatoms which dehydrate and kill the larvae of the darkling beetle.

Procedure

- Apply Litter Life as soon as possible. Immediately after de-caking, windrowing or your standard procedure and BEFORE new bedding is added. Apply Litter Life at the rate of one half gallon per 1000 square feet. Do not windrow after initial application as stack temperatures greater than 130 degrees F will kill biology.
- Seal the house after the flock is removed to maintain higher temperature. Microorganisms are more effective in warmer temperatures. Ventilate prior to re-entry for service, or if moisture begins to condensate in the house.
- Dilute at a minimum of one gallon Litter Life concentrate per nine gallons of water. Many farmers double the recommended water making it easier to cover.
- After diluting, wait 30 minutes before applying. The principal is to fully oxygenate the live biology.
- Uniformly cover the litter bed. A spray applicator with a 20 foot boom can complete treatment in 10 minutes. Seal the house after application for at least 24 hours as microorganisms are more effective in warmer temperatures.
- Ventilate prior to re-entry for service, or if moisture begins to condensate in the house.
- Litter Life is flexible and safe. It can be applied along side live birds.

Expectations - *Things to look for . . .*

Initial Application

Litter Life has 24 adapted and indigenous species of biology that perform specific functions for the decomposition of poultry litter and uric acid.

- Some of the biology feeds on the uric acid and converts it into ammonia. Similar biology is naturally present in every litter bed. Litter Life accelerates the natural process.
- The key nitrogen converters turn the ammonia into ammonium nitrate (plant food).

There too many variables to predict the exact numbers of ammonia during a flock. Litter Life has been used in a great variety of situations and this has allowed us to see that Litter Life is very consistent with its results. This enables us to share the typical results you are likely to see.

In an average broiler house with 4 inches of built up litter, ammonia levels of 100 PPM are common.

Upon application the active biology in Litter Life begins to aggressively break down the uric acid in the litter. This produces a huge quantity of ammonium, which then gasses off as ammonia.

Ammonia levels will actually increase on day two and begin to fall by day three.

A second spike is again seen around day seven. This phenomenon is due to the life cycle of the nitrogen converters. It is not seen again.

After the seventh day spike ammonia level will begin to plummet and stay low for long periods of time.

Subsequent Applications

Subsequent applications is where Litter Life really shines. Starting ammonia levels will be much lower on the second application, we have seen second application starting ammonia values as low as 30 ppm.

The patterns will mimic the first application of Litter Life but the spikes will be greatly reduced. Most likely at the 10 day point on the second flock ammonia levels will be 10 to 15 ppm and remain low.

Besides ammonia control, Litter Life has a number of benefits

Other areas to look for . . .

Less Disease

- The competitive exclusion capabilities of Litter Life push diseases out of the poultry house. Farms using Litter Life are less likely to see dermatitis and other skin conditions. The chance of contracting serious conditions such as LT, Clostridium, Campylobacter and Salmonella are also greatly reduced.

Less Cake

- Litter Life has been shown to dry litter significantly. Growers using Litter life have reported 50% less caking when compared with untreated houses.

More Valuable Litter

- Since Litter Life converts the ammonia in the litter to ammonium nitrate, a common fertilizer, the treated poultry litter is a more valuable product. Some lab tests report nitrogen values 1.5% higher.

Reduction in Ventilation

- Follow your normal ventilation program before and after bird placement. After two cycles of treatment you will likely be able to reduce ventilation run time.

