



HOW TO MANAGE THE LITTER ?

When birds have access to litter, it is necessary to maintain its quality. Birds like dust bathing, scratching, and sleeping on it, so a bad litter quality or management will have a negative impact on performance. The type of litter does not have a huge impact, may it be rice hulls, straw, wood chips... all can be successfully used, if the quality is good.

GENETIC POINT OF VIEW

There is no link between genetics and litter quality.

ORIGIN

The most frequent problem observed is wet litter. This could be due to water waste by birds. However, a poor inspection or management of the water system could provide some leaks or overflow. A low faeces quality could also imply a litter too wet in certain areas. In system with deep litter, temperature could also result to many risks: insects' development, difficulty to dry some areas, litter becomes uncomfortable for birds... During the rainy season, in some countries with nearly 95 % of Relative Humidity, managing litter problems becomes increasingly challenging.



Rice hulls litter

MEASURES TO BE DONE

- Water line inspection (leak and pressure)
- Sodium and chlorine level (feed and water)
- Efficiency of water treatment (at the end of the water pipeline)
- Frequency of water lines flushing
- Efficiency of the enzymes added
- Feed and water quality in term of contamination (Enterobacteriaceae, mycotoxins, and heavy metals)
- Ventilation

MANAGEMENT IMPACTS

Use the appropriate litter for your breeding and production area.

- Particle size, sanitary level, and litter height
- Litter height is crucial, use as little as possible (deep litter can be heated)

Avoid any water leaks, overflow, or too high or too low pressure.

- Inspect the water system daily, and repair it, if necessary, as soon as possible.



If some specific areas are more wet than others, it is possible to:

- Regularly remove the hard, crusty litter under the water system
- Install cups under the nipples (to avoid water waste and wet litter)
- Check the water pressure daily during flock inspection (entrance, middle and end of house)
- Inspect the ventilation, the smoke candle can detect any failures of airflow.
- Litter conditioner could be used to catch the water (mainly clay like Sepiolite)

A low water quality or water treatment issue will affect gut health and in consequence the dropping quality. To avoid wet droppings, the following should be observed:

- Treat the water at farm level (chlorination is the most common technique)
- Clean / flush the water pipes regularly (at least once a day in hot conditions)
- Avoid any algae or biofilm inside the water system (use a specific treatment if necessary)

The natural behaviour of birds is to scratch the litter and take dust bathe regularly. It is helpful to encourage them to move the litter by themselves:

- Grit or cereals on the litter, especially during the afternoon:
 - Grit (insoluble stone particles of 2 to 4 mm): 1 to 3 g per week per bird, distributed over 2 or 3 days
 - Grain (broken maize, whole wheat, barley ...): 1 to 3 g per bird every day, or every other day
- Oyster shell or coarse limestone, always during the afternoon at 1 g per bird/day (it is also very useful to improve eggshell quality)
- Fibre sources could be added directly on the floor such as alfalfa or straw balls

NUTRITION IMPACTS

An imbalance nutrient compared to the birds' requirement could imply poor droppings quality.

- Check our Nutrition Guide and adjust according to your performances with your local nutritionist
- The main nutrients to check are protein, Fibres, Amino Acids, and fat quality

Feed provides salt like sodium and chlorine, but water can also contribute a big quantity of salt. Be cautious with salted water, especially when using well water.

- Adjust the salt in the feed according to the salt content of the water.

- If water drilling is too rich in salt, stop using it and use the human water system.

Feed contamination could negatively impact gut health, and by consequence the litter quality. The following must be checked regularly:

- Used toxin binders and its dosage to avoid mycotoxin contamination
- Cooking quality of raw materials (to destroy undesirable substances, like lectins in soya for example...)

Soluble fibres (N.S.P.) can increase the viscosity of the gut which may prevent the birds from properly assimilating all the nutrients in their diets.

- Use Glucanase and/or Xylanase to avoid high viscosity (according to raw materials)
- Or decrease the level of raw materials with high content of N.S.P.

SANITARY IMPACTS

Diarrhea and all the respiratory diseases will degrade the litter quality.

CONCLUSION

Poor litter quality could always be improved. In extreme cases, removing the hard, crusty litter and refreshing it with fresh material is necessary. Good litter contributes to the overall health of the birds, leading to increased production. Maintaining high quality litter is always beneficial in terms of profitability.

For more details, consult our website with the nutrition guide and all the management guides, and our NovoCenter.



Litter with feather