Comparison of Broiler Litter to Commercial Fertilizer

What’s in broiler litter?

In addition to N, P and K, each ton of broiler litter contains approximately 36 lb of calcium, 7 lb of magnesium, 6 lb of sulfur, 0.9 lb of copper, 0.8 lb of zinc, 0.8 lb of manganese, and 2.9 lb of iron.

What’s the cost?

<table>
<thead>
<tr>
<th>Fertilizer Type</th>
<th>Avg. cost per pound of N, P2O5, and K2O delivered and spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-46-0</td>
<td>$0.60</td>
</tr>
<tr>
<td>46-0-0</td>
<td>$0.40</td>
</tr>
<tr>
<td>0-0-60</td>
<td>$0.20</td>
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</tbody>
</table>

Avg. cost per ton litter:
- $40
- $30
- $20
**Problem** – Grass needs nutrients in a ratio of 3-1-2 or 3-1-3 nitrogen, phosphorus (P2O5) and potassium (K2O). Broiler litter usually has an analysis of about 2-3.5-2.

**Question** – How do I best use broiler litter as a nutrient source for my pasture or hayland?

- Insist that the seller provide a litter analysis to you, or send in a sample yourself so that you will know how many pounds of nutrients you are applying.

- Soil test before you buy fertilizer from any source. **It's too expensive to guess!**

- Always try to get as close to the recommended rate as possible, fertilizer costs too much to put on nutrients you don't need, regardless of the source.

- If your soil test says you have very low, low or medium levels of phosphorus in your fields use broiler litter to meet the recommended amount annually, or put out 2 times the recommended phosphorus every other year. Supplement with commercial nitrogen and potassium, if needed.

- **If you already have high or very high phosphorus and/or potassium soil test levels, don't put out phosphorus or potassium from any source.**

- If you are going to overseed your pasture with clover and your soil test phosphorus is very low – medium, put out the recommended amount of litter by August, so that there will be enough time for some of the organic material in the litter to become available by fall.

- Don’t expect to see a quick response from the litter application. Since litter is an organic source of nutrients, it takes a little time for the nutrients to become available.

- It is a more efficient to use broiler litter as a phosphorus source and supplement with commercial nitrogen and potassium to meet crop needs. If you use litter to meet the nitrogen requirement of most grasses you will be grossly over applying phosphorus, which could result in water quality problems in the future.

- **Don't forget lime!** If your soil test calls for lime put it on. Studies have shown that up to 70% of the nitrogen you apply may be lost if your soil pH is 4.5.

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