Benefits of using Poultry Litter
The benefits of poultry litter as a fertilizer far outweigh the smell. Many farms are making the switch to this much more cost feasible fertilizer. Beyond cost, poultry litter is high in macronutrients that are immediately available to plants. According to a study by Oklahoma State University, Alabama “As is” Broiler Litter Fertilizer Concentration is 78 lbs/ton of nitrogen (N), 74 lbs/ton of phosphorus, and 50 lbs/ton of potassium. Nutrition concentrations like this make poultry litter highly salt after and very valuable to crop producers.

Of course before applying litter to any field or crop it is recommended that a soil test is done to determine the soil nutrient needs, a nutrient analysis is done to determine the nutrient concentration in the available poultry litter, and develop a poultry litter application plan.

To avoid polluting the ground water supply and nitrogen dumping only apply the amount of poultry litter recommended in the soil test results.

Where can You Get Poultry Litter
Alabama has a certified animal waste vendor program. This program certifies the card carrying member is knowledgeable of Alabama Department of Environmental Management regulations and appropriate techniques for handling, managing, transporting, storing, and applying animal waste to the land. These people are certified and trained by the Alabama Department of Agriculture and Industries.

For an updated list visit the Extension Alabama Animal Waste Management Web site at http://www.aces.edu/dept/aawm/CAWV.php or call (334)844-1505.

Composting
Composting is the decomposition of organic waste material into organic fertilizer (Githinji). In this case your organic waste material is poultry litter. It is advised that poultry litter be well composted before it is spread in your fields or around standing crops or trees. Non-composted litter can burn crops and roots, loses it nitrogen in the air, and may pollute the ground water supply.

There are six subject areas that are required for good decomposition; they are aeration, moisture, particle size, heat, fertilizer, and ingredients.

Aeration
Oxygen is required for microbes to decompose organic material. Without it you can end up with foul odors. You should mix your compost 1-2 times per month.

Moisture
Microbes also need adequate moisture to decompose organic material. A dry pile will not decompose efficiently and lead to foul odors. Moisten the pile periodically.

Particle size
The small the organic waste material particle the faster it will decompose.

Heat
As microbes decompose the organic matter heat is given off. A success pile, “hot” pile will give off temperatures between 140 to 160 degrees Fahrenheit.

Fertilizer
If you were composting organic material other than poultry litter, you would want to consider the ratio of carbon material to nitrogen material. Composting
material low in nitrogen such as sawdust and straw will require you to add nitrogen fertilizer to engage proper decomposition. Poultry litter is already high in nitrogen.

**Ingredients**
Decomposition always works better when there is a good carbon to nitrogen ratio.

Composting can be done various structures. Three structures often used are:

1. Compost tumbler
2. Wire mesh compost bin
3. Freestanding Pile

Freestanding piles work best decomposing large amounts of poultry litter

Once you have a well decomposed litter, it can be spread without fear of burning your plants or polluting the ground water.

**How to Apply Poultry Litter**
Poultry litter should be spread on the field two to four weeks prior to planting, it is recommended that after the litter is spread it be tilled into the soil about six to eight inches to avoid nitrogen loss, leaching, or run-off.

When working with crops that are already standing you can consider “side-dressing” during late spring or early summer. The compost should be spread about an inch from the stem of the plant.

When using compost on fruit and nut trees, spread fertilizer at the base of the plant about six to eight inches from the truck and do not incorporate into the soil, as this may disturb roots that are close to the surface.

Poultry litter can be used on grass fields as well. Litter can be spread on grass fields anytime just before or during the growing season. Spreading litter is not recommended during the winter months.

Contact your county agent or Agriculture Specialist to determine the rate of application. There may be regulations on poultry litter application in your area.

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