

A Way to Use Poultry Litter Ash Efficiently

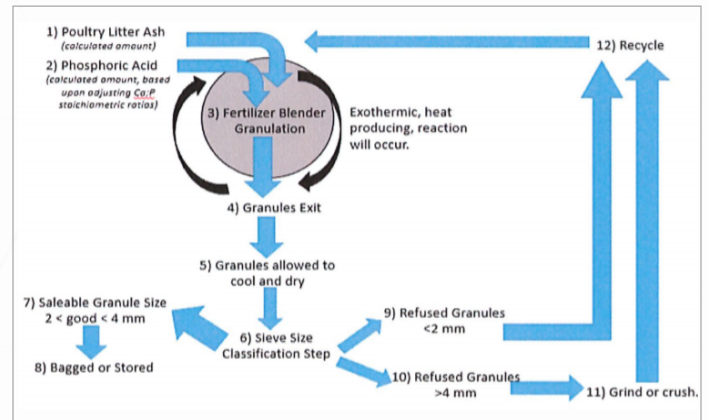
VTIP 20-052: “Granulating Poultry Litter Ash and Similar”

THE CHALLENGE

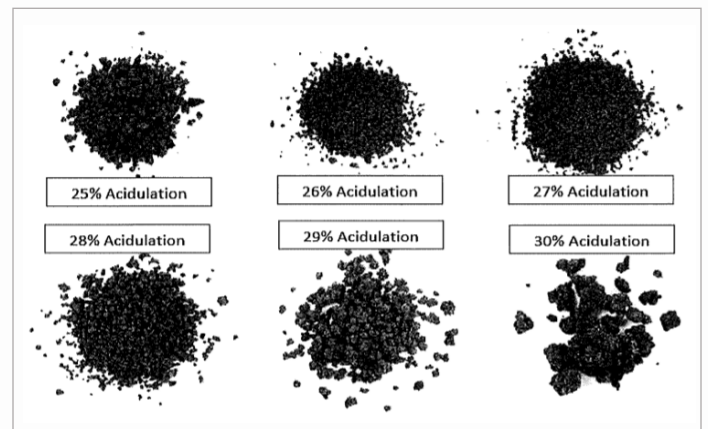
Poultry litter ash (PLA) is a co-product from manure-to-energy systems, using poultry litter as a fuel source. PLA concentrates phosphorous nutrients to up to 10 times. It was introduced as a way to reduce waste and use the by-product as a useful fertilizer. But high conversion temperatures reduce the nutrient solubility and produce small particulate matter, thus reducing its usability.

OUR SOLUTION

In an effort to redistribute manure nutrients and increase usability of PLA, Mark Reiter and his team have invented a granulation process for PLA that helps produce an enhanced fertilizer source. The Granulated Poultry Litter Ash (GPLA) targets multiple agronomic problems associated with PLA, like improving land application, increasing total and water soluble P, transportation and storage, and also conversion of PLA into convenient fertilizer granule form.



Schematic diagram of granulating process.



GPLA acidulation trials.



CONTACT:

Grant Brewer
grantb76@vt.edu
 540-231-6648

