

SUSTAINABILITY

Pineapple growers are always looking for ways to grow bigger, healthier fruit and decrease use of chemicals.



Comparison of pineapple size without compost (top) and with compost (bottom).

An Unlikely Marriage

Dairies accumulate large amounts of animal waste and have few options for its disposal. Pineapple growers are always looking for ways to grow bigger, healthier fruit and decrease use of chemicals. What could these two realities have to do with each other? CTAHR dairy specialist, C. N. Lee, had an idea. Why not apply composted dairy waste to pineapple fields before planting? Couldn't this be a classic win-win for both parties? First, a grower had to be convinced to try it. The grower was skeptical, thus the dairy manager had to donate the compost and Lee had to lend a spreader. Initial results looked good but needed confirmation. CTAHR researchers Russell Yost and Adam Reinhart tested both the fruit yield and the soil. Their results showed that substantial quantities of composted dairy manure applied as a preplant fertilizer produced higher total pineapple yields and higher quality fruit (increased average pineapple weight), and reduced environmental contamination (nitrate leaching) as compared to using only inorganic fertilizers. The grower is safely reusing locally produced compost to increase production and simultaneously reducing potential contaminant flows into a major drinking water aquifer. The grower is now so satisfied that an unanticipated new problem has been created: there may not be enough dairy compost to meet the grower's needs!