

Dairy Manure as a Marketable Fertilizer

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Dairy Manure as a Marketable Fertilizer

Pyrolysis of screw-pressed dairy manure

Biochar: 2.0% P_2O_5 , 2.6% K_2O , and 2.0% MgO

>50% carbon persistence over 100 years

Passes all amendment tests

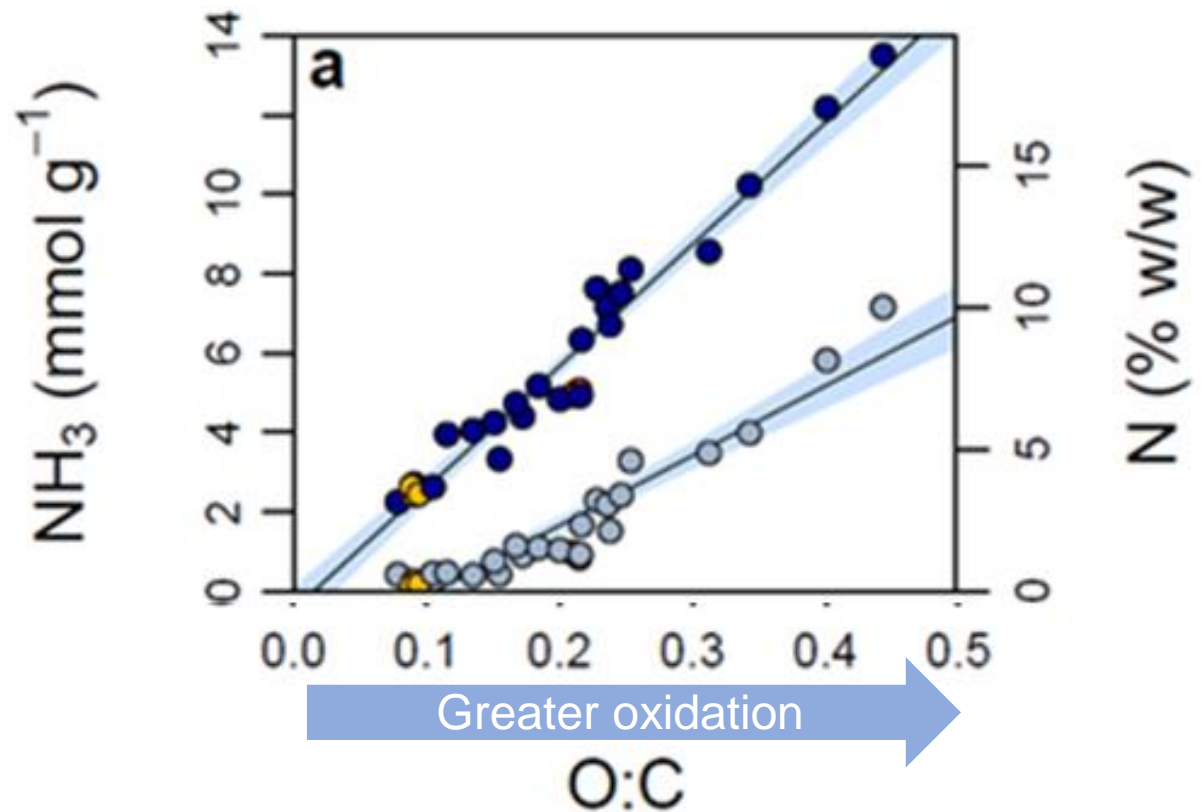
Replacing peat moss
in commercial potting
mixes



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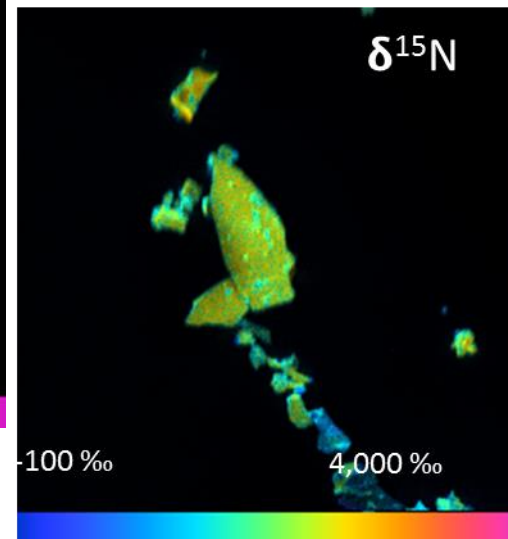
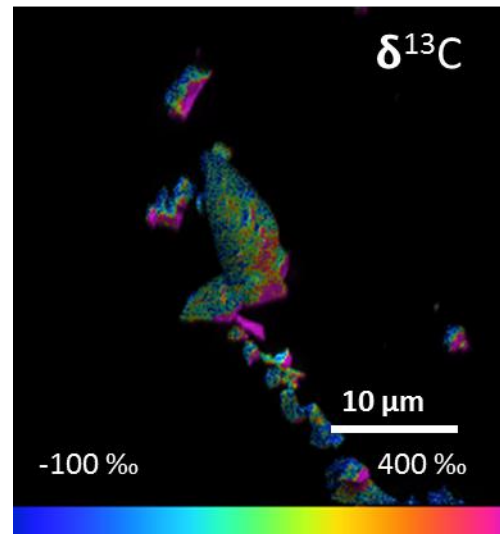
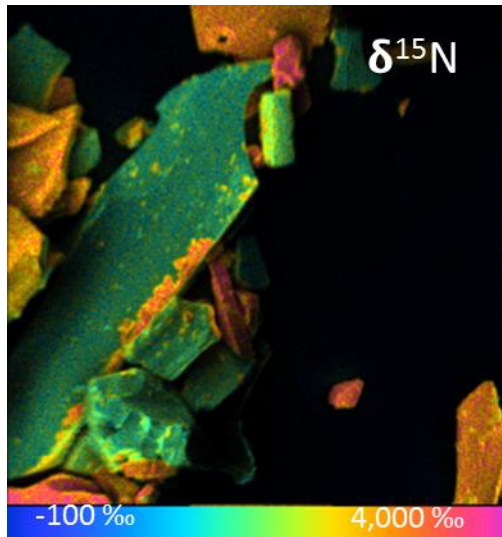
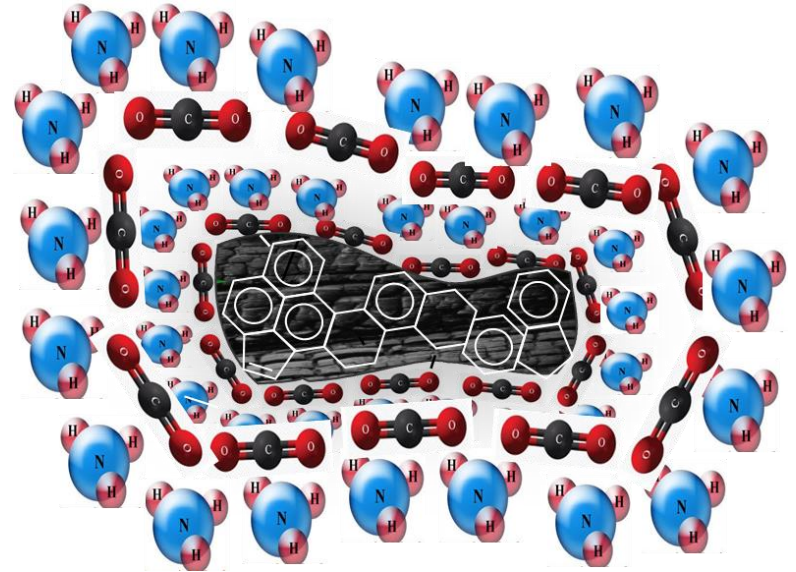
High ammonia gas interaction with oxidized biochars (beyond just physical adsorption)

Biochars with 18% nitrogen



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Ammonia gas adsorption enhanced by 80% through CO₂ layering



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Product development at scale relevant to industrial production

Cornell Leland Pyrolysis facility opened 2018

www.pyrolysis.cals.cornell.edu

