

# On-Farm Biomass Pretreatment

## What is this technology?

Investigating the ability of on-farm pretreatments to improve enzymatic degradability of cellulose and hemicellulose in biomass at the biorefinery.



## Wet storage of biomass has some advantages:

- Lower risk of fire.
- Reduced harvest costs.
- Improved feedstock susceptibility to enzymatic hydrolysis.

## Wet storage also offers a unique opportunity for on-farm pretreatment of feedstock:

- Chemical or biological means available
- Treat at ambient temperature and pressure
- Allows prolonged reaction times.

## On-farm pretreatment has the potential to:

- Reduce volume of feedstock being transported.
- Reduce volume of feedstock being stored at biorefinery.
- Reduce pretreatment costs at the biorefinery.
- Add value to feedstock/provide better return for farmers.

## To date we have tested:

- Acid and lime pretreatment
- Ozonolysis
- Novel enzymes

## Moving Forward

We would like to partner with an entity with sufficient capacity to optimize fermentation of pretreated material at pilot and/or full scale.

## Contact Information

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