Assessing the influence of rice roots and root exudates on nitrogen mineralization in soil using a novel protocol

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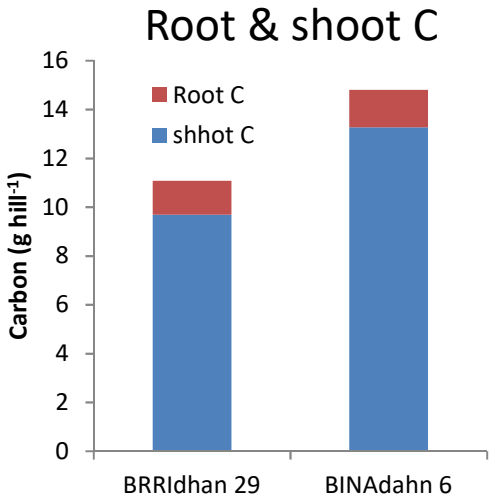
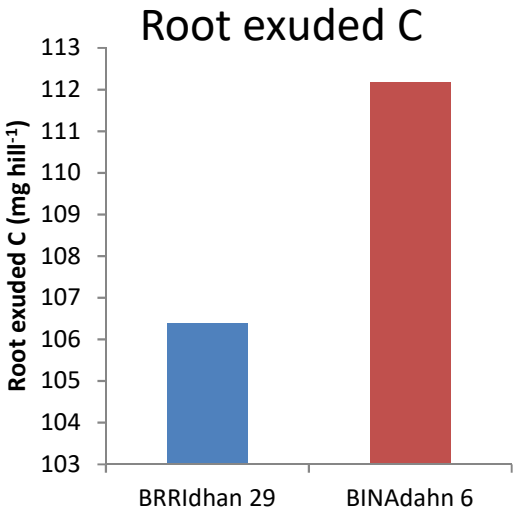
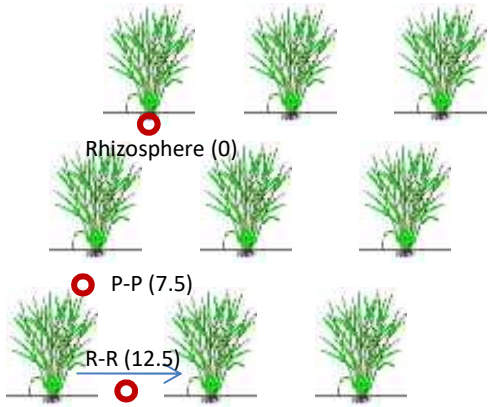
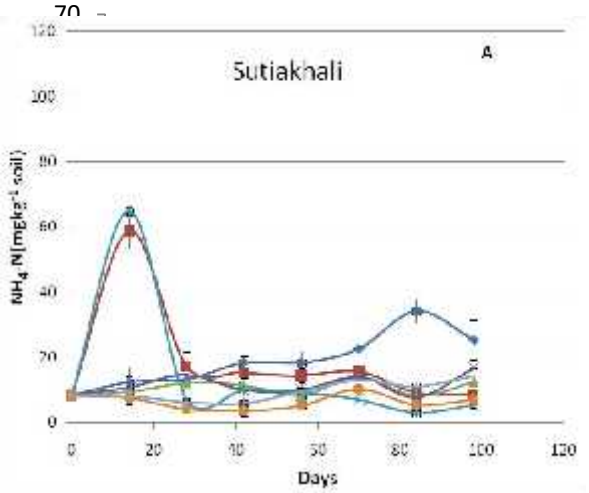
Major Findings

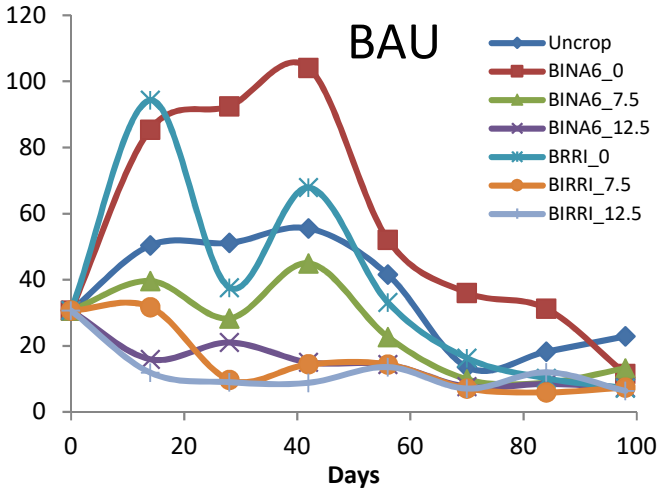






BINA 6 > BRRI 29





- **BAU > Sutiakhali**
- **BINA 6 > BRRI 29**
- **Rhizosphere>> bet^{n} plants ≈ bet^{n} rows**

Mineral N levels in soils incubated with and without rice crop

Conclusions

- Root C-exudation seems relatively independent of rice variety and was about 1 mg C $hill^{-1}$ day^{-1}
- Rice plants promote soil mineral N release relative to uncropped soil at the BAU site but not at Sutiakhali
- Rice rhizosphere mineral N evolved at higher levels than in bulk soil, suggesting that exudation locally promoted soil N mineralization


THANKS