Oromia Agricultural Research Institute

Batu Soil Research Center

Biochar based bio-fertilizer Production

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Adama

INTRODUCTION

Biochar?

- a charcoal-like material,
  - improves soil health,
  - crop yields, and
  - combats climate change.

Cont…..

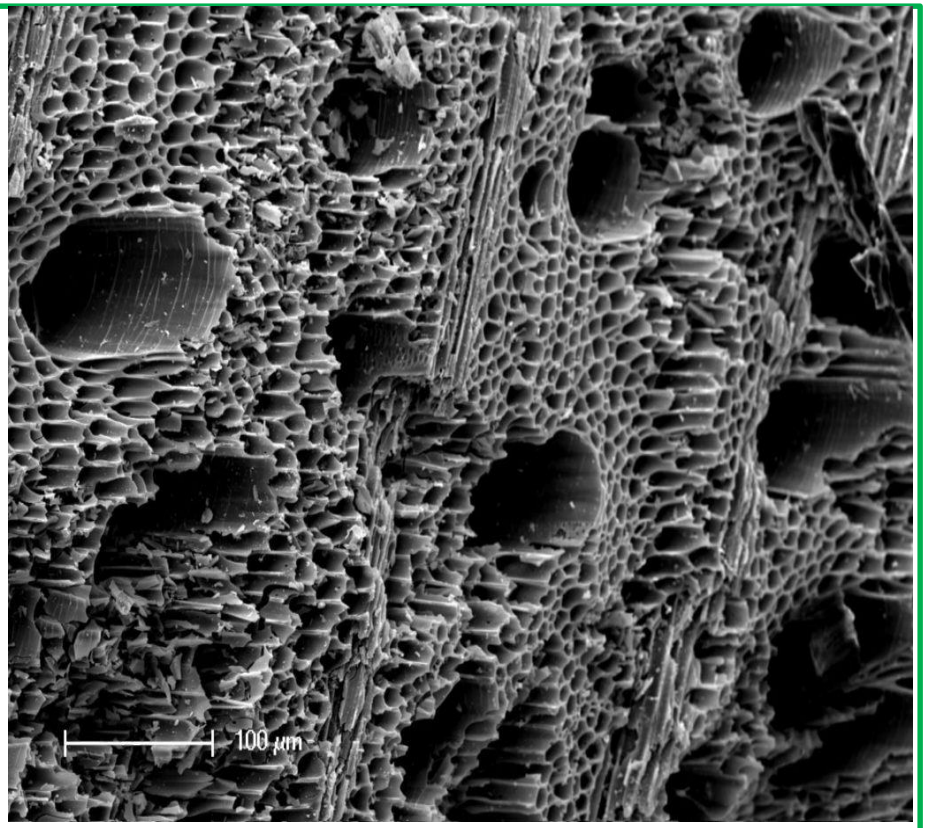
- **Boosts soil health by**
  - enhancing water retention,
  - aeration, and
  - nutrient holding capacity.

Reduces fertilizer runoff by

- acting like a sponge for nutrients.

Works even better

- when combined with biofertilizers.



Cont…..

Produced sustainably:-

- ❖ through pyrolysis
  - ✓ (heating biomass without oxygen).

Methods

- Biomass feedstock preparation
- Pyrolysis
- Biochar characterization
- Compost preparation and collection
- BBF formulation
- Quality Control
- Distribution

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Material collection

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Mass pyrolysisi

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Mass production

- Biochar Plan= 50 tone
- achievements= 55tone

Milling(3-5cm)

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Moisture testing(30-35%)

Compost collection

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Weighing (30%Biochar + 70% compost)

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Co-composting(BBF)

Packed biochar and BBF

Cont…..

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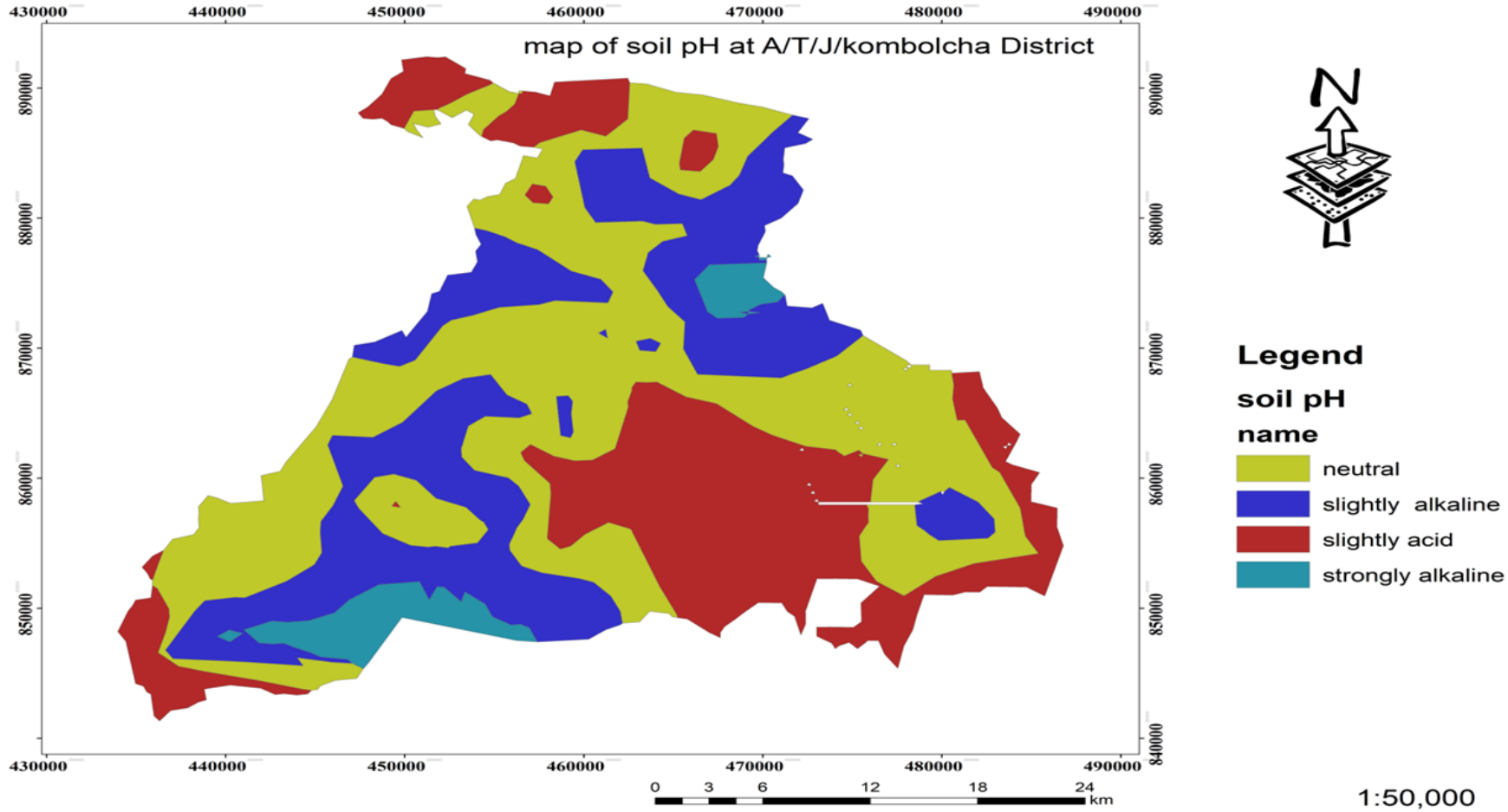
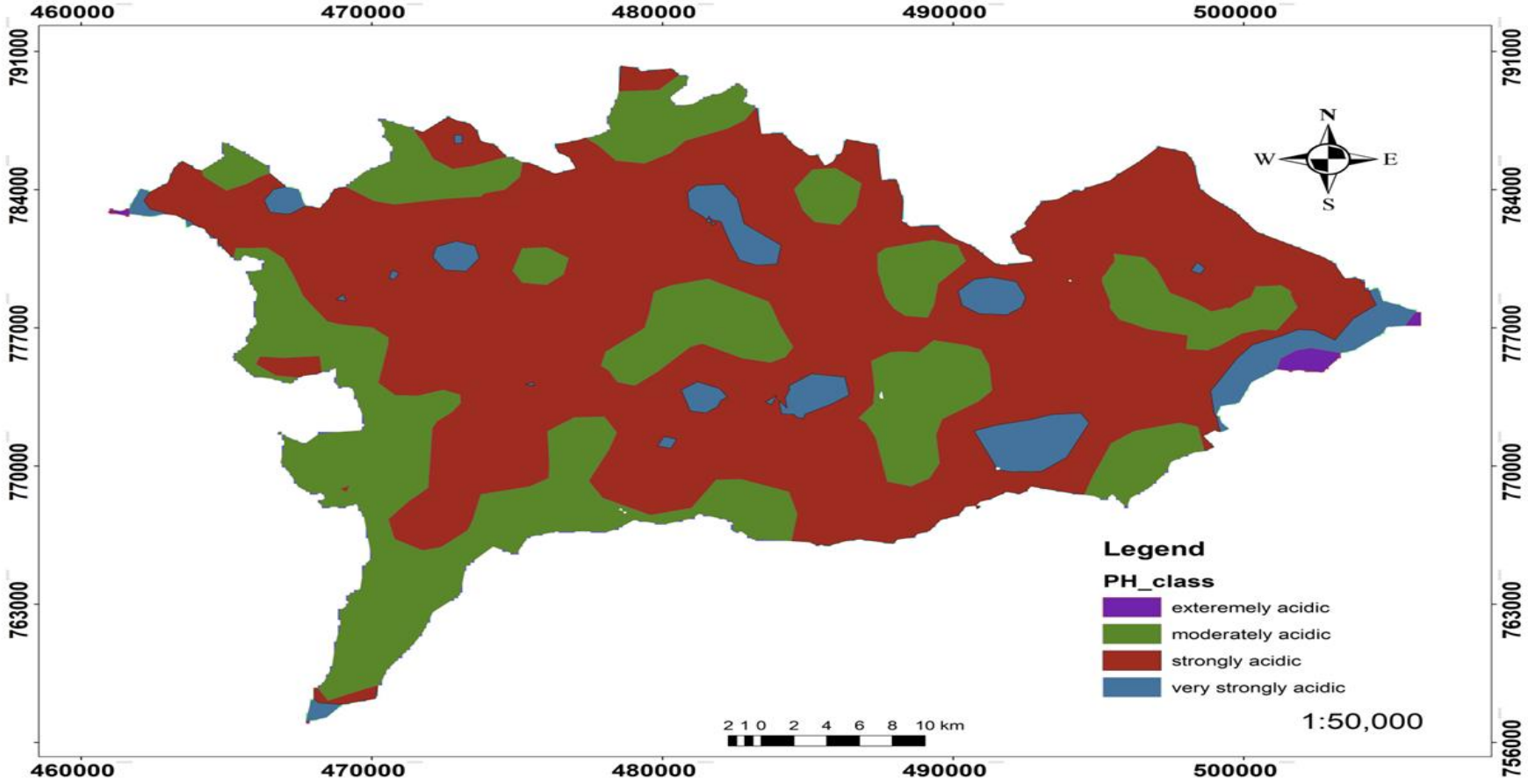
Soil Monitoring at ATJK



Soil Monitoring at Kofale



Suction cup testing in lab and burring at field

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THANK YOU !