



The selection and characterization of biochars for three agricultural processes



SCAN ME

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Preselection criteria

- Moisture content < 30 wt.%
- Ash content < 15 wt.%
- Fixed carbon > 15 wt.%
- Heavy metal contamination

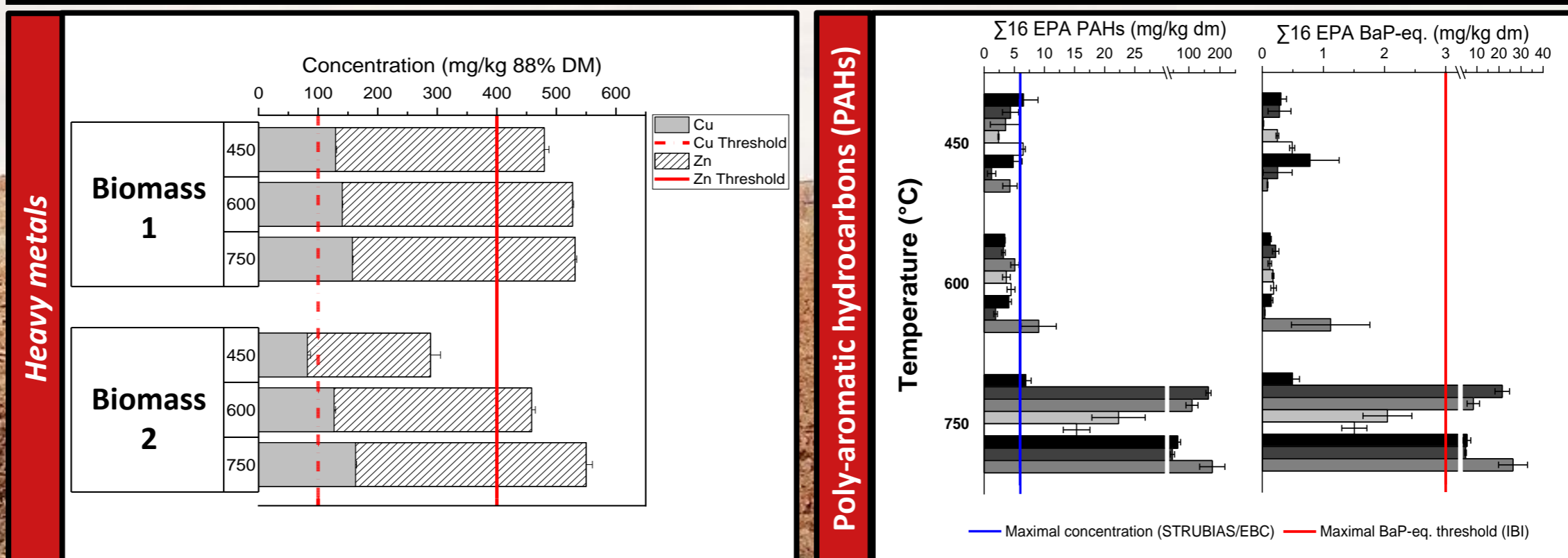


40 biomass streams



8 biomass streams

BIOCHAR TOXICITY ASSESSMENT OF 24 BIOCHARS



P
Y
R
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L
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Anaerobic digestion



- High NH₄⁺ retention
- High pH buffering

Peat substitution



- Low pH buffering
- Low nutrient leaching
- High water-holding capacity

Marginal soil remediation



- High metal sorption
- High pH buffering
- High water-holding capacity

LARGE AND PILOT SCALE EXPERIMENTS (WP2, WP3 & WP4)