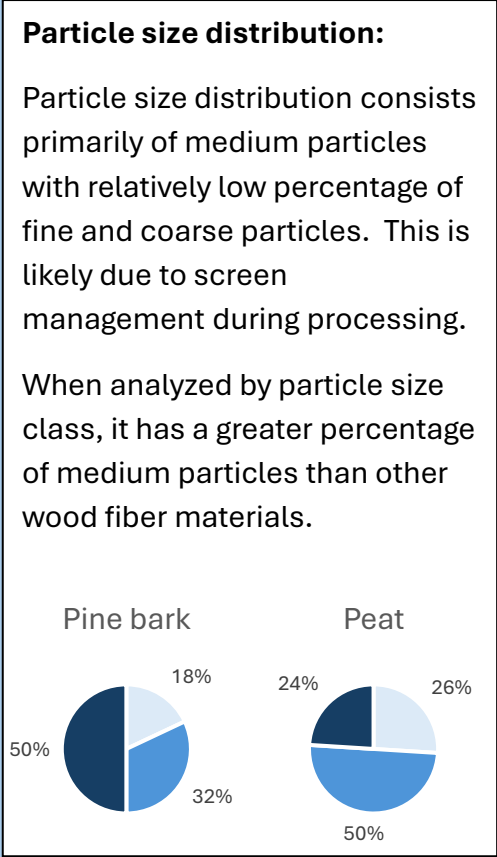
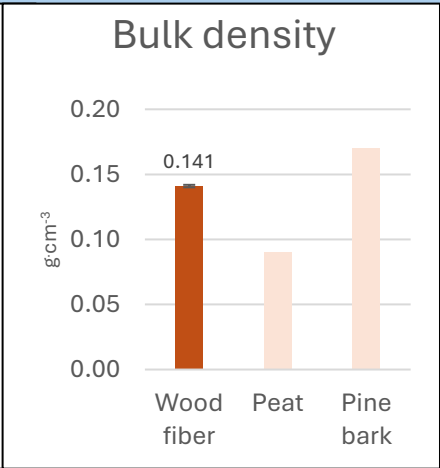
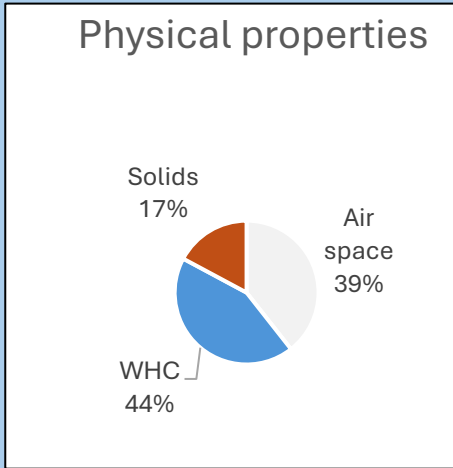
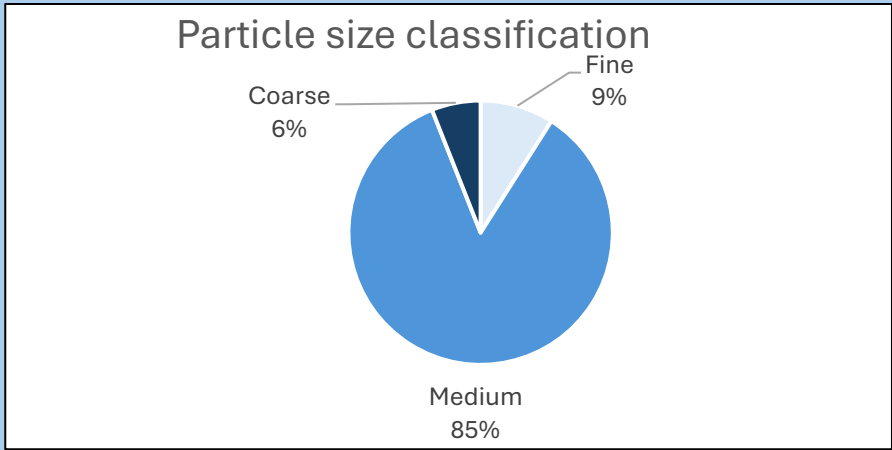
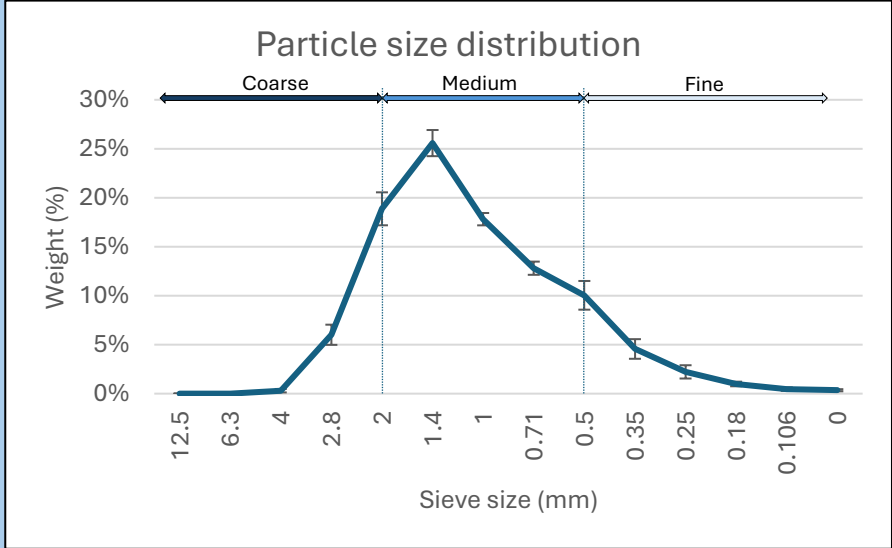


Product: Ground pine wood (S3-14)

Source: Hammermilled pine from Plumas, California.
Date received: 5/6/2025
Moisture content upon receipt: 8.7%
Plant species: *Ponderosa pine (P. ponderosa)*

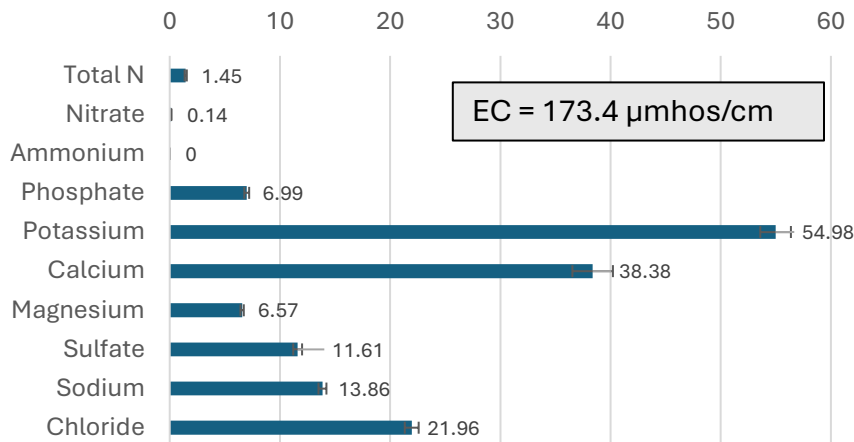
- Processing equipment: hammermill for olive oil extraction
- Nominal equipment size: ¼ inch screen size



Physical properties:

Total porosity is relatively high at 83% (but typical of wood fibers). Of that, this substrate has very high air space and low water holding capacity. Measured bulk density is typical of ground wood products.

Water extractable nutrients (mg·L⁻¹)



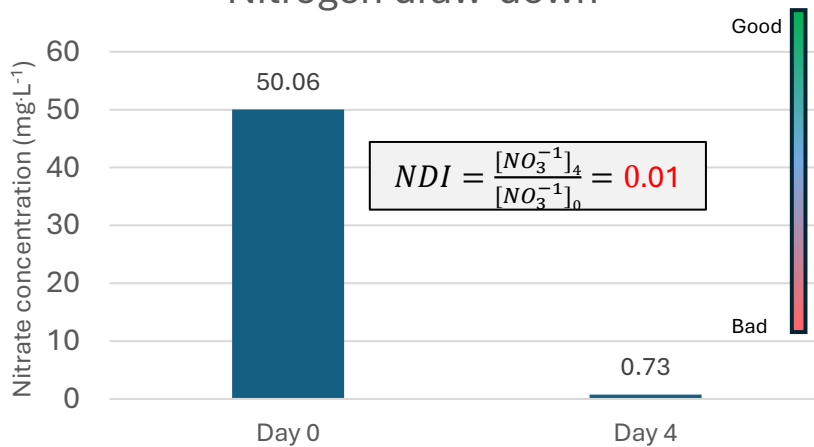
Water extractable nutrients:

Water extractable N and P are low, typical of most wood-based substrates. Extractable K is higher, but well within normal ranges (<300 mg·L⁻¹).

Ca and Mg are typical of wood-based substrates, and the Ca:Mg ratio is ideal.

Na and Cl are sufficiently low.

Nitrogen draw-down

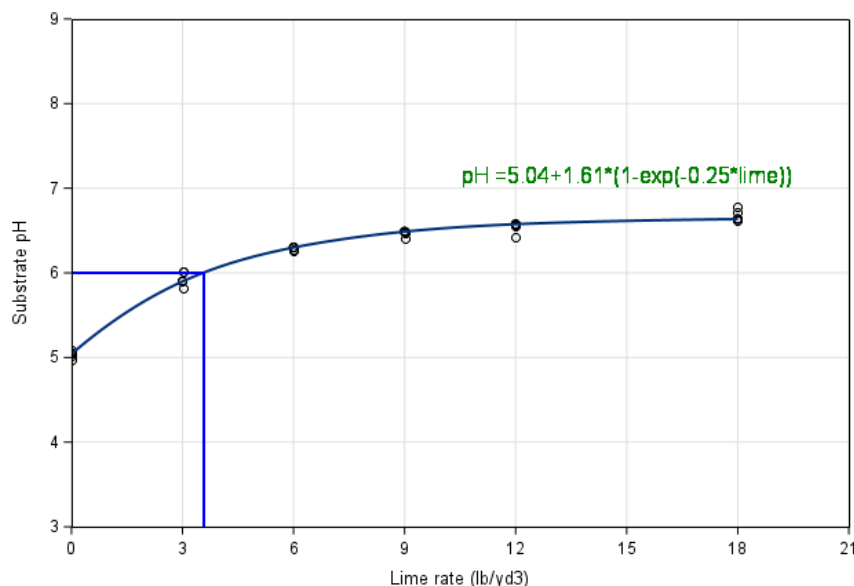


Nitrogen draw down index :

Nitrogen draw-down index (NDI) is about 0.01, indicating a high rate of N immobilization, typical of wood-based substrates. Extra N will be necessary for proper crop growth.

This value is based on 48.9 g dry mass and 0.141 g·cm⁻³ bulk density.

Substrate pH response to lime rate



Lime rate titration:

Lime calibration curves suggest a moderate pH of the substrate alone (pH 5.04). Lime amendment can raise pH as high as 6.6.