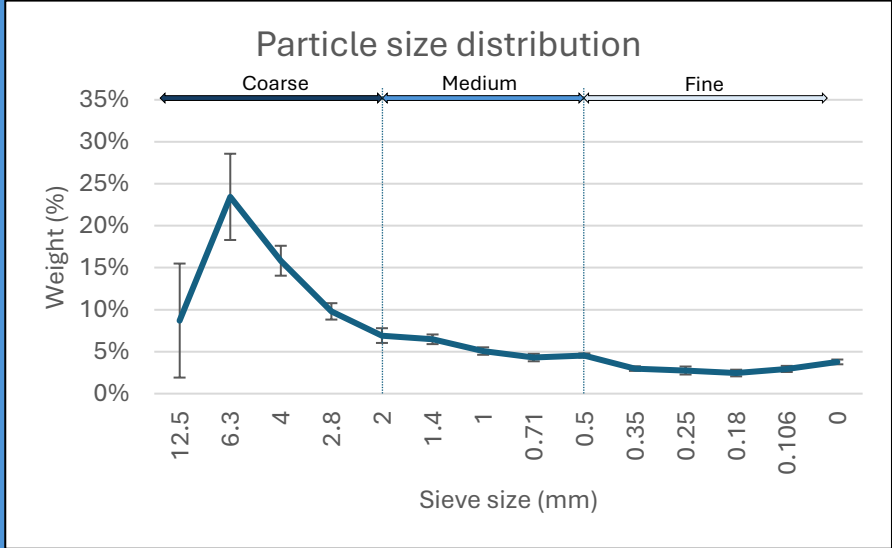


Product: Palm fiber (S3-15)

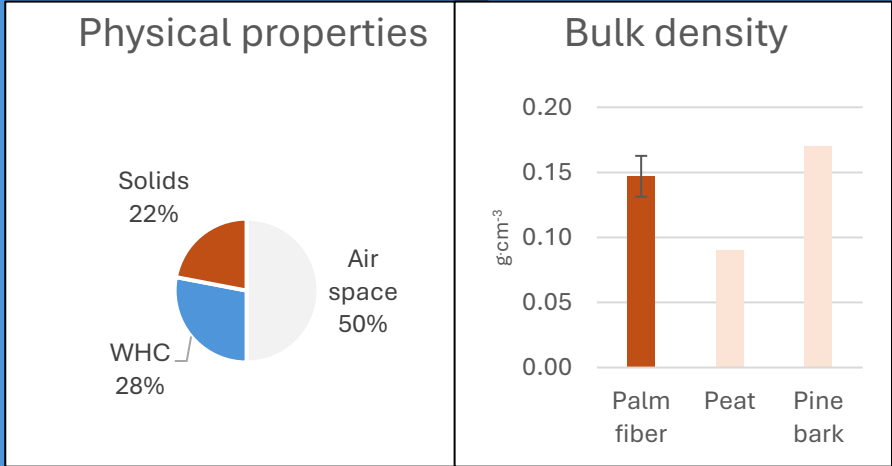
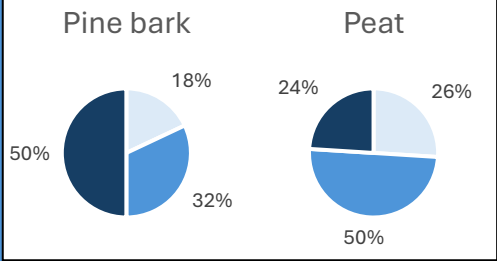
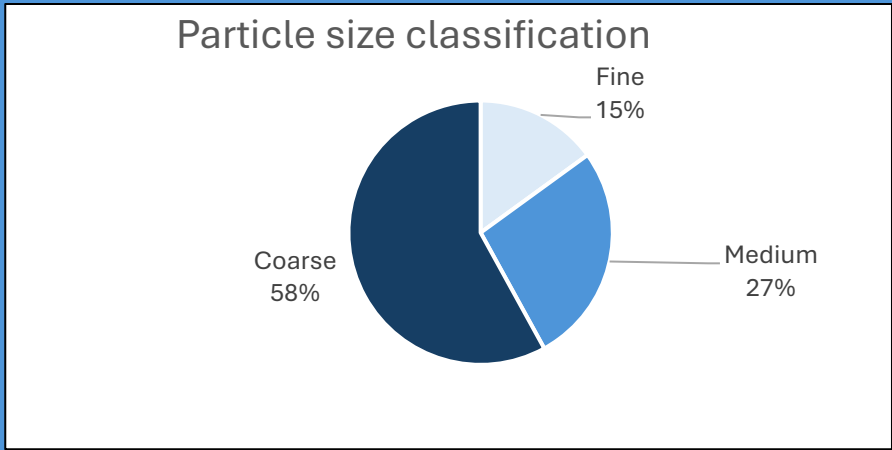
Source: California
Date received: 9/2/2025
Moisture content upon receipt: 19.2%
Plant species: *Washingtonia robusta* and *W. filifera*
Processing equipment:
Nominal equipment size:
Raw material particle size at processing:
Raw material moisture content at processing:



Particle size distribution:

Particle size distribution skews towards coarse particles. This material might benefit from additional grinding or screening before use in any but the largest container sizes.

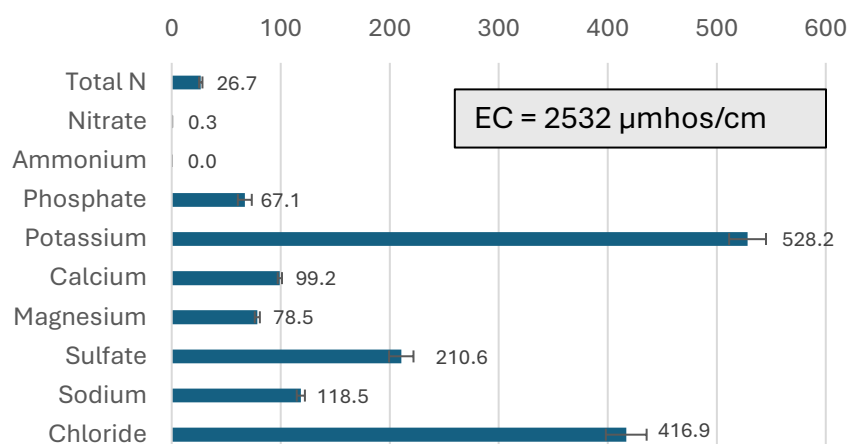
When analyzed by particle size class, it has a distribution similar to pine bark, albeit with a higher percentage of coarse particles (and some very large particles).



Physical properties:

Total porosity is 78%. Of that, this substrate has very high air space and very low water holding capacity. Bulk density is close to pine bark, and typical of other wood and bark substrates.

Water extractable nutrients (mg·L⁻¹)

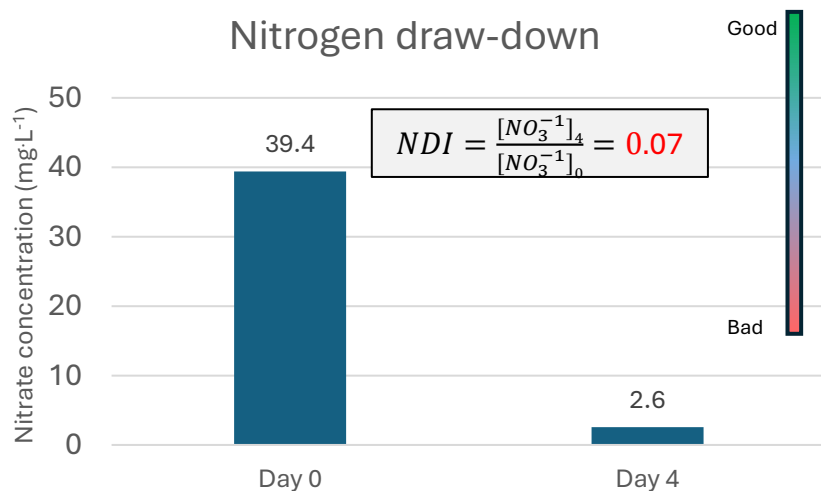


Water extractable nutrients:

Water extractable N forms are low. Extractable P and K are both very high. Chloride is also notably high. This is apparently typical of palm biomass due to plant physiology.

EC of these palm fibers is high relative to other raw substrate components.

Nitrogen draw-down

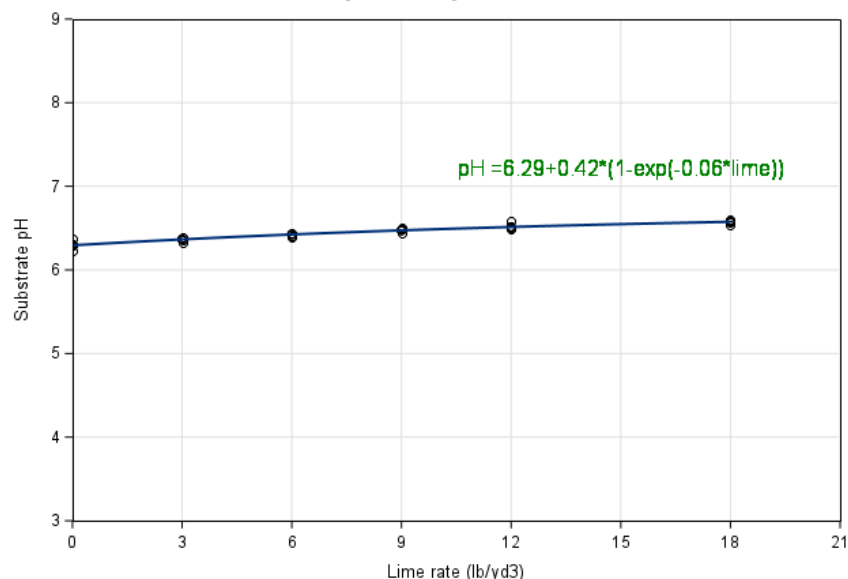


Nitrogen draw down index :

Nitrogen draw-down index (NDI) is about 0.07, 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 51.2 g dry mass and 0.147 g·cm⁻³ bulk density.

Substrate pH response to lime rate



Lime rate titration:

Lime calibration curves suggest a relatively high pH of the substrate alone (pH 6.29). Lime amendment provided only a minor increase in pH up to 6.6. This may be due to the coarse nature of the palm fibers, limiting the lime reaction as a result of reduced water holding capacity.