

Wood pH Protocol

This is adapted from Geffert et al. (2019) using the cold extract protocol of sawdust
Forests 2019, 10(10), 852; <https://doi.org/10.3390/f10100852>

1. Make up the pH matrix solution:
5mM CaCl₂ solution = 0.146g/200 ml
2. Weigh out ~400 mg of sawdust into a glass or plastic 25 ml scintillation vial
3. Add 20 cm³ of CaCl₂ solution per gram of sample - i.e., 8 ml if using 400 mg. Using less than 400 mg is problematic as it becomes more difficult to immerse the pH probe.
4. Vortex the vial for 20 seconds and allow to stand overnight (up to 3-4 days is fine)
5. If the sawdust has not been ground to powder then filter the sample into a fresh vial using nylon mesh (we use two layers of ~ 1mm pore size mesh).
6. Measure pH.

For small wood samples:

Using the pH microprobe:

Same methods, however use Eppendorf tube with 50 mg of wood and 1 ml of CaCl₂ solution.