

Product: Sphagnum peat (S3-17)

Source: New Brunswick, Canada

Date received: 12/5/2025

Moisture content upon receipt: 48.8%

Plant species: *Sphagnum spp.*

Processing equipment:

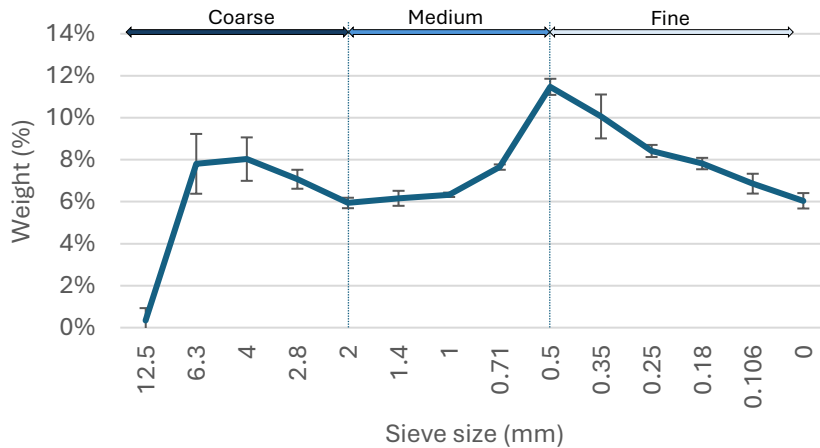
Nominal equipment size:

Raw material particle size at processing:

Raw material moisture content at processing:



Particle size distribution

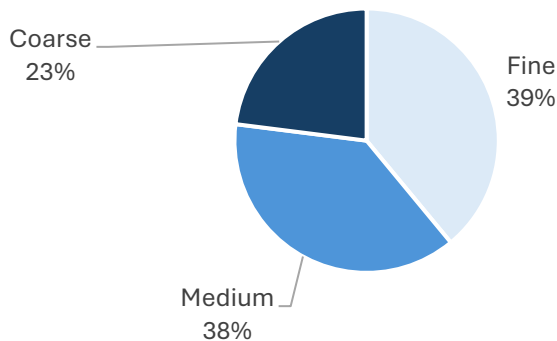


Particle size distribution:

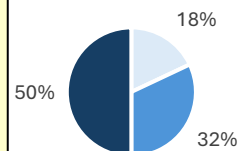
Particle size distribution is fairly uniform from 6.3 down to 0.11 mm. The unique sponge-like properties of peat allow even coarse particles to absorb water.

When analyzed by particle size class, it has fairly equal distribution among coarse, medium and fine particle size classes. This peat has slightly more fines and fewer medium particles than most other peats (below).

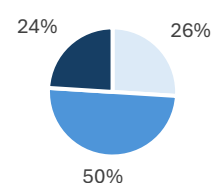
Particle size classification



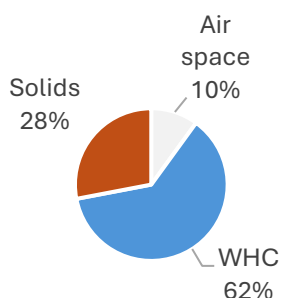
Pine bark



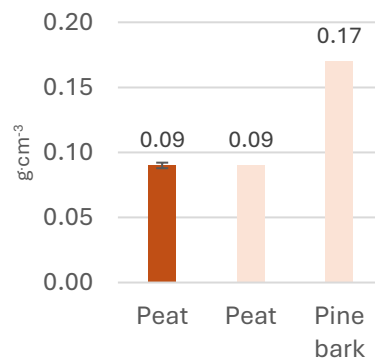
Peat



Physical properties



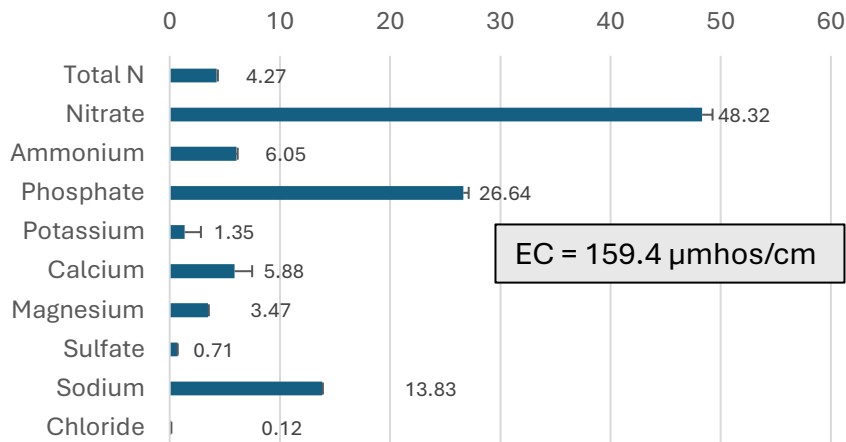
Bulk density



Physical properties:

Total porosity is 72%. Of that, this substrate has low air space and high water holding capacity, as might be expected for sphagnum peat. Bulk density is similar to other peat substrates used in horticulture.

Water extractable nutrients (mg·L⁻¹)



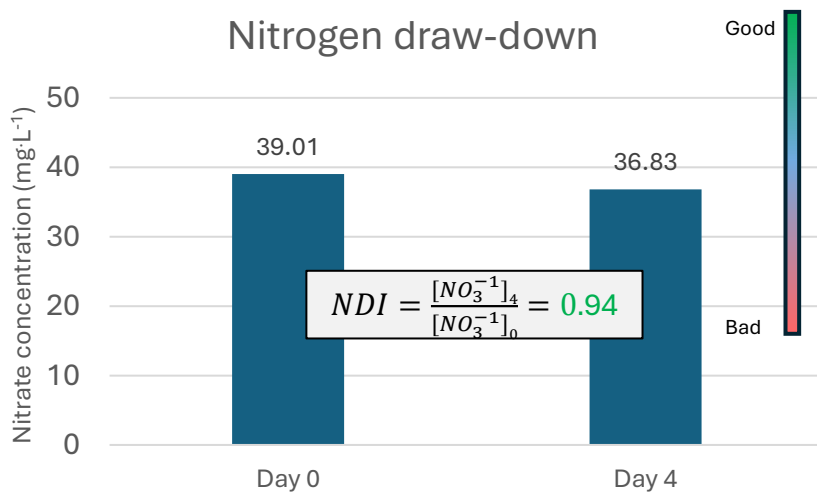
Water extractable nutrients:

Nitrate and phosphate are higher than most peat sources, although this is probably transient and will not affect fertility programs.

Ca and Mg are also low, but the ratio Ca:Mg is acceptable.

Na and Cl are sufficiently low.

Nitrogen draw-down

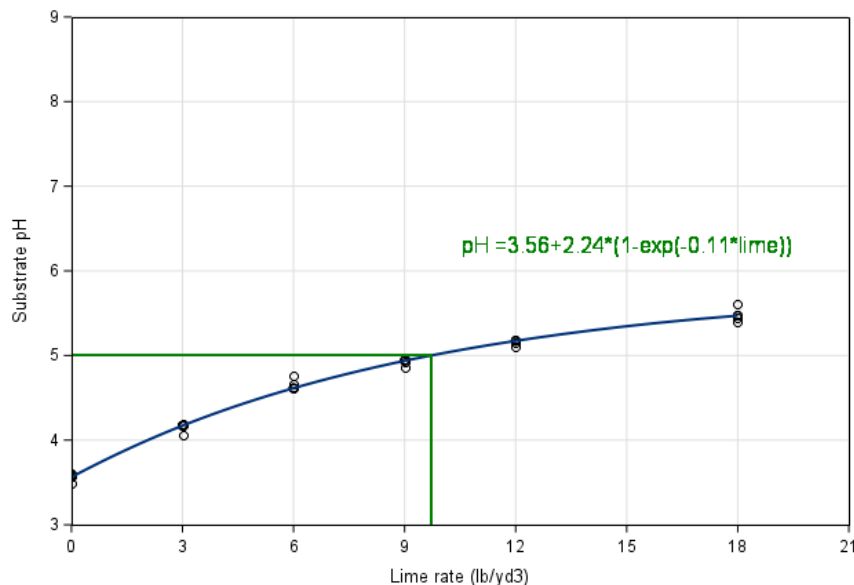


Nitrogen draw down index:

Nitrogen draw-down index (NDI) is 0.94, indicating a very low rate of N immobilization. As with most peat-based substrates, little or no supplemental N at potting is necessary.

This value is based on 30.6 g dry mass and 0.09 g·cm⁻³ bulk density.

Substrate pH response to lime rate



Lime rate titration:

Lime calibration curve shows a typical response for a peat substrate. This peat has a low pH of 3.56 when not amended with lime, and can be raised to a pH near 5.5 with 18 lb/yd³.