

Table 4.2: Needle and leaf nutrient concentrations

| | Nitrogen [mmol g ⁻¹] | Sulphur [μmol g ⁻¹] | Phosphorus [μmol g ⁻¹] | Potassium [μmol g ⁻¹] | Calcium [μmol g ⁻¹] | Magnesium [μmol g ⁻¹] |
|--|-------------------------------------|------------------------------------|---------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|
| <i>Picea abies</i>, 0yr old needles | | | | | | |
| M di Mezzo | 1.05 ± 0.04 ^{bcd} | 30.6 ± 1.6 ^{ab} | 57.0 ± 7.9 ^{abc} | 206.7 ± 24.4 ^{ab} | 140.5 ± 39.8 ^b | 32.9 ± 8.3 ^a |
| Aubure | 0.87 ± 0.07 ^{bc} | 32.0 ± 3.1 ^{bc} | 77.0 ± 9.4 ^{bc} | 216.2 ± 33.6 ^{ab} | 72.3 ± 15.8 ^{ab} | 45.4 ± 12.2 ^{ab} |
| Nacetin | 1.20 ± 0.03 ^d | 63.6 ± 3.0 ^d | 50.1 ± 2.2 ^{ab} | 140.0 ± 24.9 ^a | 75.5 ± 18.9 ^{ab} | 33.6 ± 1.7 ^a |
| Schacht | 1.27 ± 0.12 ^d | 38.4 ± 2.5 ^{bc} | 82.9 ± 10.3 ^c | 220.3 ± 17.9 ^{ab} | 70.8 ± 17.6 ^a | 37.0 ± 2.7 ^a |
| Waldstein | 1.15 ± 0.22 ^{cd} | 36.7 ± 4.2 ^{bc} | 73.3 ± 16.8 ^{bc} | 249.0 ± 6.2 ^b | 76.5 ± 27.7 ^{ab} | 33.9 ± 8.6 ^a |
| Klosterhede | 0.99 ± 0.04 ^{bcd} | 39.5 ± 2.5 ^c | 50.8 ± 6.7 ^{ab} | 247.2 ± 39.7 ^b | 68.5 ± 9.7 ^a | 70.8 ± 12.8 ^b |
| Skogaby | 0.77 ± 0.07 ^{ab} | 22.2 ± 3.1 ^a | 31.4 ± 10.0 ^a | 138.7 ± 36.3 ^a | 37.6 ± 10.2 ^a | 28.0 ± 5.8 ^a |
| Åheden | 0.54 ± 0.14 ^a | 22.0 ± 2.9 ^a | 61.2 ± 1.9 ^{bc} | 204.5 ± 25.8 ^{ab} | 64.7 ± 26.8 ^a | 47.2 ± 10.8 ^{ab} |
| <i>Picea abies</i>, 1yr old needles | | | | | | |
| M di Mezzo | 1.00 ± 0.21 ^b | 32.0 ± 4.7 ^{bc} | 52.8 ± 14.6 ^{bc} | 172.1 ± 28.3 ^b | 249.3 ± 25.3 ^c | 31.3 ± 12.1 ^b |
| Aubure | 0.91 ± 0.11 ^{ab} | 32.0 ± 2.7 ^{bc} | 62.4 ± 4.5 ^c | 173.8 ± 27.3 ^b | 92.4 ± 14.5 ^{ab} | 29.8 ± 9.2 ^b |
| Nacetin | 1.00 ± 0.13 ^b | 72.5 ± 4.0 ^d | 37.3 ± 5.8 ^{ab} | 128.4 ± 15.1 ^{ab} | 112.7 ± 21.0 ^{ab} | 28.2 ± 1.2 ^b |
| Schacht | 1.10 ± 0.12 ^b | 40.1 ± 1.7 ^c | 64.3 ± 6.5 ^c | 168.4 ± 9.2 ^b | 104.4 ± 33.7 ^{ab} | 31.4 ± 3.7 ^b |
| Waldstein | 1.06 ± 0.13 ^b | 37.6 ± 4.3 ^c | 49.1 ± 7.5 ^{bc} | 138.7 ± 12.2 ^{ab} | 125.3 ± 8.9 ^b | 21.4 ± 3.5 ^b |
| Klosterhede | 0.88 ± 0.11 ^{ab} | 37.4 ± 4.2 ^c | 41.9 ± 9.2 ^{abc} | 175.2 ± 13.2 ^b | 134.5 ± 29.8 ^b | 74.9 ± 15.5 ^a |
| Skogaby | 0.76 ± 0.21 ^{ab} | 22.1 ± 1.4 ^{ab} | 21.1 ± 2.7 ^a | 85.0 ± 5.6 ^a | 47.1 ± 6.4 ^a | 23.6 ± 3.3 ^b |
| Åheden | 0.53 ± 0.10 ^a | 21.2 ± 3.1 ^a | 48.1 ± 3.8 ^{bc} | 165.3 ± 19.7 ^b | 123.5 ± 39.7 ^{ab} | 45.4 ± 12.3 ^b |
| <i>Pinus pinaster</i>, Thezan | | | | | | |
| 0-yr old | 0.62 ± 0.03 | 40.2 ± 2.2 | 22.6 ± 1.5 | 161.8 ± 19.1 | 72.6 ± 28.1 | 81.5 ± 17.0 |
| 1-yr old | 0.53 ± 0.07 | 38.5 ± 2.1 | 18.2 ± 0.8 | 114.1 ± 33.4 | 134.3 ± 35.5 | 114.3 ± 32.3 |
| <i>Pinus sylvestris</i>, Åheden | | | | | | |
| 0-yr old | 0.94 ± 0.12 | 31.2 ± 3.3 | 57.1 ± 3.8 | 190.9 ± 10.4 | 40.0 ± 18.6 | 46.1 ± 12.1 |
| 1-yr old | 0.79 ± 0.06 | 27.4 ± 2.9 | 44.3 ± 3.3 | 143.7 ± 6.5 | 65.2 ± 28.8 | 39.3 ± 9.8 |
| <i>Fagus sylvatica</i> | | | | | | |
| Collelongo | 1.73 ± 0.11 ^a | 51.3 ± 8.3 ^a | 41.4 ± 12.0 ^a | 163.5 ± 25.1 ^{abc} | 188.7 ± 39.7 ^b | 65.5 ± 5.1 ^b |
| Aubure | 1.91 ± 0.03 ^{ab} | 54.2 ± 13.8 ^a | 60.1 ± 27.0 ^a | 237.3 ± 99.7 ^c | 74.1 ± 23.2 ^a | 28.4 ± 4.5 ^a |
| Schacht | 1.88 ± 0.16 ^{ab} | 45.7 ± 5.1 ^a | 41.6 ± 17.8 ^a | 93.5 ± 26.1 ^a | 104.9 ± 17.5 ^a | 24.2 ± 5.4 ^a |
| Waldstein | 1.87 ± 0.16 ^{ab} | 55.2 ± 8.0 ^a | 44.5 ± 18.8 ^a | 130.3 ± 40.6 ^{ab} | 155.4 ± 16.2 ^b | 51.0 ± 15.4 ^b |
| Hilleroed | 1.98 ± 0.17 ^b | 52.2 ± 4.6 ^a | 49.0 ± 16.6 ^a | 179.0 ± 11.7 ^{bc} | 179.1 ± 28.0 ^b | 65.5 ± 20.4 ^b |
| <i>Betula pendula</i> | | | | | | |
| Åheden | 1.32 ± 0.14 | 39.2 ± 4.9 | 65.2 ± 9.3 | 223.5 ± 28.9 | 172.0 ± 19.4 | 72.4 ± 7.9 |