**Tables**

Table1: Effect of treatment on poplar survival rate (%) at each growing season (2013: first growing season; 2014: second growing season; 2015: third growing season; 2016: fourth growing season). Mean ± SE, N = 75. Mean values that differed significantly at P < 0.05 are marked with different letters, a> b.

|  | Treatments | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| **Topsoil** | Whips | 100 ± 0 (a) | 100 ± 0 (a) | 99 ± 1 (a) | 98 ± 1 (a) |
|  | Cuttings | 100 ± 0 (a) | 100 ± 0 (a) | 95 ± 3 (a) | 95 ± 2 (a) |
|  | Bareroots | 100 ± 0 (a) | 100 ± 0 (a) | 100 ± 0 (a) | 100 ± 0 (a) |
| **Mineral soil** | Whips | 100 ± 0 (a) | 100 ± 0 (a) | 100 ± 0 (a) | 100 ± 0 (a) |
|  | Cuttings | 100 ± 0 (a) | 100 ± 0 (a) | 98 ± 2 (a) | 97 ± 2 (a) |
|  | Bareroots | 100 ± 0 (a) | 100 ± 0 (a) | 95 ± 4 (a) | 95 ± 4 (a) |

Table2: Effect of treatments (Topsoil: whips, cuttings, and bareroots; Mineral soil: whips, cuttings, and bareroots) on hybrid poplar biomass, diameter, and maximum height after four growing seasons (2016). Mean ± SE, N =18. Mean values within a column that differed significantly at $P < 0.05$ are marked with different letters, a > b. Ba = aboveground biomass; Bb = belowground biomass; Ba/Bb =above/belowground biomass.

| | Planting material | Basal diameter (mm) | Diameter at breast height (mm) | $B_a$ (g) | $B_b$ (g) | $B_a/B_b$ | $B_a$/total biomass | $B_b$/total biomass |
|---|---|---|---|---|---|---|---|---|
| **Topsoil** | Whips | 53 ± 21(a) | 31 ± 17(a) | 2519 ± 495 (a) | 515 ± 39(a) | 4.89 ± 1.2(a) | 0.83 ± 0.04(a) | 0.17 ± 0.02(a) |
| | Cuttings | 78 ± 5(a) | 43 ± 9(a) | 1801 ± 925(a) | 379 ± 65(a) | 4.75 ± 1.2 (a) | 0.83 ± 0.05(a) | 0.17 ± 0.01(a) |
| | Bareroots | 50 ± 15(a) | 29 ± 12(a) | 1791 ± 649(a) | 544 ± 38(a) | 3.29 ± 1.4(a) | 0.77 ± 0.04(a) | 0.23 ± 0.02(a) |
| **Mineral soil** | Whips | 55 ± 17(a) | 30 ± 9(a) | 2227 ± 865(a) | 466 ± 29 (a) | 4.77 ± 0.9(a) | 0.83 ± 0.2(a) | 0.17 ± 0.04(a) |
| | Cuttings | 62 ± 9(a) | 44 ± 4(a) | 1870 ± 312(a) | 449 ± 37 (a) | 4.16 ± 1.1(a) | 0.81 ± 0.03(a) | 0.19 ± 0.02(a) |
| | Bareroots | 55 ± 11(a) | 31 ± 8(a) | 2672 ± 442(a) | 566 ± 24 (a) | 4.72 ± 0.8(a) | 0.83 ± 0.02(a) | 0.17 ± 0.03(a) |

Table3: Effect of treatments (Topsoil: whip, cutting, bareroot; Mineral soil: whip, cutting and bareroot) on architectural root (diameter > 4 mm) variables after four growing seasons (2016). N = 18. Mean values that differed significantly at P < 0.05 are marked with different letters, a > b.

| | Planting material | Root number (lateral roots; diameter > 10 mm) | Mean root diameter (mm) | Maximum rooting depth (cm) | Number of sink roots (in depth) |
|---|---|---|---|---|---|
| **Topsoil** | Whips | 4 ± 2 (a) | 18 ± 7 (a) | 40 ± 6 (a) | 12 ± 4 (a) |
| | Cuttings | 5 ± 1 (a) | 21 ± 3 (a) | 37 ± 14 (a) | 9 ± 5 (a) |
| | Bareroots | 5 ± 1 (a) | 20 ± 5 (a) | 43 ± 8 (a) | 14 ± 1 (a) |
| **Mineral soil** | Whips | 4 ± 1 (a) | 19 ± 6 (a) | 47 ± 10 (a) | 12 ± 3 (a) |
| | Cuttings | 4 ± 3 (a) | 22 ± 2 (a) | 38 ± 17 (a) | 11 ± 7(a) |
| | Bareroots | 5 ± 1 (a) | 20 ± 2 (a) | 36 ± 15 (a) | 11 ± 4(a) |