Is it possible to manipulate root anchorage in young trees?

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“Specific root length (m^{-1})” should be “Specific
root length (m^{-2})”

Table 2 “Specific root surface (m^{-2})” should be
“Specific root surface (m^{-1})”

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Table 2 Mean root growth parameters $\pm$ standard error for the 76 cuttings and trees with (+) or without (–) tap roots

Growth parameter	Treatment			<i>P</i>
	Cutting	(–) Tap root	(+) Tap root	
RPC (%)	0.20 $\pm$ 0.08	0.20 $\pm$ 0.09	0.18 $\pm$ 0.11	0.209
Total root volume (m ³)	0.009 $\pm$ 0.001 ^a	0.014 $\pm$ 0.002 ^b	0.018 $\pm$ 0.003 ^b	0.003
Total root length (m)	9.7 $\pm$ 1.0 ^a	19.9 $\pm$ 1.0 ^b	22.7 $\pm$ 2.0 ^b	<0.001
Specific root surface (m ^{–1})	360 $\pm$ 20 ^a	430 $\pm$ 30 ^b	400 $\pm$ 30 ^{a,b}	<0.001
Specific root length (m ^{–2})	16000 $\pm$ 2000 ^a	24000 $\pm$ 3000 ^b	20000 $\pm$ 3000 ^{a,b}	<0.001
Maximal radial distance (m)	1.4 $\pm$ 0.8 ^a	1.5 $\pm$ 0.8 ^{a,b}	1.6 $\pm$ 1.0 ^b	0.124
Maximal depth (m)	0.7 $\pm$ 0.2	0.7 $\pm$ 0.3	0.7 $\pm$ 0.2	0.216
Tap root length (m)	0.8 $\pm$ 0.3	0.8 $\pm$ 0.5	0.8 $\pm$ 0.4	0.792
Relative root number (number/DBH (m))	389.9 $\pm$ 16.2 ^a	578.0 $\pm$ 39.1 ^b	564.7 $\pm$ 22.7 ^b	<0.001
Mean number of lateral roots on stump	8.8 $\pm$ 0.6 ^a	20.5 $\pm$ 1.2 ^b	19.6 $\pm$ 1.4 ^b	<0.001
Mean basal diameter of lateral roots on stump (mm)	17.0 $\pm$ 0.1 ^a	13.1 $\pm$ 0.1 ^b	14.7 $\pm$ 0.1 ^{a,b}	0.031
Mean inter-lateral length along tap root (mm)	51.6 $\pm$ 3.9 ^a	29.3 $\pm$ 3.1 ^b	27.1 $\pm$ 2.1 ^b	<0.001
Proportion of stump volume (%)	49.3 $\pm$ 1.6	49.6 $\pm$ 1.3	46.5 $\pm$ 1.1	0.128
Root wood density (kg/m ³)	422.8 $\pm$ 7.7 ^a	454.9 $\pm$ 19.5 ^b	456.7 $\pm$ 7.6 ^b	0.050
Shallow soil layer (all root segments) (%)	69.0 $\pm$ 2.9	65.6 $\pm$ 4.7	61.8 $\pm$ 2.8	0.33
Intermediate soil layer (all root segments) (%)	29.9 $\pm$ 2.7	31.7 $\pm$ 4.3	35.9 $\pm$ 2.6	0.41
Deep soil layer (all root segments) (%)	1.1 $\pm$ 0.3	2.1 $\pm$ 0.6	1.9 $\pm$ 0.5	0.12
<i>Proportion of root volume (%) between different compartments (with stump removed)</i>				
Horizontal shallow segments within ZRT	17.1 $\pm$ 2.0	15.8 $\pm$ 2.0	15.8 $\pm$ 1.6	0.86
Intermediate roots	6.2 $\pm$ 1.8	5.1 $\pm$ 2.2	4.3 $\pm$ 1.1	0.76
Oblique roots	12.4 $\pm$ 2.4 ^a	4.6 $\pm$ 1.6 ^b	9.1 $\pm$ 1.9 ^{a,b}	0.09
Deep roots	0.37 $\pm$ 0.14	0.42 $\pm$ 0.21	0.56 $\pm$ 0.17	0.74
Tap root	27.8 $\pm$ 2.2	26.1 $\pm$ 3.1	22.8 $\pm$ 2.4	0.24
Sinker roots beneath ZRT	11.2 $\pm$ 1.9 ^a	18.1 $\pm$ 2.4 ^b	17.5 $\pm$ 2.6 ^b	0.06
Sinker roots beyond ZRT	0.5 $\pm$ 0.4	0.6 $\pm$ 0.3	0.4 $\pm$ 0.2	0.56
Horizontal shallow segments beyond ZRT	25.2 $\pm$ 2.4	30.0 $\pm$ 3.2	31.1 $\pm$ 2.1	0.22

Where letters in superscript differ, differences are significant between treatments using a Fisher LSD test ($P < 0.05$). In the Probability (P) column, P values (significant P values are in bold) are given for the comparison of all three treatments together using ANOVA (with DBH as covariate). Non-proportional data were log-transformed and proportional data were arcsine square root transformed before analysis, although mean values of raw data are given here for ease of reading

Legend of Fig. 2 should read:

Fig. 2 Reconstruction with AMAPmod of root systems coloured as a function of compartment type in (a) trees with pruned tap roots, (b) control trees with undamaged tap roots, and (c) cuttings. The root systems are at the same scale with a maximal rooting depth of -0.75 , -0.9 , and -0.8 m, respectively. Side view, left is North West