

Supplementary Material

Insights into the functional relationship between cytokinin-induced root system phenotypes and nitrate uptake in *Brassica napus*

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Table S1. Primer sequences and GenBank accession numbers

F, forward; R, reverse

Primers	Sequence	GenBank accession no.
<i>BnNPF6.3F</i>	5'-TCTAGGGTTTTMTCTACTCATCCCACAATAC-3'	MF357893
<i>BnNPF6.3R</i>	5'-CAGCKATCCAYGGATGAGCTTTATC-3'	
<i>BnNPF7.3F</i>	5'-CACTCACTGTGATGGCTCAAGCTC-3'	MF357895
<i>BnNPF7.3R</i>	5'-TTGGAATCCAACCAGGCATGTGATC-3'	
<i>BnNPF7.2F</i>	5'-TCAGTACATGATGATAGGTGCATCAGAAG-3'	MF357894
<i>BnNPF7.2R</i>	5'-AGCACAAACCAGGTAAACCACAAAATC-3'	
<i>BnNRT2.1F</i>	5'-TGGATMTCTTTCTCCACATGTTTTGTCTC-3'	MF357896
<i>BnNRT2.1R</i>	5'-TCCCATCACSAGCCTAGAGAAGATAC-3'	
<i>BnPHO1aF</i>	5'-GGCCAACCAAGTCGATACAATTCCTG-3'	MF357897
<i>BnPHO1aR</i>	5'-GTAACACGCAGTTGACTCTAAATGTCTCAG-3'	
<i>BnPHO1bF</i>	5'-TGAAGTCGACACCATTCCAGGCATC-3'	MF357898
<i>BnPHO1bR</i>	5'-ACGCAGTTGACTCAATATGTCTAAGCAATG-3'	

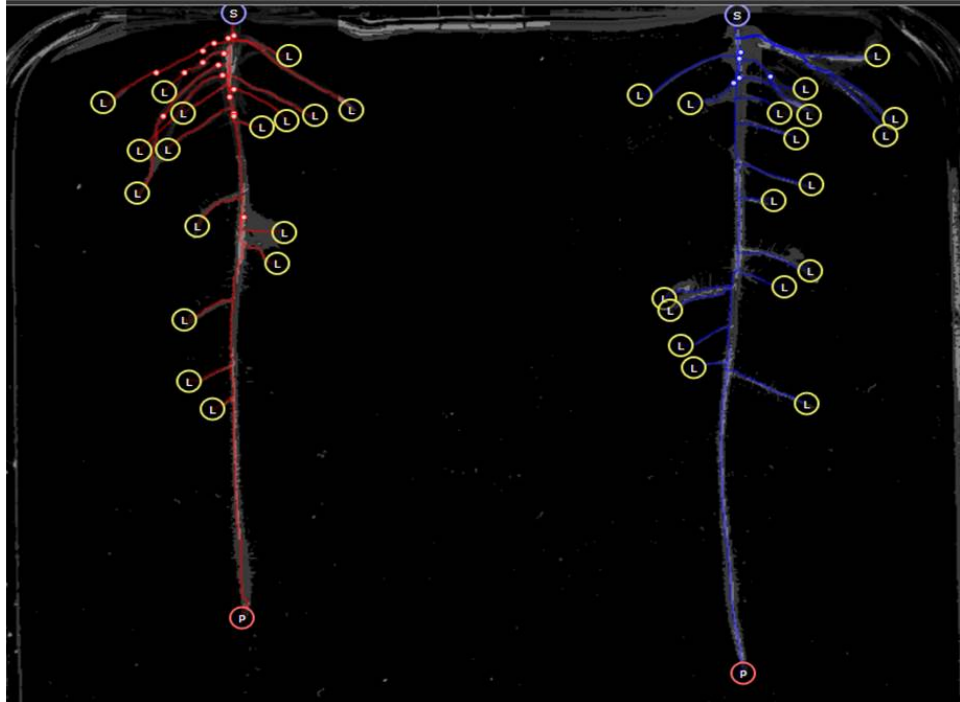


Fig. S1. An image of *B. napus* roots growing on phytogel analysed by RootNav. Label ① indicates the primary root, ② indicates lateral root.

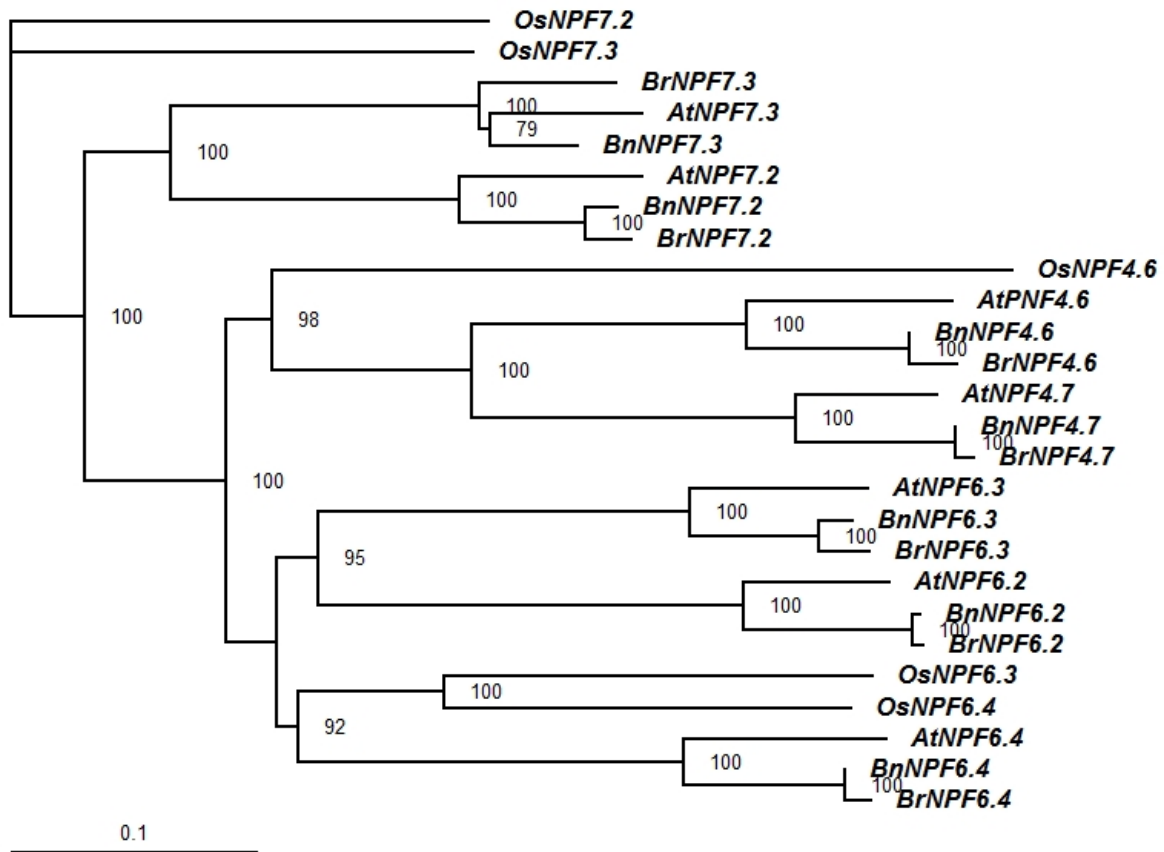


Fig. S2. Neighbor Joining phylogenetic tree for NPF protein gene sequences in *Brassica napus* and representative species. *At*, *Arabidopsis thaliana*; *Bn*, *B. napus*; *Br*, *B. rapa*; *Os*, *Oryza sativa*. The tree was rooted using *O. sativa* NPF protein OsNPF7.2 gene sequence. Node values were percentages of bootstraps generated with 1000 bootstrap replicates.

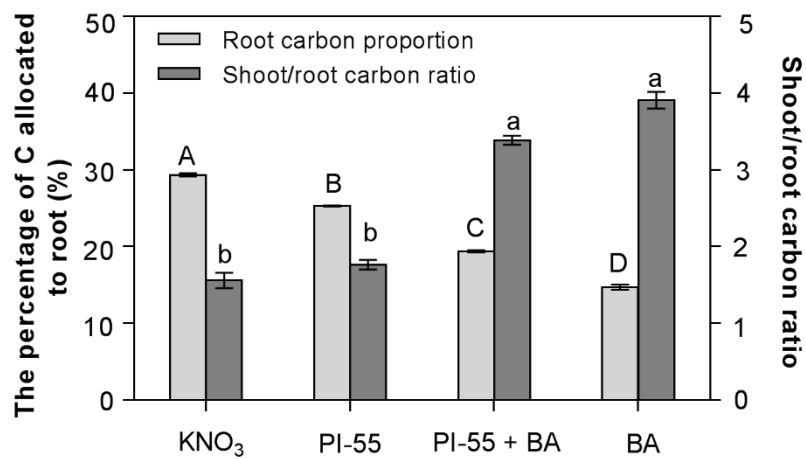


Fig. S3. The effects of PI-55 and BA on C allocation in *B. napus* during 96 h of growth on phytogel plates with a homogeneous supply of 1 mM KNO₃. All treatments and control were supplied with 1 mM KNO₃. Proportion of C allocated to the roots is referred to as the percentage of whole plant C allocated to roots. Values are the mean \pm s.e. of $n=6$ experiments, with each experiment including four plates with two seedlings per plate. Bars with different upper and lower case letters denote means that are significantly different within the measurements of C allocation to roots and shoot : root carbon ratio, respectively ($P < 0.05$).

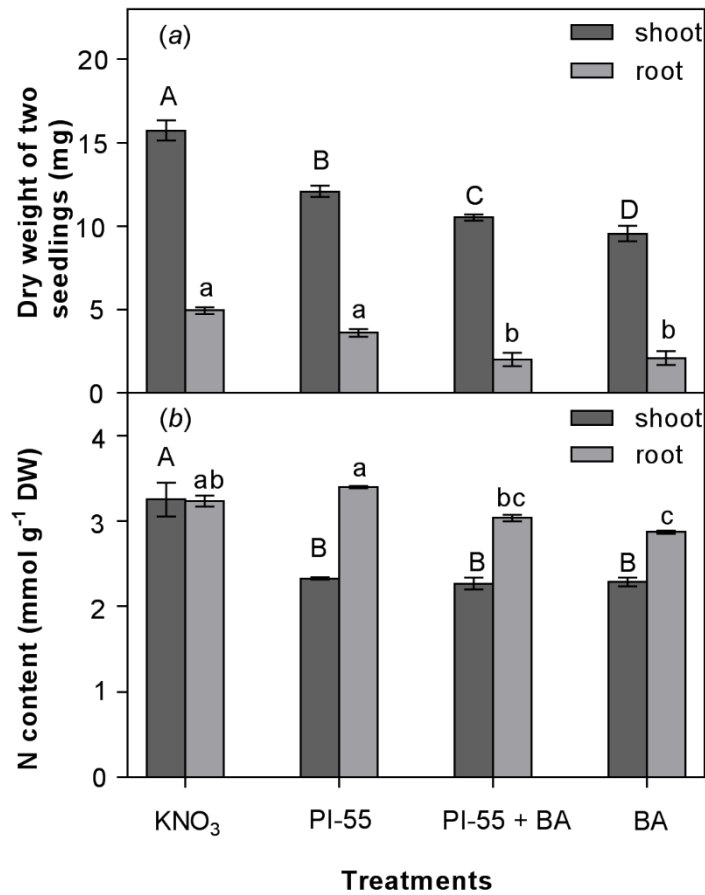


Fig. S4. The effects of PI-55 and BA on dry weight and N content of shoots and roots in *B. napus* after 96 h of growth on phytogel plates with a homogeneous supply of 1 mM KNO₃. All treatments and control were supplied with 1 mM KNO₃. Vertical bars indicate mean \pm s.e. of $n=3$ experiments, with each experiment including 10 plates with two seedlings per plate. Bars with different upper case letters denote means that are significantly different within the measurements of dry weight and N content in shoots, respectively ($P<0.05$). Bars with different lower case letters denote means that are significantly different within the measurements of dry weight and N content in roots, respectively ($P<0.05$).