Supporting Information

Insights on the Impact of Trans-Zeatin Overproduction-Engineered *Sinorhizobium meliloti* on Alfalfa (*Medicago sativa* L.) Tolerance to Drought Stress.

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A

CCCAGTTTCGCGGTCCGCTGGCTTACACCGCGCCTCAAGAGCTTC
CTTGATGCCAATCCCGACTGGGGCGTTCGTGTCGATGCAACGCCG
GATTTTTCCGATTTCGAGACCGAAGTGATCGACCTCGACTTGCGTT
ACGGTTCCGGCGCCTGGGAGGGGCTGCGTACCGAGTGCATCATCA
GCGATTTCGTCCTGCCGATGTGCAGCCCCGACTATCGCGACCGGC
TGCGTTCGGTCAGCGACGATCCGGTGCTGCAGTTTGCCCAGGCGC
GGCTCATCCATTCGGTGAAGGCGCTTTAC

B

ATGTTACTCCATCTCATCTACGGACCGACTTGCAGCGGCAAAACGGACATGGCGATCCAAATCGCACAAGAA
ACCGGGTGGCCGGTGGTTGCCCTTGATCGTGTGCAATGCTGTCCTCAAATCGCGACAGGTAGCGGAAGACCT
TTGGAATCGGAATTGCAATCAACGCGGAGAATATATTTGGATTCCCGCCCCCTCACCGAGGGCATCCTTGACG
CTGAGAGTGCCCATCGTCGACTCATATTCGAAGTGGATTGGCGGAAGTCCGAAGAGGGTCTTATTCTCGAGGG
CGGGTCGATTTCGCTTCTCAATTGCATGGCTAAAAGTCCGTTTTGGAGATCGGGTTTTCAATGGCATGTCAAGCGG
CTACGTCTTGGGGATTCGGACGCCTTTCTCACCCGAGCCAAGCAACGCGTTGCGGAAATGTTTGCCATCCGGG
AAGATCGCCCCTCGTTGTTGGAGGAGTTGGCGGAACTCTGGAACTACCCTGCCGCTCGACCGATTTTGGAAGA
TATCGACGGATATCGCTGCGCAATTCGTTTTGCGCGCAAACACGATCTCGCAATCAGCCAGTTGCCAAATATTGA
TGCAGGGCGGCACGTAGAGCTCATAGAGGCCATAGCTAATGAATATCTTGAACATGCGCTCTCGCAGGAGCG
CGATTTTCCTCAGTGGCCAGAAGATGGCGCAGGACAGCCTGTTTGCCCGGTCACGCTGACGCGAATTCGGTGA

Fig. S1 The *SMc00275* gene sequence in *S. meliloti* 1021 (A). The *IPT* gene sequence in *Agrobacterium tumefaciens* C58 (B).

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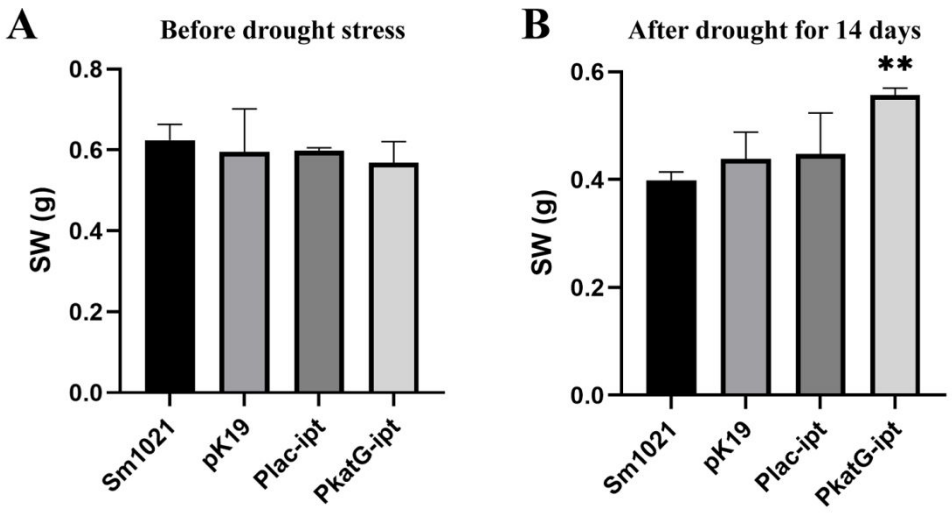


Fig. S2 Effects of engineered *S. meliloti* strains and control strains inoculation on the saturated weight (SW) of alfalfa. Saturated weight before drought treatment (A). Saturated weight after drought treatment (B). ** above the bar indicate significant differences at $P < 0.01$.

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