Supplementary material

Rhizosphere Colonization

For each strain, unique genomic regions were identified and specific primer developed, based on the methodology of Mendis et al 2018.
From rhizosphere soil samples eDNA was isolated using the PowerSoil kit (Qiagen®) following the manufacturer's instructions.

The following samples were used to trace the presence of the strains:

		LHB11	PIXIE
	0 days	7 days	7 days
Soil without plants (pre-soil)	x		
Rhizosphere soil from Control (not inoculated)		x	x
Rhizosphere soil (inoculated with the respective strain)		x	x
Original soil inoculated with bacterial culture with known cell density (10^7 cfu/ml)	x		

LHB11: Primer Sequence (5'->3')

Forward primer	CGCCAGCTAACAAACCAATC
Reverse primer	GTGTGAGAACTCCAGCATACC
Product length:	109

PIXIE: Primer Sequence (5'->3')

Forward primer	CGCTATATGACAGAGACAAGAGG
Reverse primer	ATCAGTGAAGTAAGCGTCCAG
Product length:	138

For amplification, the following PCR protocol was employed:

- Initial denaturation: Temperature: 94°C for 3 minutes
- Denaturation: Temperature: 94°C for 40 seconds
- Annealing: Temperature: 60°C for 45 seconds
- Extension: Temperature: 72°C for 30 seconds
- Cycle count: 40 cycles

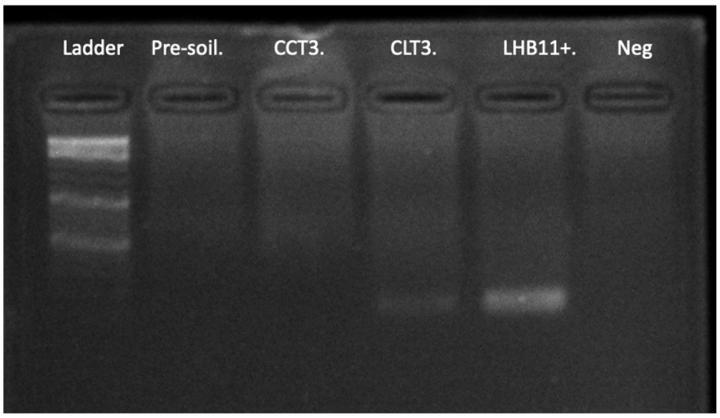


Figure S1: Rhizosphere colonization of LHB11 after 7 days. Pre-soil and rhizosphere soil from plants without inoculation (CCT3) show no amplification of the specific region; rhizosphere soil 7 days after inoculation (CLT3) and soil inoculated with 10^7 cfu/ml (LHB11+) show amplification for the specific region.

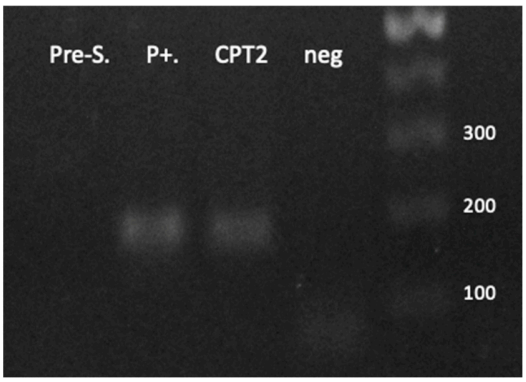
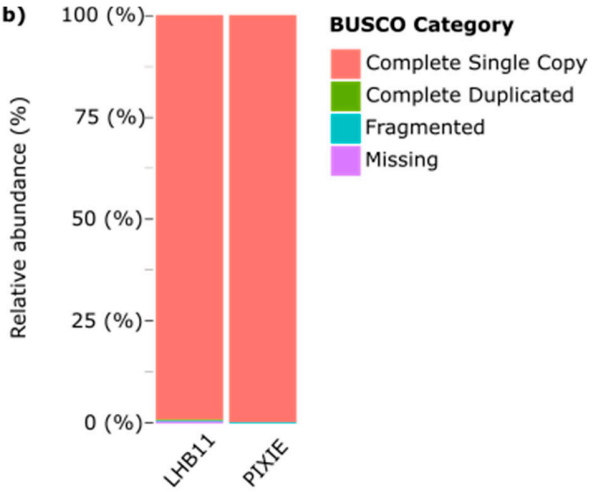
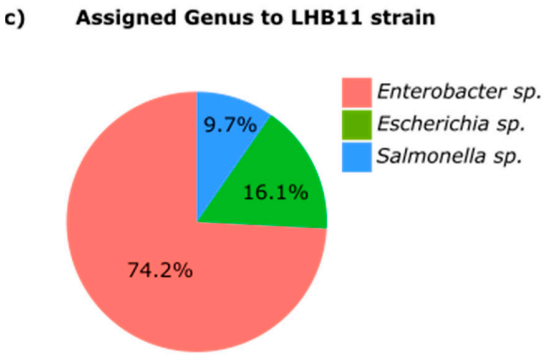


Figure S2: Rhizosphere colonization of PIXIE after 7 days. Pre-soil and rhizosphere soil from plants without inoculation (neg) show no amplification of the specific region; rhizosphere soil 7 days after inoculation (CPT2) and soil inoculated with 10^7 cfu/ml (P+) show amplification for the specific region.

a)

	LHB11	PIXIE
GC Content (%)	54.81	45.86
Genome Size (Mb)	4.9	4.2
CDS	4700	4379
Number of Contigs	42	32
Coverage (X)	373.7	636.08





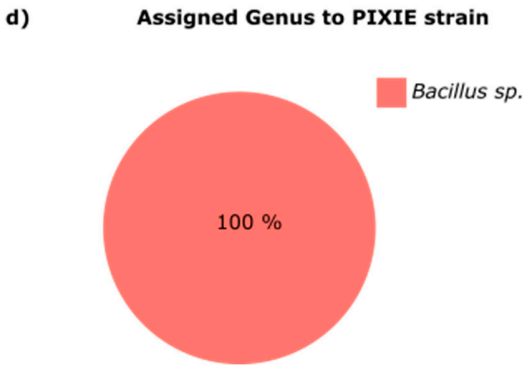


Figure S3: Genomic characterization of LHB11 and PIXIE strains. a) Genome sequence data of isolated LHB11 and PIXIE strains, b) sequence of read quality, c) assigned genus of LHB11 strain and d) assigned genus to PIXIE strains.

Table S1: Tolerance of the LHB11 and PIXIE strains against drought stress induced by different levels of PEG-6000.

Drought stress tolerance		
0% PEG-6000	+++	+++
5% PEG-6000	+++	+++
10% PEG-6000	++	++
15% PEG-6000	++	++
20% PEG-6000	+	+

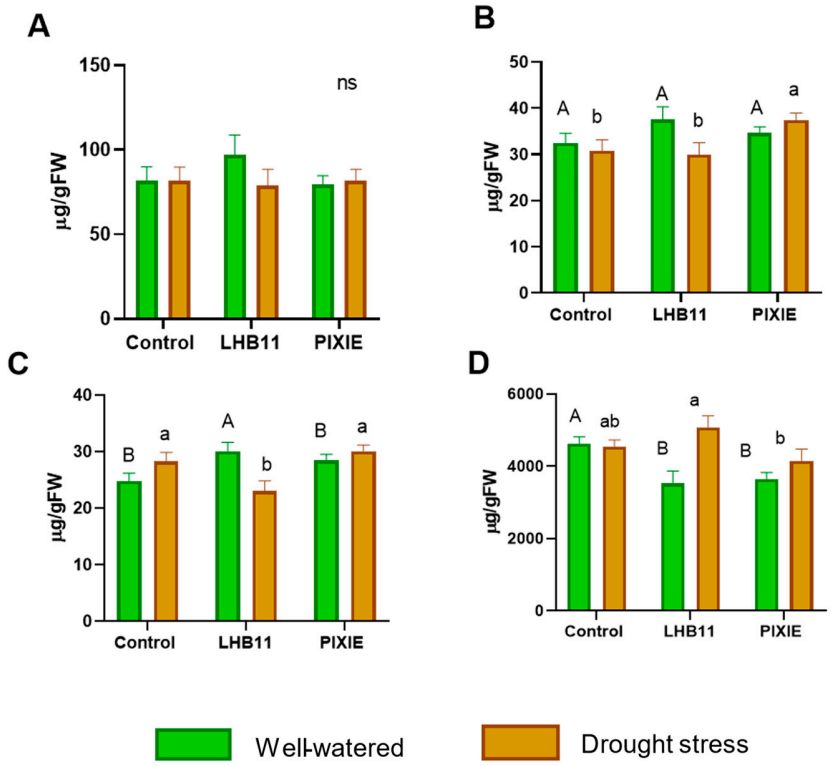


Figure S4: Concentration of photosynthetic pigments (A) chlorophyll B, (B) chlorophyll B, (C) Chlorophyll C, (D) carotenoids

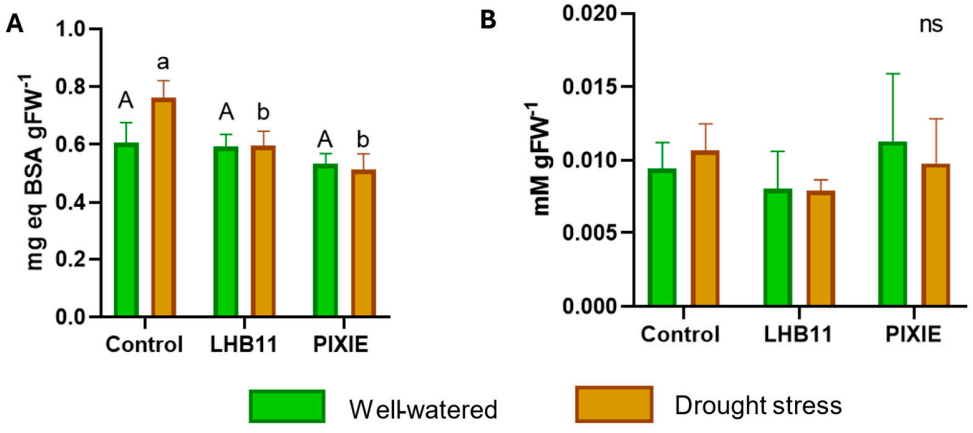


Figure S5: Quantifications of soluble protein content (A) and quantifications of MDA (B)