



**Supplementary Figure S1.** The percentages of different repetitive element groups that underwent changes in roots or leaves under water deficiency stress and subsequent rewatering.

**Supplementary Table S2.** MSAP bands patterns corresponding to possible DNA methylation

Band pattern	<i>Hpa</i> II	<i>Msp</i> I	Type	Methylation state
I	1	1	Demethylated or hemimethylated inner C	CCGG or CCGG GGCC GGCC
II	1	0	Hemimethylated outer C or one strand hemimethylated	CCGG or CCGG GGCC GGCC
III	0	1	Fully methylated inner C	CCGG GGCC
IV	0	0	Fully methylated or fully methylated outer C or fully methylated outer C + hemimethylated inner C or hemimethylated outer C + fully methylated inner C	CCGG or CCGG or CCGG or CCGG GGCC GGCC GGCC GGCC

states

**Supplementary Table S3.** The percentages of different LTR types that underwent changes in roots or leaves under water deficiency stress and subsequent rewatering

<b>LEAVES</b>		<b>ROOTS</b>	
<b>Group</b>	<b>%</b>	<b>Group</b>	<b>%</b>
Gypsy	29.4	Gypsy	22.8
SUKKULA	15.6	BARE	21.6
BAGY	11.9	SUKKULA	13.3
BARE	8.9	BAGY	11
Copia	8.9	Maximus	8.3
Maximus	7.4	SABRINA	7.3
SABRINA	6.7	Copia	5.3
INGA	4.1	INGA	3.8
CEREBA	2.6	CEREBA	3.6
IKEROS	1.9	NIKITA	0.9
INAV	1.1	OPHELIA	0.7
OPHELIA	0.7	INAV	0.6
Unknown	0.7	IKEROS	0.5
NIKITA	0	Unknown	0.3