

Table S1 Source and basic information of RNA-Seq training dataset

Database	Accession number	Experiment design	Species	Sample number ^a	Reference
ArrayExpress	E-MTAB-5540	Cold, drought, heat, and salt stress	<i>P. trichocarpa</i>	27/81	[33]
ENA	ERP012528	ACC treatments	<i>P. tremula</i> × <i>P. tremuloides</i>	18/18	[38]
ENA	ERP016242	Different cell types	<i>P. tremula</i>	137/137	[32]
GEO	GSE81077	Different cell types	<i>P. trichocarpa</i>	18/24	[30]
GenBank	PRJNA471819	Different internodes	<i>P. trichocarpa</i>	18/18	[27]
SRA	SRP033626	Blister canker	<i>P. tomentosa</i>	4/4	[36]
SRA	SRP035471	miR397a over-expression	<i>P. trichocarpa</i>	12/12	[37]
SRA	SRP115696	Gravity stimulation	<i>P. alba</i> × <i>P. tremula</i>	37/37	[34]
SRA	SRP116293	Phloem, xylem	<i>P. euphratica</i>	6/13	[31]
SRA	SRP154396	Different areas	<i>P. nigra</i>	24/24	[35]

a: The numerator is the number of stem-related samples, the denominator is the total number of samples in this experiment

ArrayExpress: EMBL-EBI ArrayExpress

ENA: European Nucleotide Archive

GEO: GEO from NCBI

SRA: NCBI sequence reads archive