

Table S1 Plant height and base diameter changes after 106 days of water and/or nitrogen availability treatments for Biyu and Xiaoye seedlings, and results from analyses of variance.

	Biyu				Xiaoye				Results from analyses of variance						
	CK	D	NA	D + NA	CK	D	NA	D + NA	C	W	N	C:W	C:N	W:N	C:W:N
Plant height (cm)	140±7 b	107±7 c	195±6 a	150±6 b	146±5 b	110±3 c	197±5 a	151±3 b	*	***	***	ns	ns	*	ns
Base diameter (mm)	10.7±0.4 c	8.2±0.3 d	13.2±0.4 a	11.1±0.4 b	10.2±0.3 bc	9.6±0.2 d	13.0±0.4 a	10.7±0.4 b	**	***	***	ns	ns	*	ns

Note: Values shown are means ± SD. Different letters indicate statistical differences among treatments (Tukey HSD, $P < 0.05$). The significance levels of three factors and their interactions were labeled with ns $0.05 < P$, * $0.01 < P < 0.05$, ** $0.001 < P < 0.01$ and *** $P < 0.001$).

Abbreviations for treatments: CK, control; D, drought; NA, nitrogen addition; D + NA, drought and nitrogen addition;

Abbreviations for factors and their interactions: C, poplar clone; W, water; N, nitrogen; C:W, interaction between clone and water; C:N, interaction between clone and nitrogen; W:N, interaction between water and nitrogen; C:W:N, interactions among clone, water and nitrogen.

Table S2 The significance levels of clone, water, nitrogen, and their interactions in biomass distribution of Biyu and Xiaoye seedlings.

	Biyu				Xiaoye				Results from analyses of variance						
	CK	D	NA	D + NA	CK	D	NA	D + NA	C	W	N	C:W	C:N	W:N	C:W:N
Total biomass (g)	104 ± 5 c	72 ± 4 d	171 ± 7 a	110 ± 6 c	112 ± 10 c	82 ± 9 d	138 ± 8 b	111 ± 3 c	ns	***	***	**	***	**	**
Biomss of leaf (g)	27.0 ± 0.5 cd	16.5 ± 1.1 e	42.2 ± 1.9 a	28.7 ± 1.9 c	20.0 ± 2.7 e	17.8 ± 0.8 e	35.0 ± 1.6 b	24.5 ± 0.2 d	***	***	***	***	*	***	*
Biomss of stem (g)	43.4 ± 2.3 b	29.1 ± 1.2 c	67.4 ± 1.7 a	45.9 ± 3.4 b	49.8 ± 6.5 b	30.4 ± 6.0 c	65.6 ± 8.5 a	49.9 ± 3.8 b	*	***	***	ns	ns	ns	ns
Biomss of coarse root (g)	9.5 ± 1.7 c	6.1 ± 0.5 d	15.3 ± 1.2 b	10.1 ± 1.4 c	18.8 ± 1.4 a	13.9 ± 1.5 b	15.2 ± 1.0 b	17.3 ± 1.3 ab	***	***	***	**	***	ns	***
Biomss of fine root (g)	24.5 ± 1.3 b	20.4 ± 3.0 b	45.8 ± 5.0 a	25.6 ± 2.4 b	23.7 ± 2.4 b	20.0 ± 1.8 b	21.9 ± 2.3 b	19.0 ± 1.1 b	***	***	***	***	***	***	***
Leaf biomass fraction (%)	25.9 ± 0.9 b	22.9 ± 0.6 c	24.7 ± 0.9 c	26.1 ± 0.6 a	17.8 ± 2.5 d	21.9 ± 2.9 d	25.5 ± 2.5 c	22.1 ± 0.7 c	***	ns	***	ns	*	ns	***
Stem biomass fraction (%)	41.6 ± 0.9 bc	40.4 ± 1.6 bc	39.5 ± 0.8 bc	41.6 ± 2.5 bc	44.3 ± 2.2 ab	36.8 ± 3.5 c	47.6 ± 3.7 a	45.0 ± 2.3 ab	**	*	*	**	**	*	ns
Coarse root biomass fraction (%)	9.0 ± 1.2 bc	8.6 ± 1.2 c	9.0 ± 1.0 bc	9.1 ± 0.9 bc	16.7 ± 0.7 a	17.0 ± 0.1 a	11.1 ± 0.7 b	15.6 ± 1.0 a	***	*	**	**	***	**	*
Fine root biomass fraction (%)	23.5 ± 0.6 bc	28.2 ± 2.7 a	26.8 ± 1.8 ab	23.2 ± 2.1 bc	21.2 ± 1.4 cd	24.4 ± 0.8 abc	15.9 ± 1.4 e	17.2 ± 1.4 de	***	ns	***	ns	**	***	*

Note: The significance levels of three factors and their interactions were labeled with ns $0.05 < P$, * $0.01 < P < 0.05$, ** $0.001 < P < 0.01$ and *** $P < 0.001$).

Abbreviations for treatments: CK, control; D, drought; NA, nitrogen addition; D + NA, drought and nitrogen addition;

Abbreviations for factors and their interactions: C, poplar clone; W, water; N, nitrogen; C:W, interaction between clone and water; C:N, interaction between clone and nitrogen; W:N, interaction between water and nitrogen; C:W:N, interactions among clone, water and nitrogen.

Figure S1.

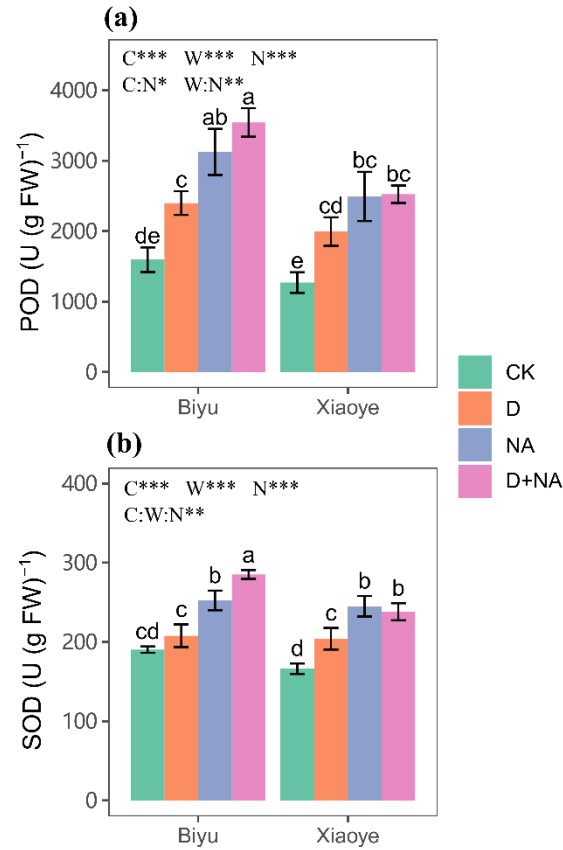


Figure S1. Peroxidase (POD) and superoxide dismutase (SOD) activities changes in leaves of Biyu and Xiaoye. Values shown are means \pm SD. Different letters indicate statistical differences among treatments ($P < 0.05$). The significance levels of factors and their interactions are indicated by * $0.01 < P < 0.05$, ** $0.001 < P < 0.01$ and *** $P < 0.001$. Treatments: CK, control; D, drought; NA, nitrogen addition; D + NA, drought and nitrogen addition. Factors and their interactions: C, poplar clone; W, water; N, nitrogen; C:W, interaction between clone and water; C:N, interaction between clone and nitrogen; W:N, interaction between water and nitrogen; C:W:N, interactions among clone, water and nitrogen.