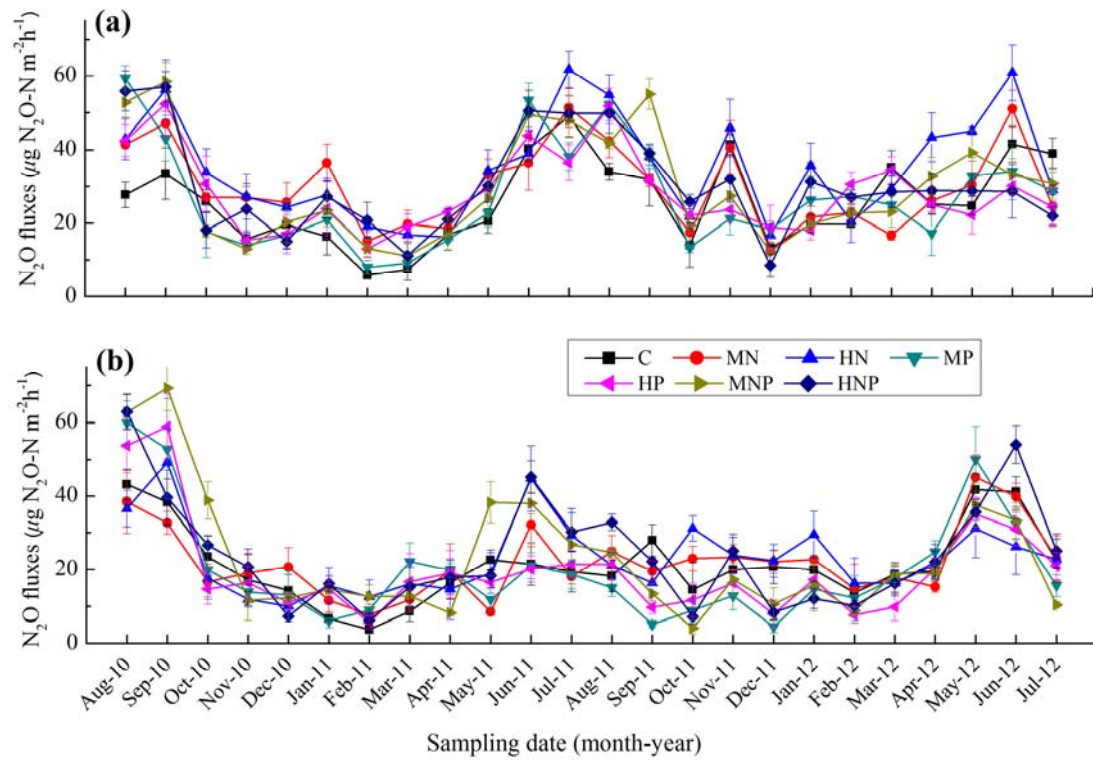


1 **Table S1** Indices of tree structure in *Acacia auriculiformis* and *Eucalyptus urophylla*  
2 plantations.

	<b>AA plantation</b>			<b>EU plantation</b>		
	<i>Acacia auriculiformis</i>	Other plants	Total	<i>Eucalyptus urophylla</i>	Other plants	Total
Stem density (tree ha <sup>-2</sup> )	357	1719	2076	1186	776	1961
Mean height (m)	12.2	5.6		11.5	4	
DBH (cm)	15	4.8		11.1	3.9	
Tree age (years)	27			27		
Basal area (m <sup>2</sup> ha <sup>-2</sup> )	7.3	5.2	12.5	14.7	2	16.7
Percentage of basal area (%)	59	41	100	88	12	100

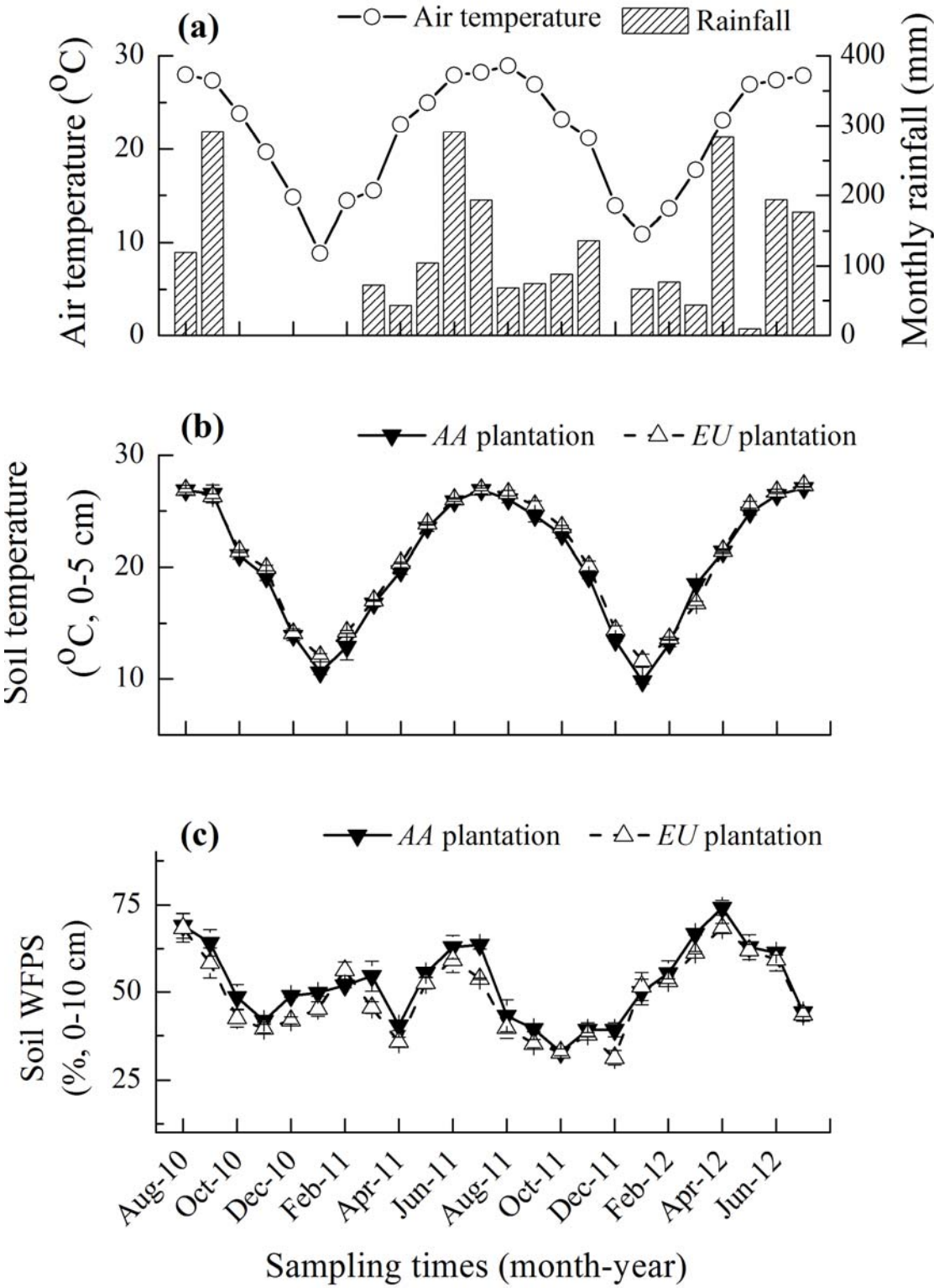
3

4 **Notes:** The survey was conducted in July 2010 (27 years after tree planting) before  
5 the first N, P, and NP applications. DBH, Diameter at breast height. AA, *Acacia*  
6 *auriculiformis*; EU, *Eucalyptus urophylla*.



8

9 **Fig. S1** Seasonal patterns of soil  $N_2O$  emissions from (a) *Acacia auriculiformis* and (b)10 *Eucalyptus urophylla* plantations. The error bars denote 1 SE.



13 **Fig. S2** Temporal variation of climate factors, soil temperature and WFPS from  
14 August 2010 to July 2012. (a) Monthly rainfall and air temperature, (b) soil

15 temperature at 5 cm depth, and (c) soil WFPS at 0-10 cm depth. The error bars denote  
16 1 SE. AA, *Acacia auriculiformis*; EU, *Eucalyptus urophylla*.