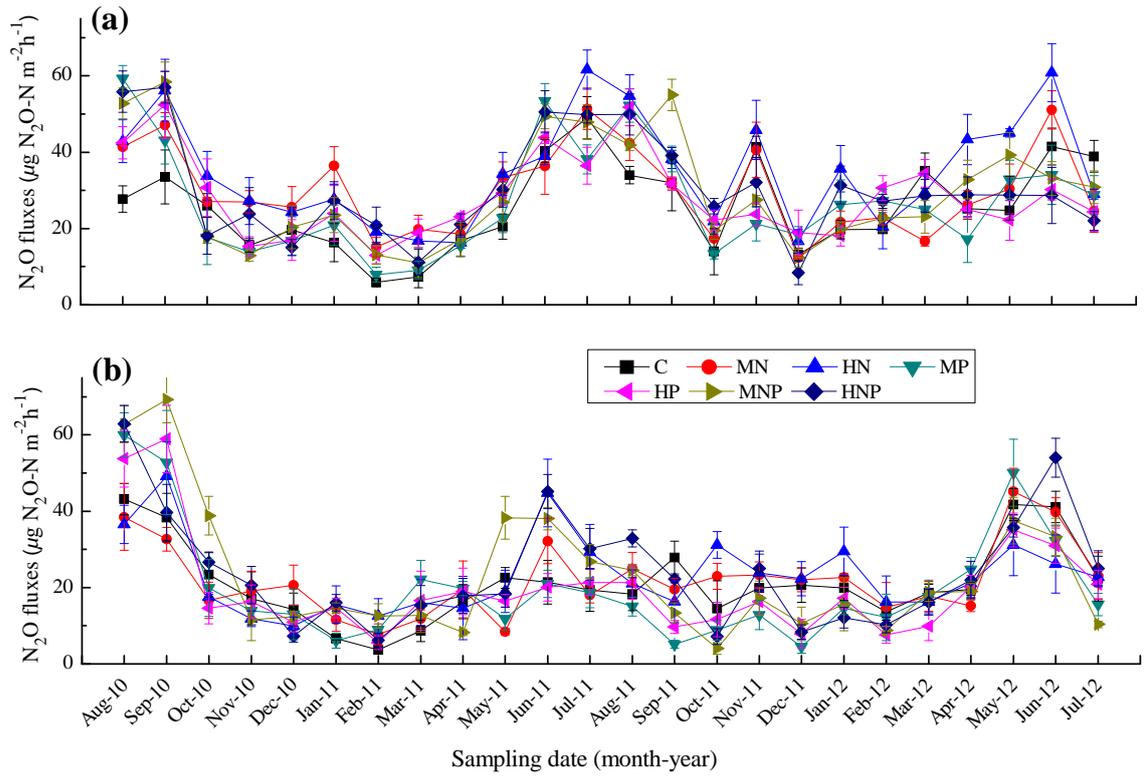


1 **Table S1** Indices of the tree structure in *Acacia auriculiformis* and *Eucalyptus*
 2 *urophylla* plantations.

	<i>AA</i> plantation			<i>EU</i> plantation		
	<i>Acacia auriculiformis</i>	Other plants	Total	<i>Eucalyptus urophylla</i>	Other plants	Total
Stem density (tree ha ⁻²)	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 ² ha ⁻²)	7.3	5.2	12.5	14.7	2	16.7
Percentage of basal area (%)	59	41	100	88	12	100

3

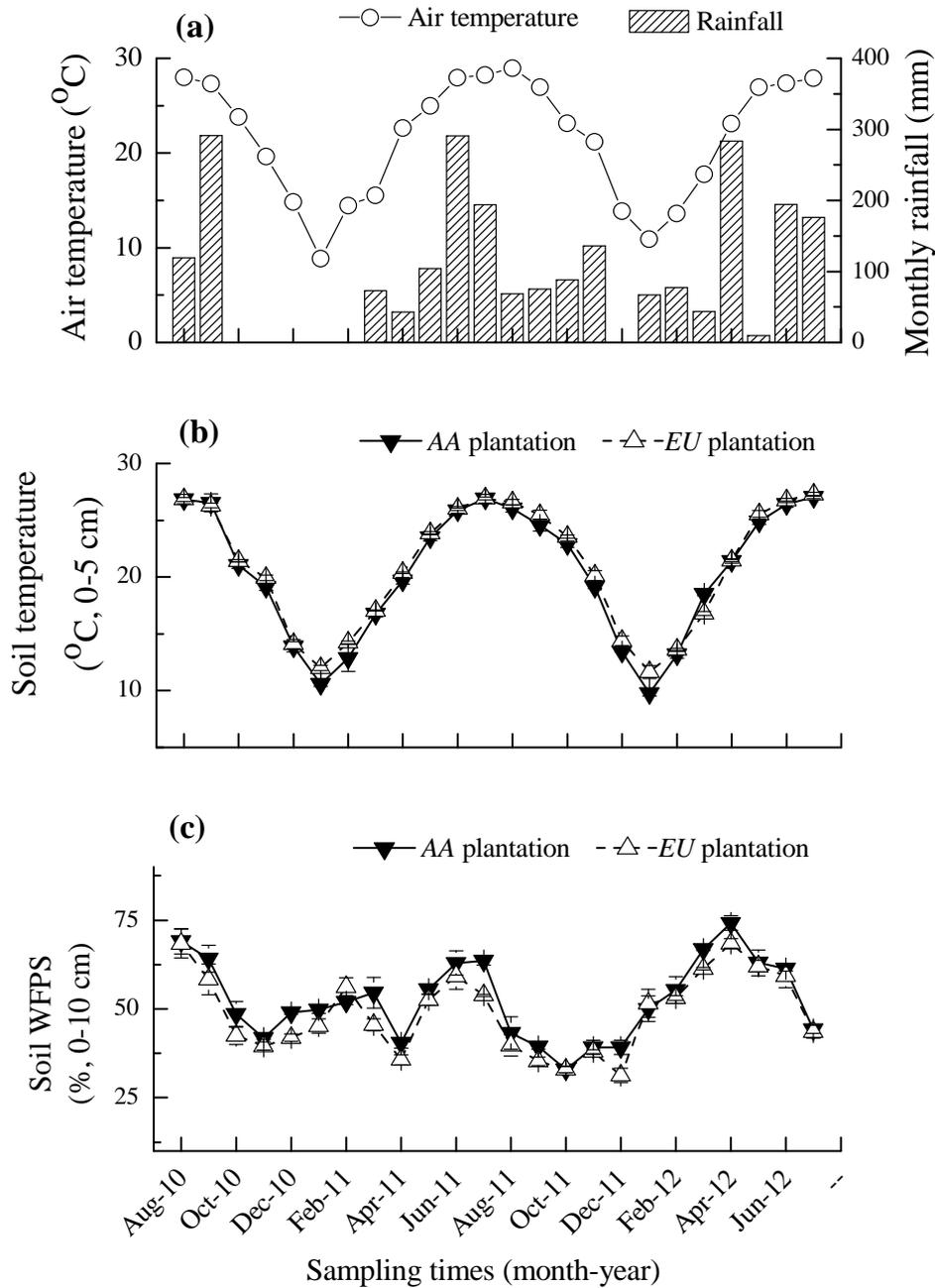
4 **Notes:** The survey was conducted in July 2010 (27 years after tree planting) before
 5 the first N, P, and NP applications. DBH, Diameter at breast height. *AA*, *Acacia*
 6 *auriculiformis* plantation; *EU*, *Eucalyptus urophylla* plantation.



7

8 **Fig. S1** Seasonal patterns of soil N₂O emissions from (a) *Acacia auriculiformis* and (b)

9 *Eucalyptus urophylla* plantations. The error bars denote 1 SE.



10

11 **Fig. S2** Temporal variation of climate factors from August 2010 to July 2012. (a)

12 Monthly rainfall and air temperature, (b) soil temperature at 5 cm depth, and (c) soil

13 WFPS at 0-10 cm depth. The error bars denote 1 SE. AA, *Acacia auriculiformis*

14 plantation; EU, *Eucalyptus urophylla* plantation.