

Table 3 Flux and compartment partitioning (g C per tree yr⁻¹) of the tree carbon (C) balance in this study and in previous studies

	Symbol	Agren <i>et al.</i> (1980)	Nygren <i>et al.</i> (1996)	Le Goff <i>et al.</i> (2004)	This study
Forest biome		Boreal	Tropical	Temperate	Semi-arid
Tree species		<i>Pinus sylvestris</i>	<i>Erythrina poeppigiana</i>	<i>Fraxinus excelsior</i>	<i>Pinus halepensis</i>
Tree age (yr)		14	2	25	35–45
Tree height (m)		2.8	3.7	17.1	10.0
Tree DBH (cm)		NA	NA	18.2	20.0
Flux					
Net assimilation	A	1723	13 666	20 590	24 463
Foliage respiration	R_f	NA	2930	3470	4222
Stem respiration	R_s	64	NA	NA	2246
Root respiration	R_r	109	2076	4548	10 074
$R/(R + G + LE)$		10%	36%	32%	70%
Foliage growth	G_f	286	2044	3060	2037
Stem growth	G_s	277	4302	11 110	1120
Root growth	G_r	960	1280	2500	834
$G/(R + G + LE)$		90%	55%	68%	17%
Foliage litter	L_f	NA	1128	NA	1943
Stem litter	L_s	NA	NA	NA	92
Reproduction litter	L_c	NA	NA	NA	114
Root litter and C export	LE_r	NA	NA	NA	840
$LE/(R + G + LE)$		NA	8%	NA	13%

DBH, diameter at breast height; NA, not available.