

Parameter description	Symbol	Default value ($\times 0.001$)	Calibrated value by SBO ($\times 0.001$)
Decomposition rate from slow pool.	$c(11,11)$	200	495.6
Decomposition rate from passive pool.	$c(12,12)$	4.5	1.01
Temperature sensitivity of C decomposition.	Q_{10}	2000	1737
Labile C fraction effect on C partitioning from leaves to surface metabolic litter.	w_1	1000	589.04
Labile C fraction effect on C partitioning from roots to soil metabolic litter.	w_2	200	4.52
Partitioning from surface structural to surface microbial pool if no lignin is present in surface structural litter.	l_1	400	384.5
Lignin effect of partitioning from surface structural litter to surface microbial litter.	l_2	400	689
Lignin effect on partitioning from surface structural litter to soil slow pool.	l_3	700	7.499
Partitioning from soil structural to soil microbial pool if no lignin is present in soil structural litter.	l_4	450	697.7
Lignin effect on partitioning from soil structural litter to soil microbial pool.	l_5	450	54.46
Lignin effect on partitioning from soil structural litter to soil slow pool.	l_6	700	871.5
C partitioning from soil microbial pool to slow pool if no sand or clay is present.	t_1	169	747.7
Clay effect on C partitioning from soil microbial pool.	t_2	5.44	29.6
Sand effect on C partitioning from soil microbial to slow pool.	t_3	678	636.8
Combined effect of sand and clay on C partitioning from soil microbial pool.	t_4	22	99.5
C partitioning from soil microbial to passive pool if no sand or clay is present.	t_5	0.51	0.152
Sand effect on C partitioning from soil microbial to passive pool.	t_6	2.04	12.99
Clay effect on C partitioning from slow pool to passive pool.	t_7	4.05	24.2
C partitioning from slow to passive pool if no clay is present.	t_8	14	0.012
C partitioning from slow to soil microbial pool if no clay is present.	t_9	449	368.8