

GENERAL INFORMATION

author(s)	Lust N, Muys B, Nachtergale L, Schauvliege M, Van Camp N
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project	Msc Haleplis&Vakalopoulos, Msc Schauvliege, Msc VanCamp
supervisor	Lust N
institution	Ghent University, Laboratory of Forestry
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data	

MATERIALS & METHODS

study area	5n
time period	
goal	overview of the research on C at the Laboratory of Forestry
set-up	C accumulation in the soil and the trees in two different old forest stands C content in young stands on former pasture
data collection	76 plots: C content of L, F, H, 0–5, 5–15, 150–50, 50–100 3 model trees per species : C content of roots, stem, branches, twigs, leaves + L, F, H, soil
remarks	Haleplis&Vakalopoulos_1993_th Schauvliege_1995_th VanCamp_1995_th

RESULTS

The overall C stock in the two forest stands was similar. The largest pool of C was found below ground level (71 % for ash, 63 % for the oak-beech stand). A little fraction was found in the living biomass (33 % ash, 43 % oak-beech). The humus layer shows the largest differences between the two stands: 25 ton/ha for oak-beech, 4 ton/ha for ash.

C content in the young ash stand is much higher than in the pasture and the young pin oak stand. The mineral soil contains 42 % of the C. The ash trees represent 47 %, the oak trees 32 % of the C stock in the young stands. After 25 years, the C stock in the young ash stand was higher than in the pasture, while the C stock of the oak stand was lower than in the pasture.