GENERAL INFORMATION

author(s)	Huvenne V
year	1998
English title	Impact of the Tertiary substrate on tree growth in the Aelmoeseneie forest
original title	Inventarisering van het Tertiair substraat en relatie met de boomgroei in het Aelmoeseneiebos te Gontrode
reference	Msc thesis, Ghent University, Ghent
pages	117
type	dissertation (d2)
ecosystem service	provisioning – wood
keywords	soil, tree growth
taxa	*Quercus robur – Fagus sylvatica – Quercus rubra – Larix leptolepis – Fraxinus excelsior*
project	Msc thesis
supervisor	Van Meirvenne M, Lust N
institution	Department of Soil Management & Laboratory of Forestry
document	hardcopy
data	

MATERIALS & METHODS

study area	2e, 3b, 3c, 3d, 3e, 5a, 5e, 5f, 5g, 5i, 5j, 5l, 5n (Fig. 4.1 p 30)
time period	
goal	Mapping of the Tertiary substrate, and investigating the relationship between substrate and tree growth.
set-up	50 sample points on a grid, 67 random sample points (Fig. 4.2 p 37) 5 tree species, 259 trees: pedunculate oak (88), beech (55), larch (50), red oak (42), ash (22) (sample points Fig. 4.3 p 43)
data collection	topography – DTM depth and texture of Tertiary substrate, C content, $CaCO_3$ content tree height, dbh
remarks	

RESULTS

The Tertiary substrate occurs relatively close to the soil surface (mean depth = 110 cm), but there is a lot of variation in depth (min = 40 cm, max = 200 cm) and in texture, which causes a high heterogeneity.

No statistically significant relationships between the Tertiary substrate and tree growth. Clayey sand or sandy clay seem to support tree growth whereas a clay substrate might be less well suited for tree growth.