

## GENERAL INFORMATION

author(s)	Muys B, Granval P
year	1997
English title	Earthworms as bio-indicators of forest site quality
original title	
reference	Soil Biology and Biochemistry 29
pages	323-328
type	article (a1)
ecosystem service	supporting – soil formation and fertility
keywords	earthworms
taxa	<i>Fagus sylvatica</i> , <i>Fraxinus excelsior</i>
project	
supervisor	
institution	Ghent University, Laboratory of Forestry
document	pdf, hardcopy
data	

## MATERIAL & METHODS

study area	5a, 5b, 5c, 5d, 5e, 5i, 5j, 5l, 5n
time period	autumn 1988, spring 1990, spring 1993
goal	
set-up	datasets from 3 previous studies (2 in Gontrode, 1 in Halle)
data collection	Muys&Lust_1992_SoilBiolBiochem Sisselaar_1991_th
remarks	

## RESULTS

Earthworm biomass is a suitable indicator for detecting trends in soil pH, ectorganic horizon biomass, soil humidity and humus quality. However, an evaluation of the ranges of presence demonstrated that earthworms are less stenobiotic and therefore less precise indicators of forest site quality than many herbal plant species.

In general, the optimal humidity and humus quality optimum for earthworms is higher than for important timber species. Earthworms can be useful as indicators in forest acidification research.