

GENERAL INFORMATION

author(s)	De Becker P, Jochems H, Huybrechts W
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MATERIALS & METHODS

study area	collection of base data: 30 sites in Flanders, except for West-Flanders (122 measuring points) test sites: 5 forests in East-Flanders (Bos t'Ename, Nuchten, Stropersbos, Trimfontbos, Vlassenbroekse Polder)
time period	2003-2004
goal	Gain insight into the abiotic requirements of alluvial <i>Alnus</i> forests in East-Flanders. Develop a framework for estimating possibilities for alluvial <i>Alnus</i> forest development based on the abiotic stand conditions.
set-up	combination of stand and vegetation characteristics <ul style="list-style-type: none"> - 30 well-developed areas - 122 measuring points - literature review: soil texture, soil chemistry, soil water level, soil water chemistry are important characteristics - coupled with vegetation inventory (172 plots)
data collection	<ul style="list-style-type: none"> - soil water depth (fluctuations) - chemical composition of the soil water - soil profile: texture, structure, pH, chemical composition, CEC, organic material - vegetation: species and cover
remarks	

RESULTS

Five alluvial forest types were distinguished. Their vegetation and occurrence are discussed.

	riparian birch forest	riparian ash forest with <i>Chrysosplenium</i>	riparian forest of ash and bird cherry	riparian semi-rich alder forest	riparian alder forest with scrub
mean soil water depth			- 1 m	- 1 m	- 1 m
max soil water depth			- 1,6 m	- 1,6 m	- 1,6 m

soil water depth					large variation
mineral content soil water	lower			intermediate, low levels of Mg and CO ₃ ⁻	
soil	organic	clay	loam		
soil pH	two units lower	intermediate	intermediate	one unit lower	intermediate