## First results of growth characteristics of hybrid aspen, birch and grey alder fertilized plantation on former farmland

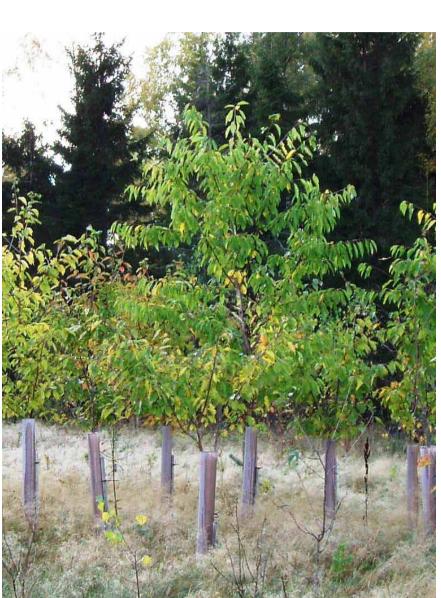
Latvian State Forest Research institute "Silava" Riga Street 111, Salaspils, Latvia

## **Problem**

'Multifunctional forestry' is relatively new term in the world, and from the point of view of also in Europe. This term has appeared in the previous century 80-90s. Together with the following terms, 'sustainable forestry' or 'sustainable agroforestry', that includes meeting ecological, economical and social needs locally and globally. In Latvia exist vast areas of agricultural lands that are not used rationally and overgrow with ligneous and caulescent plants and scrubs of low value. Afforestation of these areas with monocultures to produce high-quality timber would partially eradicate disadvantages described above.



Sweet chery



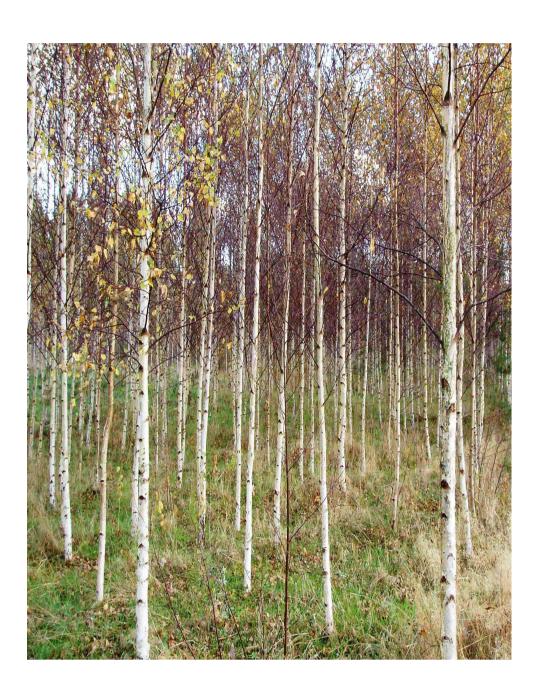
5-year sweet cherry



Hybrid aspen 12 year



15-yer lime with ower sowing of lupin



Birch of different planting density



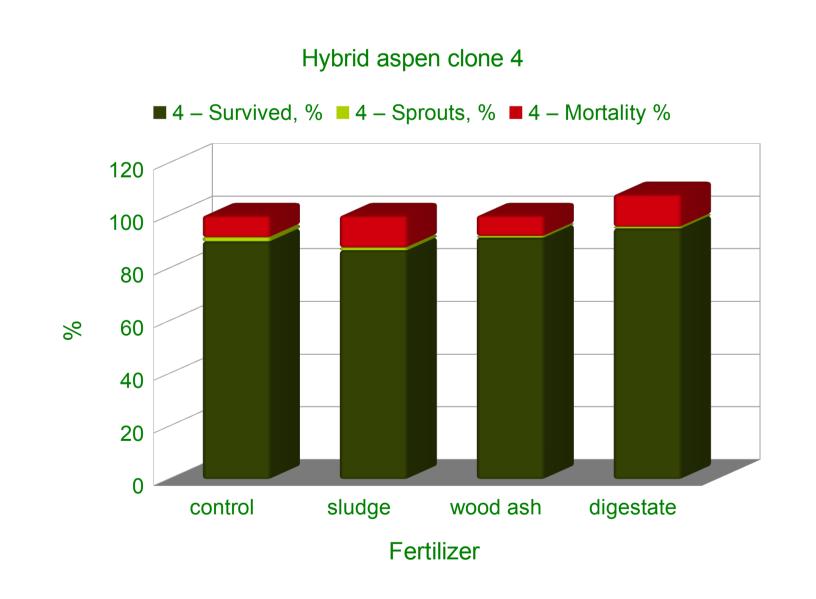
30 year sweet cherry DBH=30 cm, H=24 m

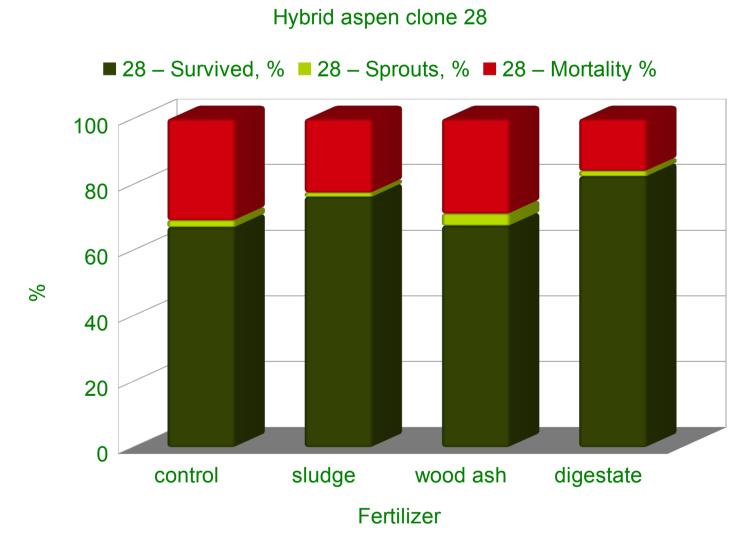
The <u>overall target</u> of the project is to secure implementation of National and European Community targets in the fields of renewable energy and protection of environment, retaining at the same time diversity of rural landscapes and biodiversity of nature.

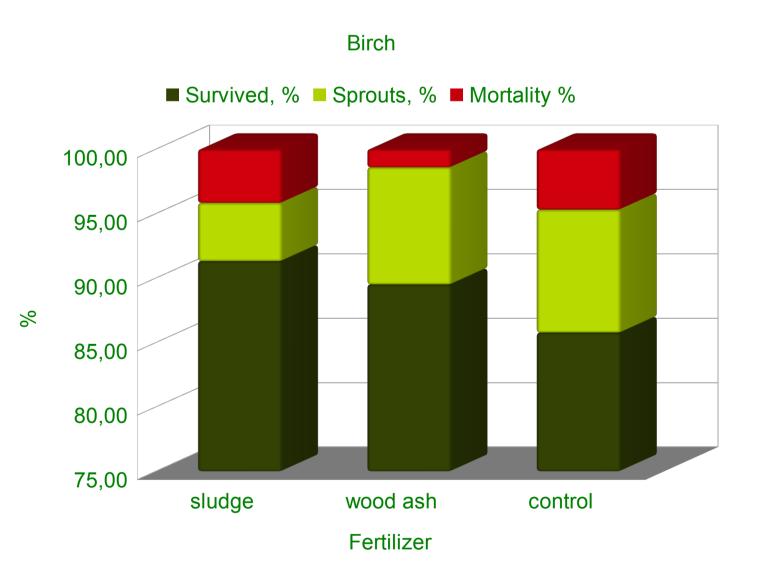
The <u>specific target</u> of the project is to elaborate the public source of practical information and interactive model of business plan for development of short rotation woody crops based business and to establish multi-functional training plots to demonstrate technologies and management approaches of different species of fast growing trees and grasses with high energy value on abandoned farmlands.

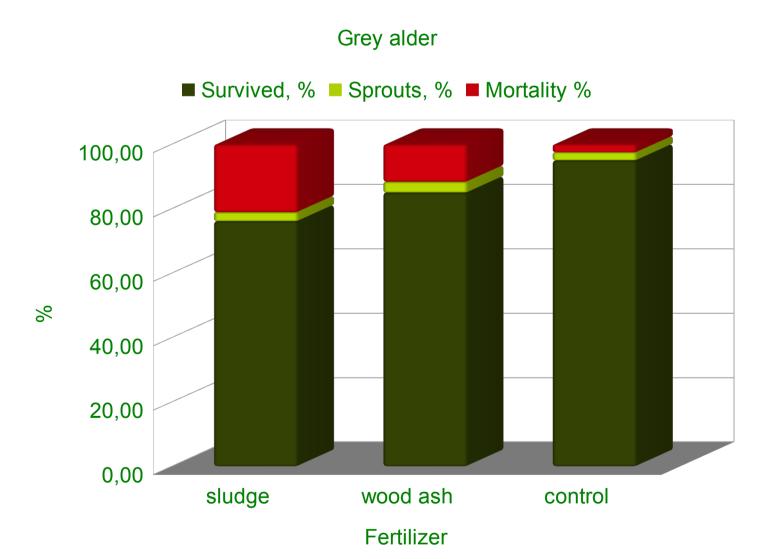
<u>Aim</u> - to evaluate pottential of trees growth increase by fertilizing with waste water sevage sludge, wood ash and biogass plant residues.

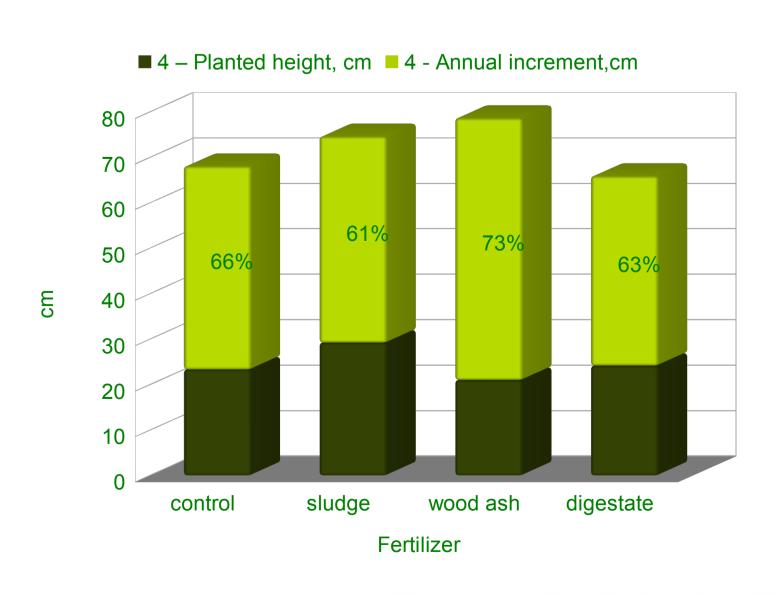
## **First results:**

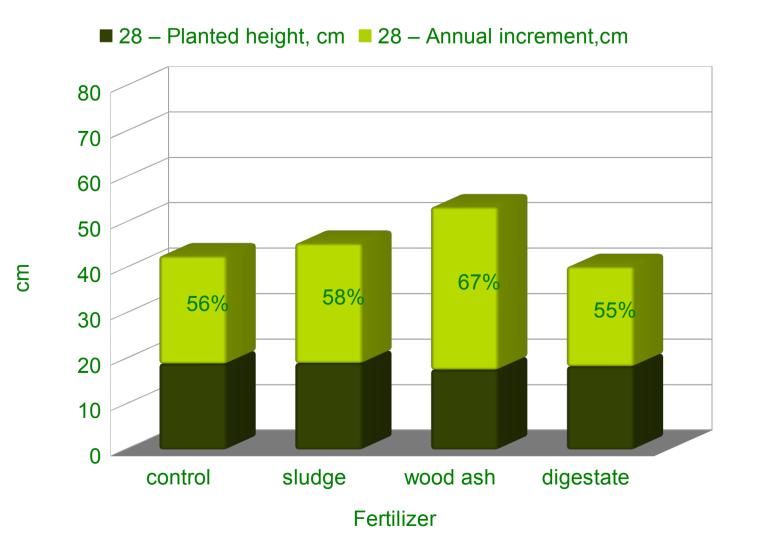


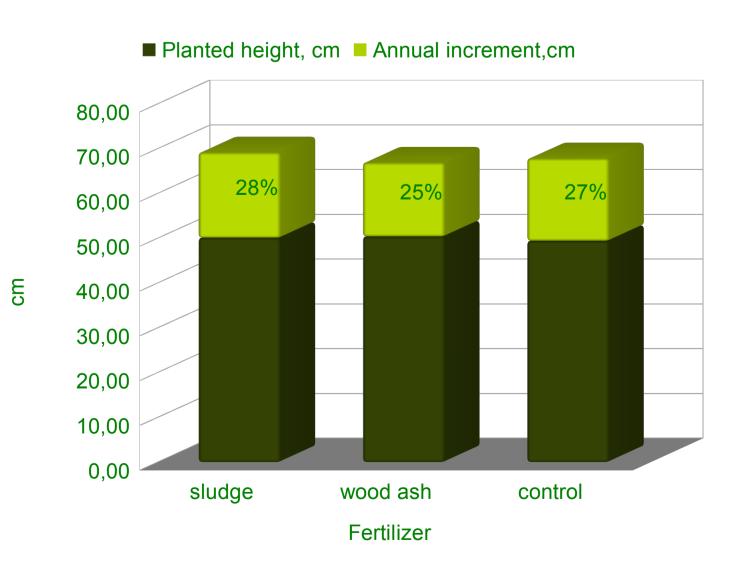


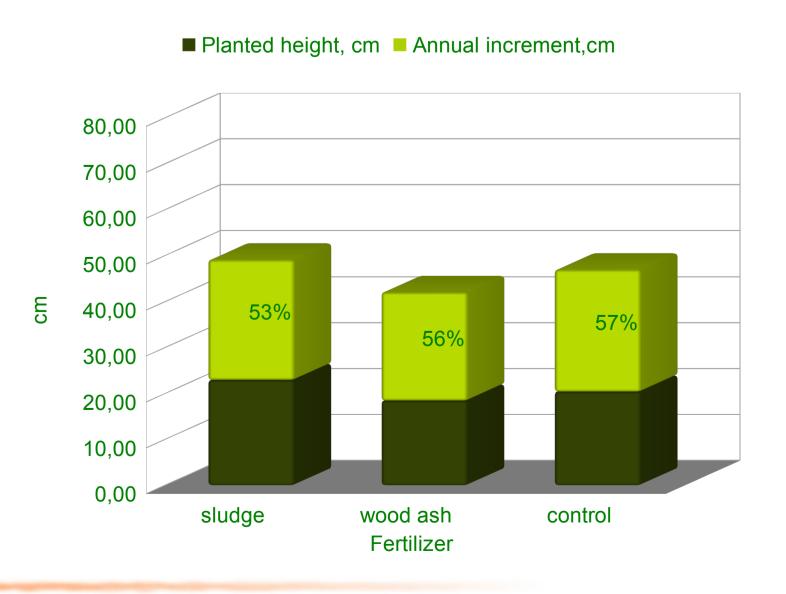












European Regional Development Fund (ERDF) project

"Elaboration of models for establishment and management of multifunctional plantations of short rotation energy crops and deciduous trees"

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