



Funded by the European Union

INVESTMENT IN YOUR FUTURE



Genetic diversity with aspen stands: phenology observations and molecular analysis

Mārtiņš Zeps

martins.zeps@silava.lv



Funded by the European Union

INVESTMENT IN YOUR FUTURE

Background



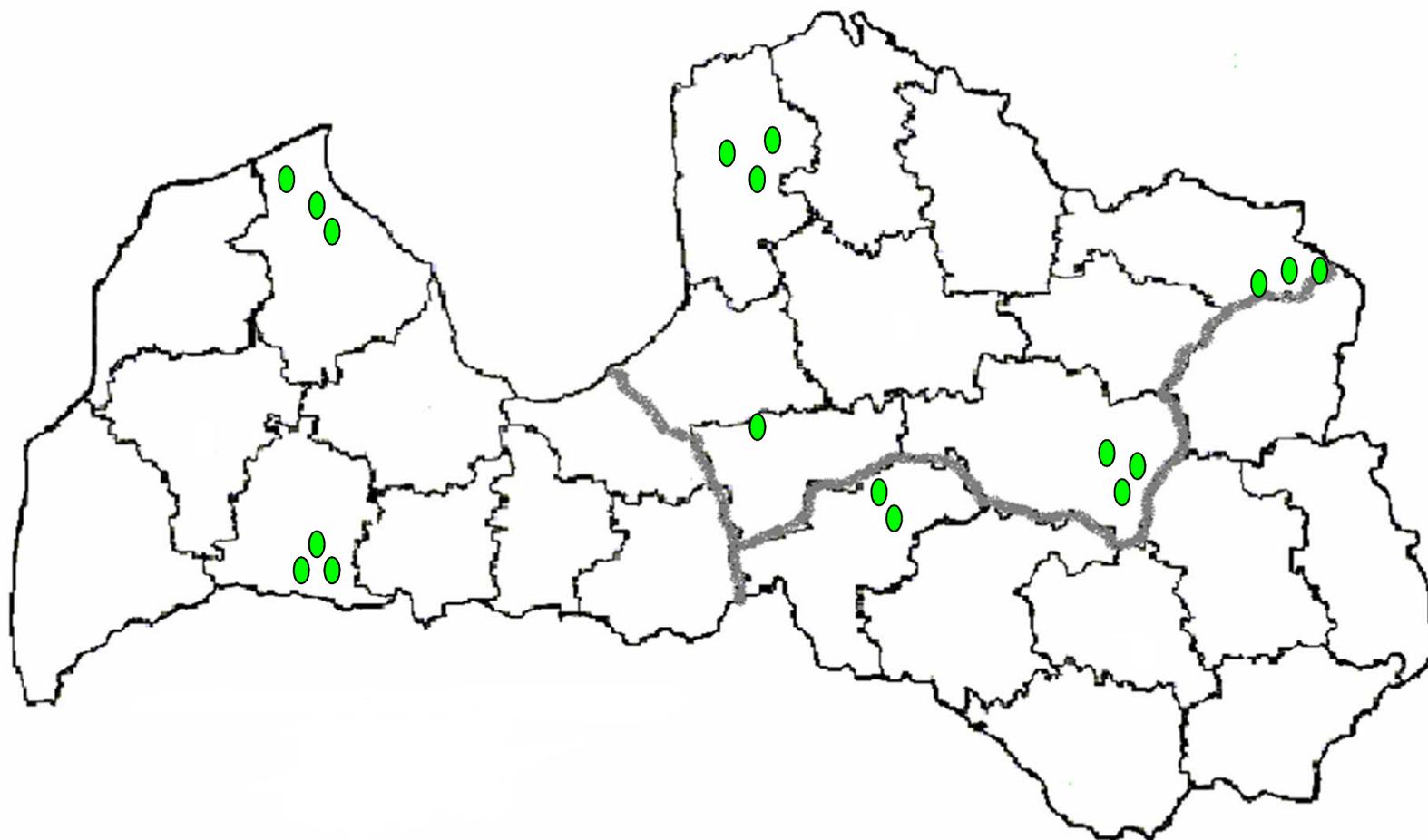
The European aspen (*Populus tremula*) is thought to reproduce mostly asexually. Thus aspen forms clones, in which several ramets belong to one genetically defined genet. We compared the clonal structure of aspen in managed forests in 6 populations in Latvia. In every population selected 3 stands approximately 5 to 10 years old, naturally regenerated this sprouts. Clones were identified using morphological characters and 3+3 microsatellite loci originally developed for *Populus remuloides*.



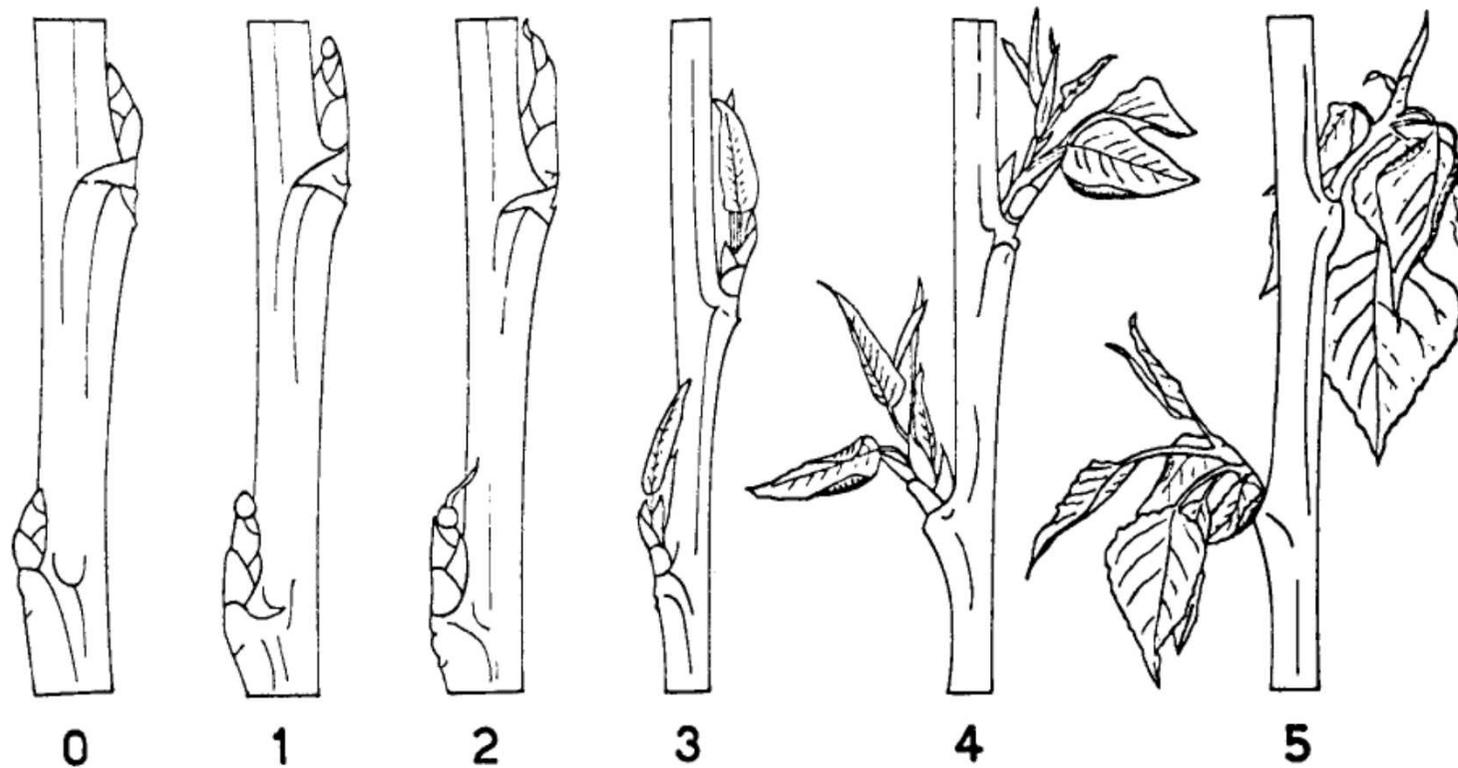
Funded by the European Union

INVESTMENT IN YOUR FUTURE

Materials and method



Materials and method

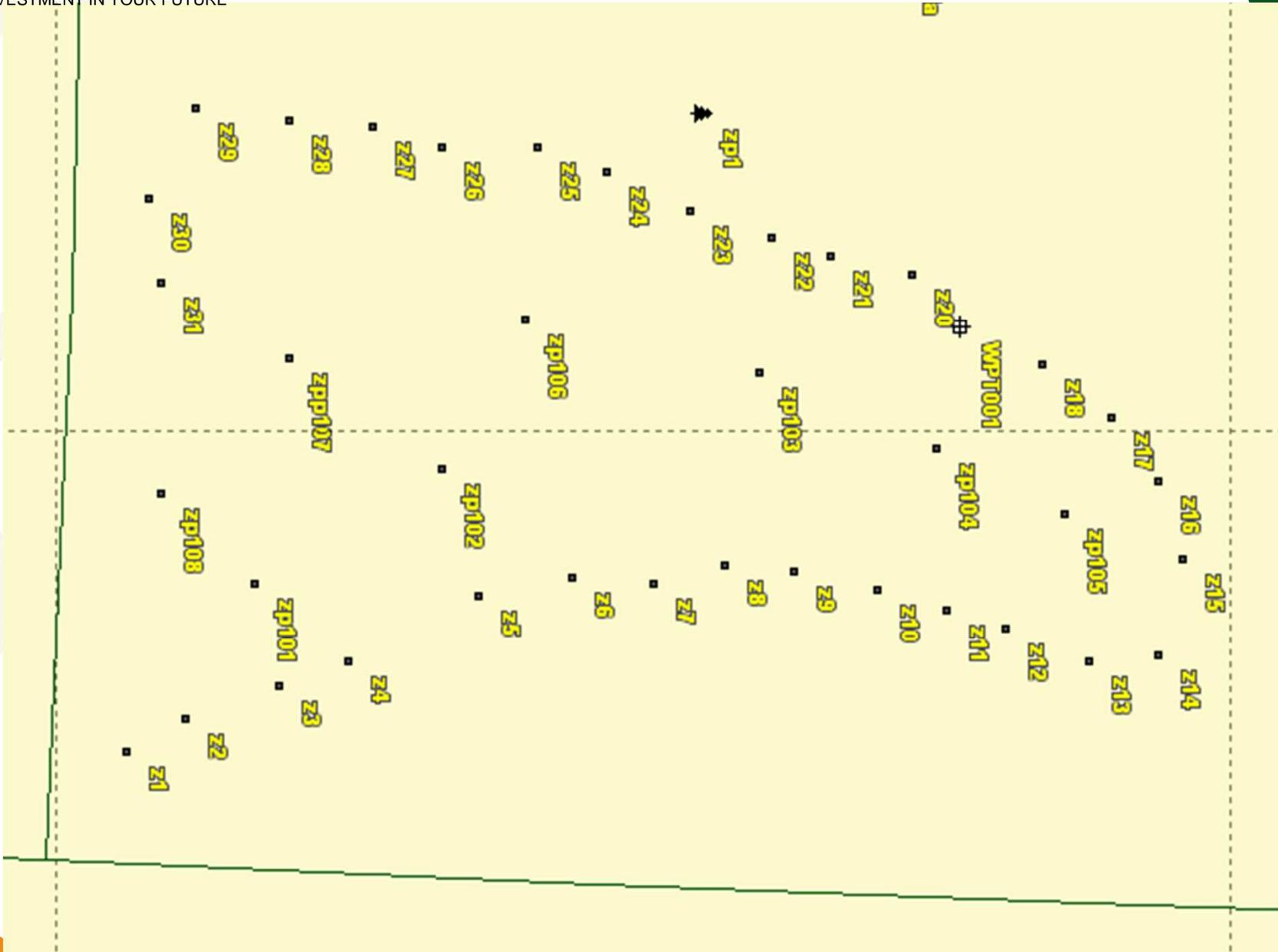




Funded by the European Union

INVESTMENT IN YOUR FUTURE

Results

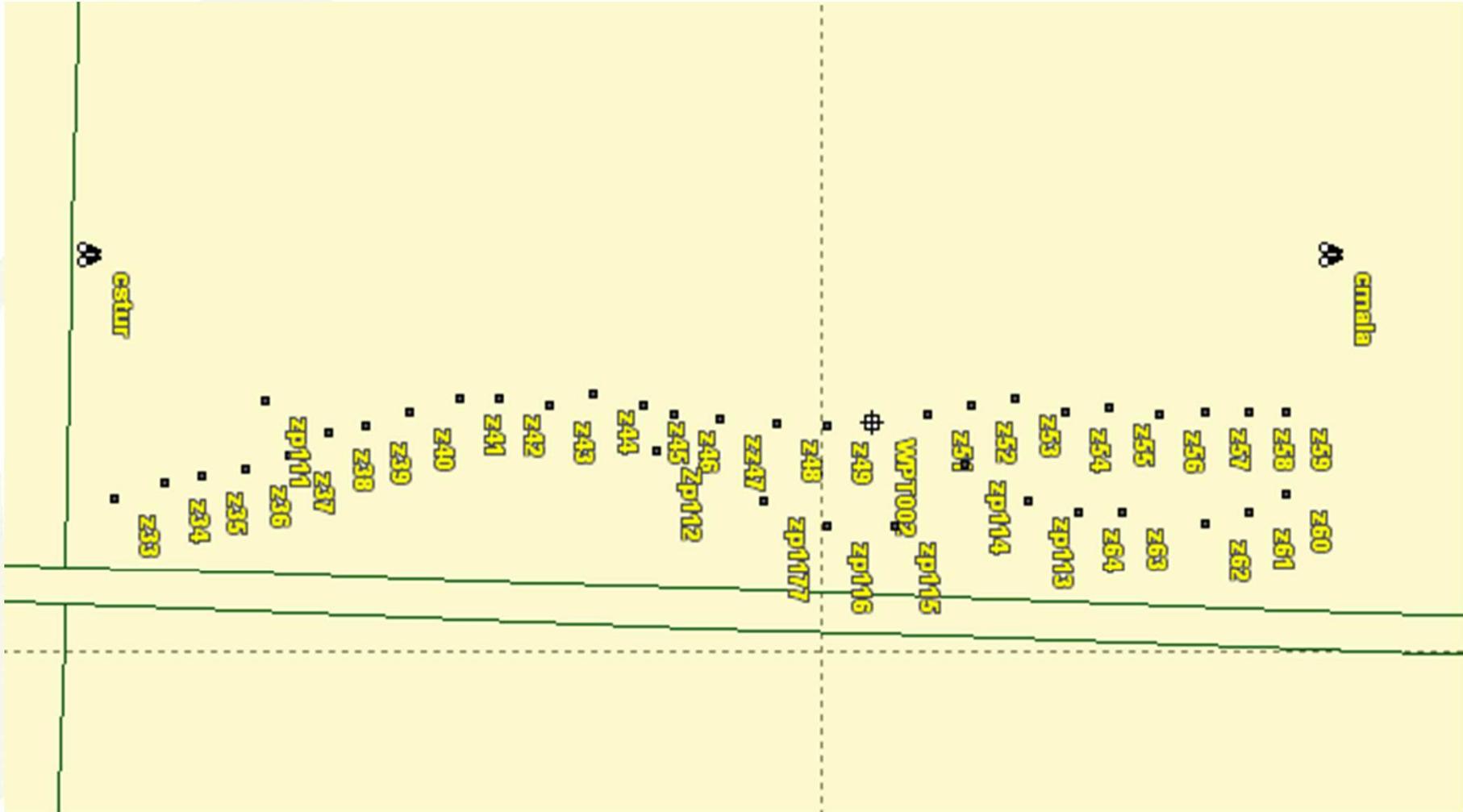




Funded by the European Union

INVESTMENT IN YOUR FUTURE

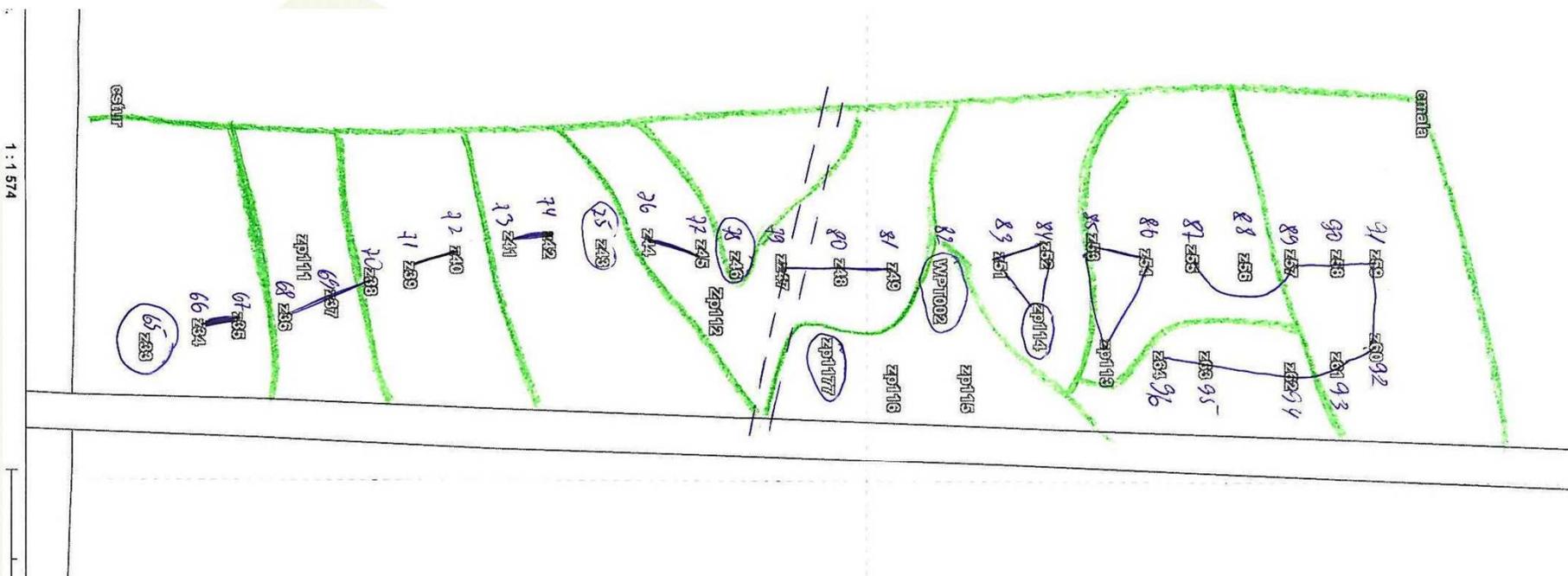
Results



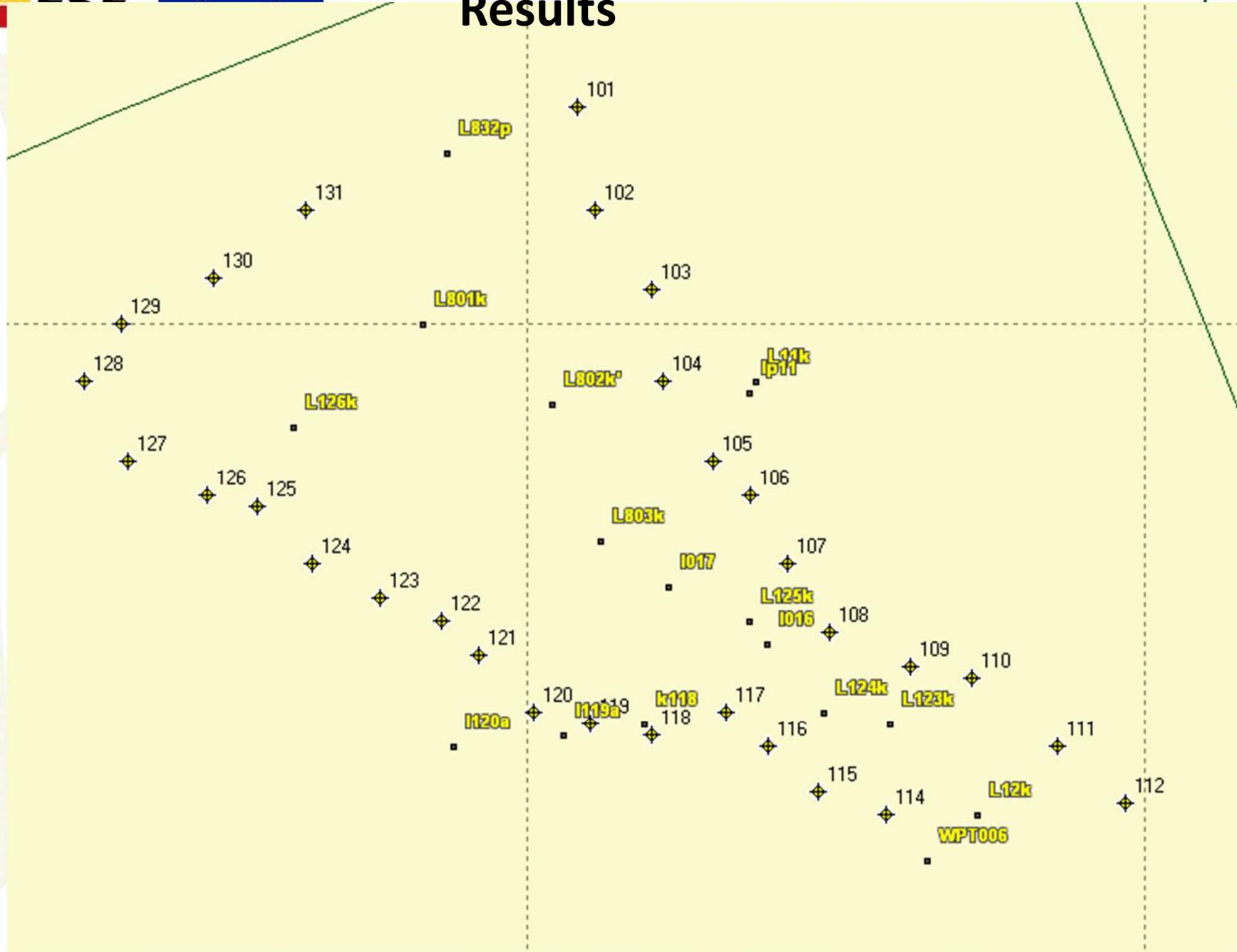


Funded by the European Union

INVESTMENT IN YOUR FUTURE

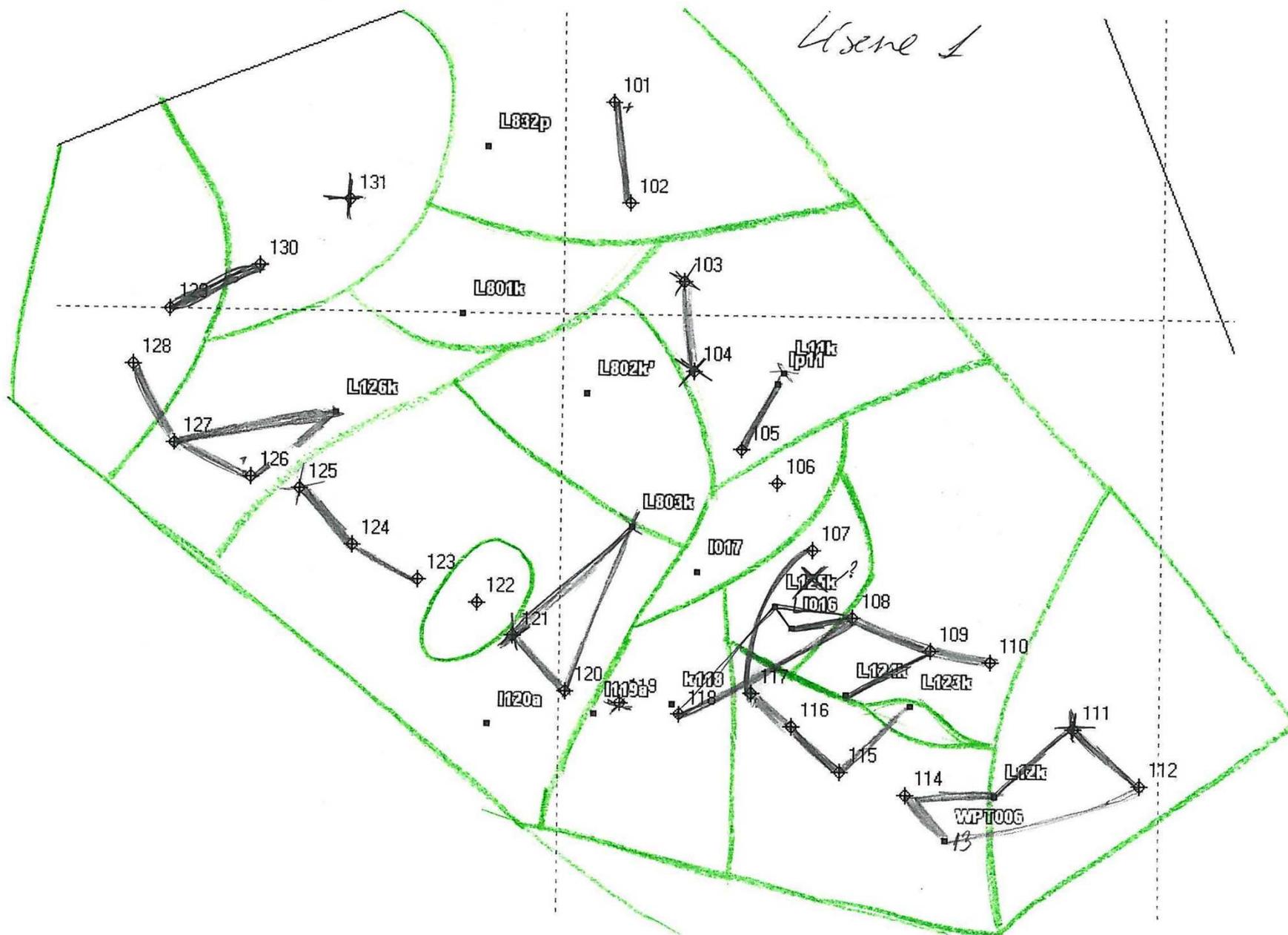


Results





Usene 1

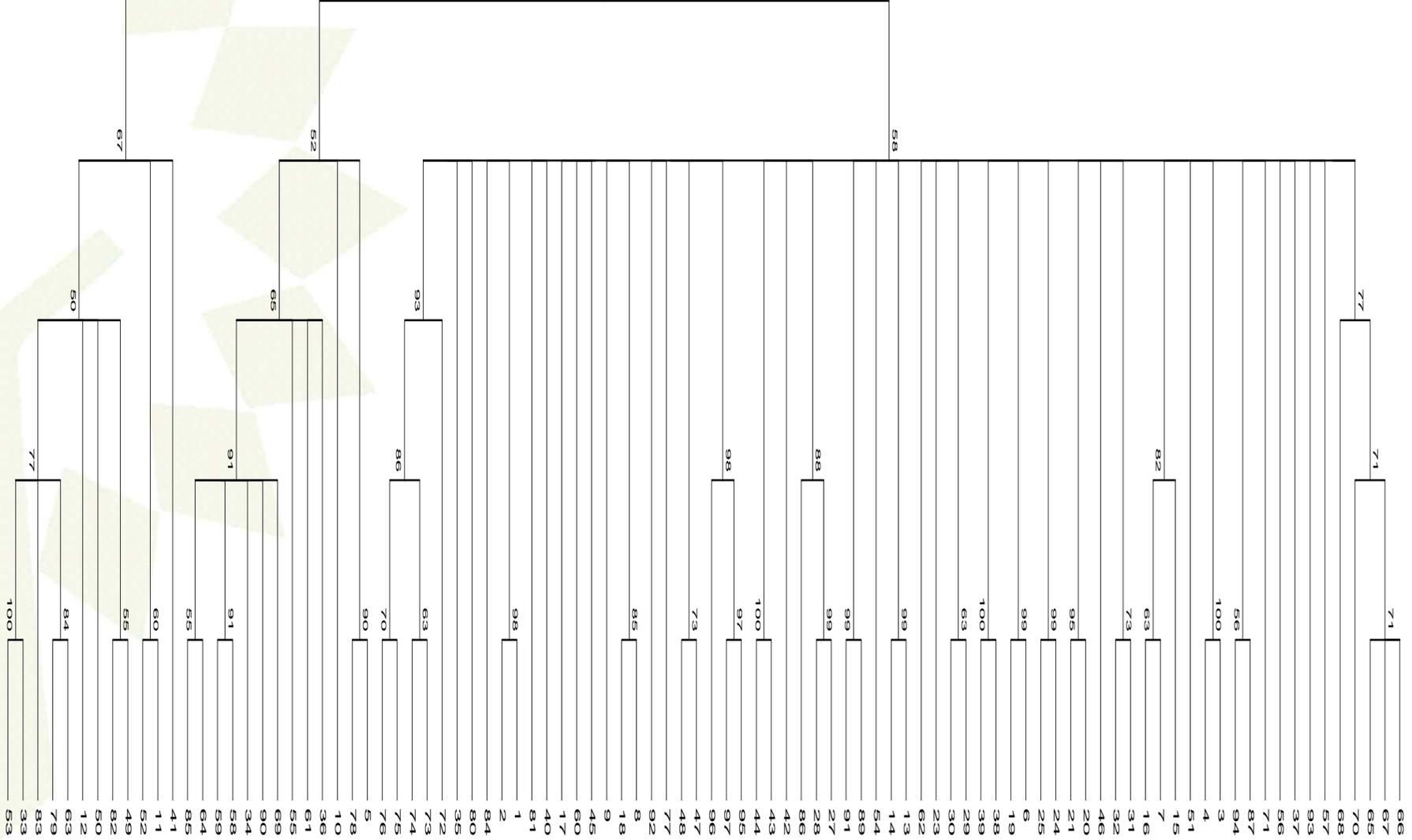




Funded by the European Union

INVESTMENT IN YOUR FUTURE

Results





Funded by the European Union

INVESTMENT IN YOUR FUTURE

Conclusions



- ✓ **The numbers of clones that were identified with microsatellites were larger than morphological characters.**
- ✓ **On average clone size in population was 1,6 ramets**
- ✓ **Only one ramets average in population was 22 ramets**
- ✓ **The average number of clones per hectare was 11,3.**



Funded by the European Union

INVESTMENT IN YOUR FUTURE

Thank You for attention!



**Study has been funded by:
ESF project “Importance of Genetic Factors in Formation of Forest
Stands with High Adaptability and Qualitative Wood Properties”
(No 2009/0200/1DP/1.1.1.2.0/09/APIA/VIAA/146)**

