

P2 (INRA): Dr Jean-Charles Leplé, UAGPF, INRA-Orléans, France Email: leple@orleans.inra.fr

Date of birth: August, 03rd, 1964

Academic degrees: M.Sc. degree(1989) and Ph.D. degree in Biophysicochemistry and, cellular and Molecular Biology (Univ. Orléans, France, 1993).

Present Employment: Group Leader, Unit AGPF, INRA-Orléans

Research Projects: Dr. Jean-Charles Leplé is involved in genomic studies on wood formation in poplar, and more specifically on tension wood, formed in response to a mechanical stress. In the past, he has participated to several collaborative projects focused on genetic engineering on poplar for insect tolerance and lignin metabolism modifications. He has more than 15 years of expertise in genetic transformation of poplar species. In 1992 he published an efficient

transformation procedure for a poplar clone (INRA 717-1-B4) largely used all over the world (123 citations from Web of Science). He recently developed improvements to speed up the screening of transgenic wood zone on poplar. He has over 10 years of experience in the management of field trials of transgenic poplars. He has been co-supervisor of 3 PhD thesis and 10 Master degrees. More than 40 publications in SCI-indexed journals.

Publications:

32 papers, 10 book chapters, one patent.

- Déjardin A, Laurans F, Arnaud D, Breton C, Pilate G and Leple JC (2010) Wood formation in Angiosperms. C. R. Biologies, in press.
- Decou R, Lhernould S, Laurans F, Sulpice E, Leplé JC, Déjardin A, Pilate G and Costa G (2009) Down-regulation of a xylan and wood specific β -xylosidase-like gene (PtaBXL1) in poplar tension wood, *Phytochem.*, 70, 163-172.

- Ralph, J., Kim, H., Lu, F. C., Grabber, J. H., Leplé, J.-C., Berrio-Sierra, J., Derikvand, M. M., Jouanin, L., Boerjan, W., Lapierre, C., 2008. Identification of the structure and origin of a thioacidolysis marker compound for ferulic acid incorporation into angiosperm lignins (and an indicator for cinnamoyl CoA reductase deficiency). *Plant J.*, 53: 368-379.

- Leplé JC, Dauwe R, Morreel K, Storme V, Lapierre C, Pollet B, Naumann A, Kang K-Y, Kim H, Ruel K, Lefèbvre A, Joseleau J-P, Grima-Pettenati J, De Rycke R, Andersson-Gunnerås S, Erban A, Fehrle I, Christensen JH, Petit-Conil M, Kopka J, Polle A, Messens E, Sundberg B, Mansfield S, Ralph J, Pilate G, Boerjan W (2007) Down-regulation of cinnamoyl-coenzyme A reductase in poplar (*Populus tremula* x *P. alba*); multiple level phenotyping reveals effects on cell wall polymer biosynthesis, degradation and structure. *Plant Cell*, 19: 3669-3691.

Arnaud D, Déjardin A, Leplé JC, Lesage-Descauses M-C, Pilate G (2007) Genome-wide analysis of LIM gene family in *Populus trichocarpa*, *Arabidopsis thaliana* and *Oryza sativa*. *DNA Research*, 14, 103-116.