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Agrobranche, give a green value to the agroforestry branches

Liagre F.¹ (liagre@agrooof.net), Marchal R.², Lemoigne N.³, Bono P.⁴, Aouf C.⁵, Senegas I.⁶, Gerardin P.⁷, Dauzat J.²

¹Agrooof, anduze, France; ²CIRAD, Montpellier, France; ³Armines, Ales, France; ⁴FRD, Troyes, France; ⁵INRA, Montpellier, France; ⁶Chambre régionale d'agriculture, Rennes, France; ⁷LERMAB, Nancy, France

Agrobranche aims at studying the possibility of strengthening the economic model of the agroforestry by improving the valuation of the intermediate biomass in the new domains of bio-based materials and chemistry.

This objective answers a double purpose:

Agroforestry management requires regular cuttings of branches for the control of the shade and the influence of trees. Branches constitute a resource available throughout the life of trees, very few harvested today.

For the partners of the industrial development, it is the possibility to benefit a resource of quality compatible with the classic agricultural productions, and safer in terms of supply.

Agrobranche will identify the best segments for the agroforestry systems with a comparison between the various uses and to dread the relevance of these agroforestry products among the set of resources mobilizable for these segments. Among the aimed segments, rigid / semi-rigides insulations with wood, particle boards and composites wood-polymer for the « material » way and extractibles molecules for the «green chemistry» way will be particularly envisaged as ways of promising valuations.

The works which are going to be led by our consortium including agricultural professional organizations, research laboratories and companies, aim in :

Defining agroforestry products likely to contain substances extractibles of interest,
Qualifying the industrial potential of valuation of the agroforestry chips for the new markets
Identifying the standard of the agroforestry chips meeting the needs of companies for a given application and an organization of the sector to optimize its development and profitability,
defining on one hand the upstream chips production ways and on the other hand the downstream technological ways dedicated for fibers and molecules extraction,

The main asset of Agrobranche is the concern to connect the needs between research and industrial sectors with an agroforestry product with strong agroecological value, without any competition for the agricultural productions. By this way, we avoid the frequent stumbling block of the green chemistry projects based on rival productions and/or on limited resources or little long-lasting, even few sustainable from an energetic point of view.

Keywords: green chemicals, chips, molecule, timber, pannel.

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