Agrobranche, give a green value to the agroforestry branches

Fabien Liagre, R. Marchal, N. Lemoigne, Pierre Bono, Chahinaz Aouf, I. Senegas, P. Gerardin, Jean Dauzat

To cite this version:

Fabien Liagre, R. Marchal, N. Lemoigne, Pierre Bono, Chahinaz Aouf, et al.. Agrobranche, give a green value to the agroforestry branches. 4. World Congress on Agroforestry, May 2019, Montpellier, France. 933 p., 2019, Book of abstracts. 4th World Congress on Agroforestry. hal-02737359

HAL Id: hal-02737359
https://hal.inrae.fr/hal-02737359
Submitted on 2 Jun 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.
Agrobranche, give a green value to the agroforestry branches

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

¹Agroof, 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 energical point of view.

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

References:

2. FRD/ADEME, Evaluation de la disponibilité et de l’accessibilité des fibres végétales à usages maté