

# **COST Action FP1203**

European Non-Wood Forest Products (NWFPs) Network

## **FINAL REPORT**

### **Short Time Scientific Mission *Management of Iberian Pine Forest Areas for Gum Resin Production***

Host Institution: Consejería de Fomento y Medio Ambiente  
Junta de Castilla y León

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*STSM Management of Iberian Pine Forest Areas for Gum Resin Production*

### FINAL REPORT

#### CONTEXT AND PURPOSE OF THE MISSION

Pine oleoresin is an important natural raw material, highly demanded in the European Economic Community, which is one of the biggest consumers of resin products in the world. In a few years Spain and the Castilla y León Region in particular, managed to increase the amount of the collected resin up to 12 000 tons (2014). This is only possible with the rational use of all available management tools, namely the Management plans in the flood plain of Segovia and Valladolid, some of them dating from the 19<sup>th</sup> century.

As stated in the Workplan, the purpose of the STSM was to improve our knowledge of the management tools, plans and other administrative instruments for pine resin harvesting in Spain (Valladolid, Avila, Segovia) and to learn from their practical implementation on wide areas.

We believe that working together with our Spanish partners and learning from their experience will bring benefits not only to Portugal but also to both Iberian countries.

#### WORKPLAN IMPLEMENTATION

##### *a) Environmental Department of Castilla y León Government/Valladolid*

The Workplan included a first attending at the Environmental Department of Castilla y León Government – Consejería de Fomento y Medio Ambiente at Junta de Castilla y León, located in Valladolid, for consulting and getting acquainted with general data concerning territorial planning and organization, silvicultural and management instructions and administrative procedures concerning resin tapping activities, constraints and perspectives about this important economical resource for the Region.

At this Department we were received by Álvaro Picardo and some responsible Engineers from the Planning and Resource Sections of the Forest Management Division. We could collect some fundamental data on the territory, land use, the regional forest law (which again includes resin as an significant forest use), forest defense strategy against forest fires, regional policy of forest investment and funding, namely the regional improvement fund (15% of all the forest profits), which is mandatorily used back in the enhancement of forest stands and forest areas. At this Department several documents were provided. The collected information requests for a more detailed treatment which is not possible within the framework of this Report, but is worth to be undertaken (see section Expected Outputs).

### *b) Territorial Environmental Service at Segovia*

At this Service we could consult a few detailed management plans, and the respective revisions aiming at the resin production. It is relevant to highlight that in some locations the management plans for vast public areas started yet in the nineteen century and, by that time, gum resin production was the driving force of the planning works.

We became aware of the process and required formalities to perform resin tapping and the local specifications/restrictions regulating the activity. There is not a Law regarding resin harvesting, but only technical recommendations, for instance, resin tapping takes place with a minimum tree DBH of 30cm to 33cm, according to the understanding of the Local Technicians.

### *c) Field trips*

Field trips took place at Valladolid, Avila and Segovia. It was possible to understand some differences between the conditions under which resin tapping takes place.

The first field trip had the Viana Comarca (Delegación Territorial de Valladolid) as destination. There we could see the use of an innovation in harvesting technique (collecting operation), shown in Fig. 1.



Fig 1 – A new collecting system at Valladolid

The second trip was to Ávila, where the rough terrain is a severe difficulty to resin tapping and the involved tasks. In the visited region (Mobeltrán) we could observe some *Pinus pinaster* provenances with good, straight stems, able to produce valuable timber (Fig.2).



Fig 2 – *Pinus pinaster* with a straight stem at Mobeltrán

At Coca County, Segovia, we could attend a demonstration of several resin tapping methods, performed by a Forest Ranger (Fig.3) and visit a Museum dedicated to this activity. We were also informed about the ongoing trials of a new chemical stimulant to be used with the bark chipping tapping method (with chemical stimulant), “pica de corteza”. However, the chemical products involved are quite expensive, and its application will be limited by this factor.



Fig. 3 – Resin tapping demonstration at Coca

From the field visits and general vision of the involved agents in resin production, two main conclusions about the importance of the activity in rural areas are possible: the social interest of the activity in terms of providing incomes and rural employment for

the population in the framework of the present crisis and the need of research progresses to improve extraction techniques and profitability of the tapping works in the field.

#### *d) Visits to other Organizations in Madrid*

We visited the Forest Research Centre at National Institute for Agriculture and Food Research and Technology/CIFOR-INIA at Madrid. There we had the opportunity to talk with Ricardo Alia, a Researcher with a long experience in the field of resin production modeling and breeding programs, who presented us the aims of the breeding program for improving resin yield from *Pinus pinaster* Ait. in Spain.

We could also speak with Aida Rodriguez-Garcia, a PhD student at the School of Forest Engineers at the Polytechnic University of Madrid (UPM), who works in the field of resin tapping physiological processes and resin yield related to tapping induced changes on xylem anatomy. She shared with us the used techniques for obtaining thin wood sections for microscopic observation and some ideas about possible future research work on resin issues.

#### FUTURE COLLABORATION

The established contacts with the Regional Government of Castilla y León, the Territorial Administrations at Valladolid, Avila and Segovia, were a unique opportunity to meet the prospects and know the concerns of producers, resin workers and Local Administration. On the other hand, the visit to the Forest Research Centre at National Institute for Agriculture and Food Research and Technology/CIFOR-INIA at Madrid and the School of Forest Engineers at the Polytechnic University of Madrid (UPM) made possible for us to get a global perspective of the main research achievements and interests of the scientific community and how they intend to meet those worries and concerns. Future collaboration and information exchange is possible and also the joint development of research projects with a solid scientific basis.

Future collaboration with Junta de Castilla y León may include the establishment of a network about resin production in the Iberian Peninsula, management tools for improving resin yield, resin tapping methods, trade and prices and other relevant aspects for the local production improvement of this important non-timber forest product.

Soon we will also consider the possibility of participating in a new research Project in the framework of the new INTERREG Europe.

#### EXPECTED OUTPUTS

With all the provided information, documents, publications and taken photos in the field, we wish to present:

- A public presentation to the Association of Resin Gum Producers and First Industrial Manufacturers - RESIPINUS about the experience shared with us by the Spanish Authorities in Castilla y León, resin workers and agents.

- A detailed paper focusing on the organizational aspects and the traditions of resin tapping activity and Silvicultural Management Plans for *Pinus pinaster* Ait. public areas in Spain, namely in Castilla y León Region.

## MISSION CONSTRAINTS

It was not possible to visit or find effective solutions for the implementation of resin harvesting in small rural private properties, located in rugged topography areas. For these situations and the small property in general, the only solution is the establishment of common areas for common management. At the moment Management Plans are not available and are not mandatory for areas/farms lesser than 100 hectares.

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...And others I cannot remember the names.

The Appllicant

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Cover photo:  
Ana Marta Tavares (from the handicraft work gently  
offered by the Forest Rangers at Coca)