

"Resin resource monitoring & modelling in a context of climate change"

Inter-regional workshop INIA Madrid

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Resin in Spanish National Forest Inventory & **statistics**

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Coordinator



Partners

































- State of the art: need of information
- Spanish statistics
- Spanish National Forest Inventory
- Plan for socioeconomic activation of the forest sector in Spain (2014-2020)

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- Portugal (Pinus pinaster Ait.), Spain (*Pinus pinaster* Ait.) and Greece (*Pinus halepensis* Mill.) are currently the only countries that extract resin in Europe, producing 4% of the world's total resin
- The rest of the demand is covered with imports made to other countries (China, Brazil, Indonesia).
- South of Europe is currently producing around 25,000 Tn/year and could produce 50,000 Tn/year.
- Resin is a raw material natural, renewable and high demanded by the european chemical industry (1). Resin derivates driven a hundred of products



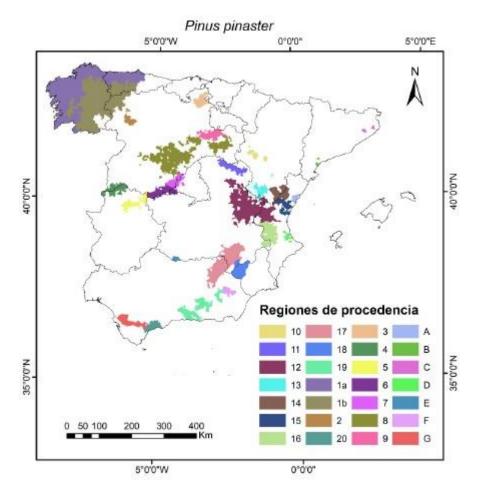


- In Spain the miera comes mainly from the black pine or Resino (*Pinus pinaster* Ait.), with a wide geographical distribution in the Iberian Peninsula.
- According to the Spanish Forest Map, 2017, Pinus pinaster occupy more than 1.000.000 ha. There are two subspecies:
 - Pinus pinaster ssp hamiltonii, in meditarranean region, occupy 773.000 ha, where the tapping activity is taking place.
 - Pinus pinaster ssp. Atlantica occupy 229.000 ha. By the moment not tapped, it is just used for wood exploitation





Pinus pinaster distribution and regions of provenance







Pinus pinaster distribution and Regions of provenance

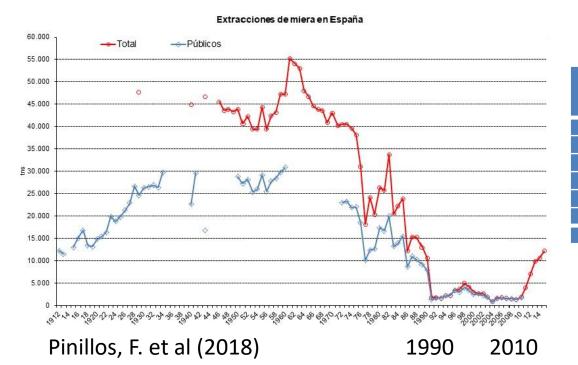
Reg	Num _{arb}	Num _m	Pm	
1a	26	54	803	
1b	29	68	678	
2	9	36	392	
3	16	59	1237	
4	10	55	585	
5	8	37	215	
6	18	61	297	
7	17	45	213	
8	18	75	405	
9	15	52	808	
10	10	43	921	
11	10	45	791	
12	19	103	623	
13	11	49	599	
14	13	79	903	
15	11	79	475	





Spanish statistics

According to National Statistics, Spain produced 12,231.67 t of miera in 2016, assuming an economic value in factory park of 12,8 million euros. (Yearbook of Forest Statistics, 2016. MAPA. https://www.mapa.gob.es/en/desarrollo-rural/estadisticas/avance 2016 web tcm38-490202.pdf

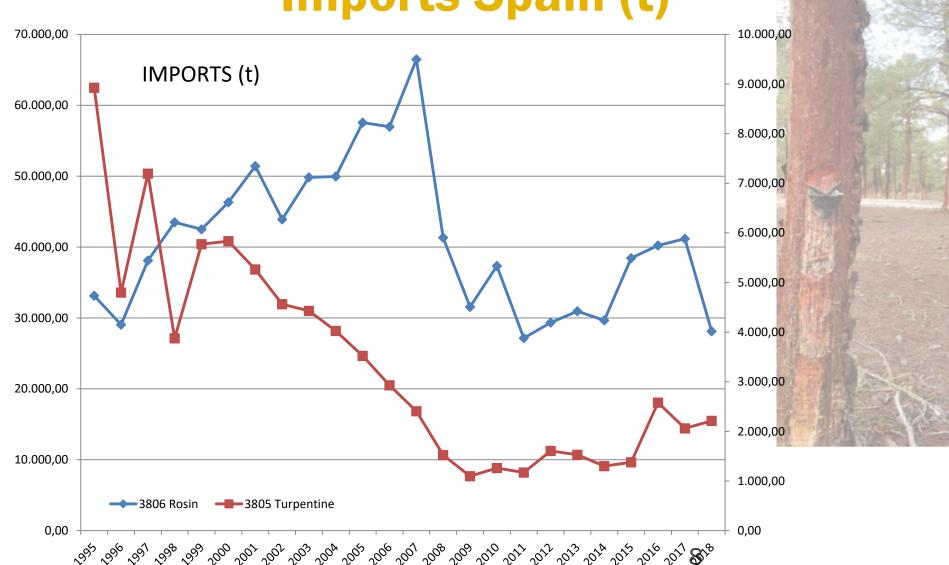


	Miera			
Year	Production			
	(t)			
2010	1.821			
2011	3.959			
2012	6.968			
2013	9.817			
2014	10.630			
2015	12.183			
2016	12.232			



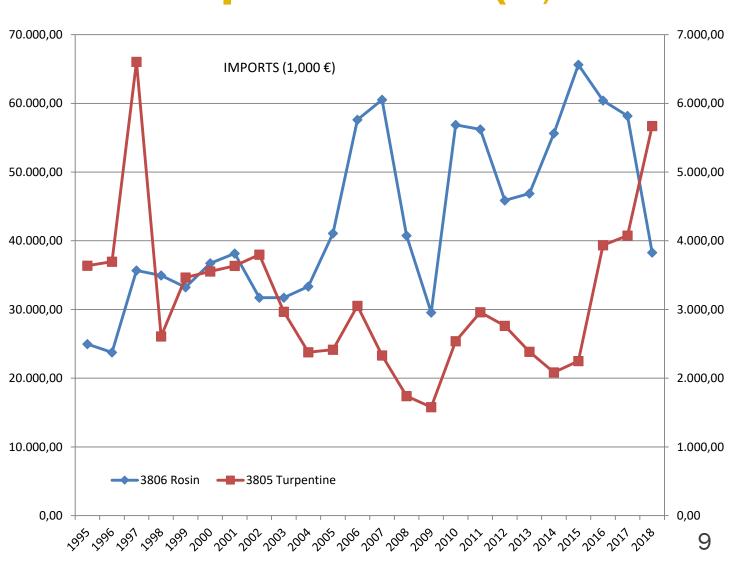


Spanish statistics: Imports Spain (t)



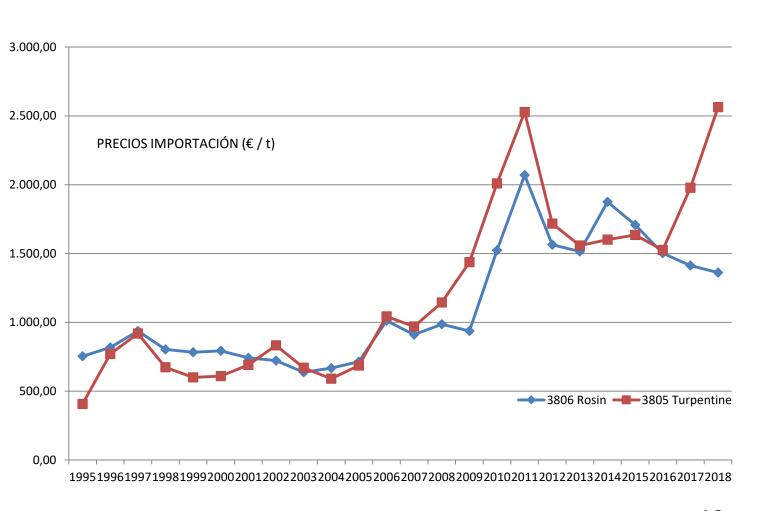


Spanish statistics: Imports value (1,000 euros)





Spanish statistics: IMPORT PRICE (€/t)







Resin data collected by SNFI2 and SNFI3

In both SNFI2 and SNFI3, the tapping data was collected by individual tree, with the following information:

- Tapping method
- If it is currently tapping or it is abandoned
- Total number of notches.





NFI goals for resin production

A good data collection will allow us to get statistical information right, so we can:

- Know the state of the pine resin stands from the point of view of resin yield.
- Estimate the current national production of resin.
- Estimate the potential national production of resin.
- Classify stands according to production/ease of tapping, so we could prioritize areas.





New variables in SNFI4

- Mobility within the plot.
- Diameter at 30cm height: Because of tapping, the real diameter at breast height could not be measured accurately before.
- Bark thickness.
- · Crown height.
- Check if the tree has been pruned up to 3 m.
- Tapping method. More methods has been added.
- Tapping direction (up or down).
- Distance between faces.
- Number of faces and notches.
- Height and width of last notch.

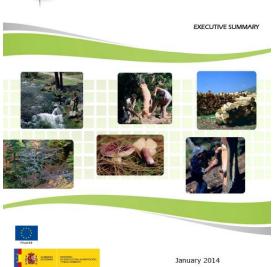


IFN4.	ESTADILLO	DE DATOS DE (CAMPO	PARA EL ESTU	JDIO DE L	A PROD	UCCION DE	e resina en	Pinus pinasto	er Ait.
Province	cia Nº E	Estadillo	Clase	:	Subclase	Tipo	Acces	o Movilidad	d Resinació	n 📗
№ Orden IFN3	№ Orden IFN4	Diámetro normal medio (mm)	Corteza (mm)	Altura a primera rama viva (m)	Poda > 3m	Método	Dist. entre caras (mm)	№ caras y entalladuras	Ultima entallado	ıra terminada Altura (mm)
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Plan for socioeconomic activation of the forest sector in Spain (2014-2020)



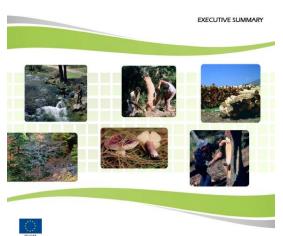


- Contribute to the diversification of economical activity at rural areas.
- Increase the number of employments related to forest activity
- Improve the incomes of the working people in the forest sector.
- Contribute to a rise in the added value of forest products (innovation and training)
- Increase the demand for forest products (bioindustry and bioeconomy))
- https://www.mapa.gob.es/es/desarrollorural/temas/politicaforestal/Executive%20summary%20(logo)_t cm30-155746.pdf



Plan for socioeconomic activation of the forest sector in Spain (14-20)





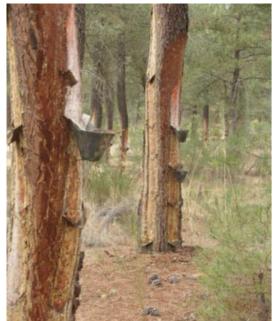
January 2014

- Encourage associativism and cooperativism among resin producers
- Support the creation of a resin interprofesional organization and promote and provide encouragement for the signing of contracts between producers and industry
- Propose the recognition of a legal, working and fiscal status for the resin collectors, to promote the ordered extraction of resin from the pine woods
- Promote the training and information of all concerned agents

Year	Place	<u>Attendance</u>	
2015	Valsaín –Coca (Segovia)	30	
2016	Mazarete-Iniéstola Comarcal Rodenal (Guadalajara)	23	
2017	Lourizán (Pontevedra)	21	
2018	Jarandilla de la Vera (Cáceres)	32	15







Thank you for your attention

Coordinator



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