

# SIMANF{R}

## Model for *Pinus pinaster atlantica* Galicia inland and León (Spain)

### Model

Ppinaster\_at\_gal\_inland\_v01

### Model description

- Specie: *Pinus pinaster* Ait. subsp. *atlantica*
- Spanish Forest Inventory (SFI) code: 26
- Geographical area: Galicia inland and León (Castilla y León)
- Geographical area (administrative): center/south Lugo, Ourense and León

### Model type

- Category: calculation without growth
- Model level: distance independent individual tree model
- Reproduction methods: seedling forest
- Stand structure: even-aged stands
- Species composition: monospecific stands
- Forest origin: natural

### Model requirements and recommended use

- Initial inventory requirements: age and dominant height of the plot; expan and dbh of the trees. Height of the crown base is a tree variable needed in order to calculate the crown variables
- Geographical area: Galicia inland and León, closer places and another places with similar characteristics (assuming differences)
- Stand type: monospecific stands, resinated or not
- Execution recommended time: xx years executions (survival, growth and ingrowth equations developed by using that criteria)
- Site Index is defined as top height at a base age of 20 years



Figure 1: *Pinus pinaster*



Figure 2: Details of *Pinus pinaster* Ait.

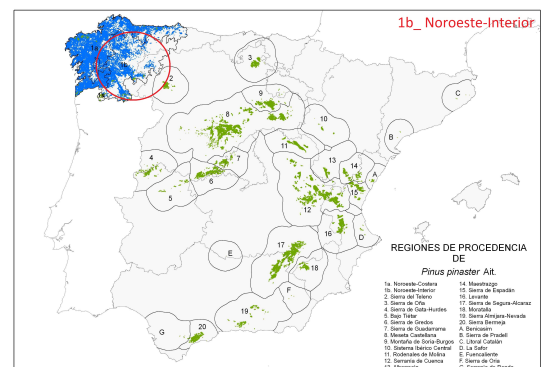


Figure 3: Provenance regions of *Pinus pinaster* in Spain

# Bibliography

## Complete SIMANFOR model recommended citation):

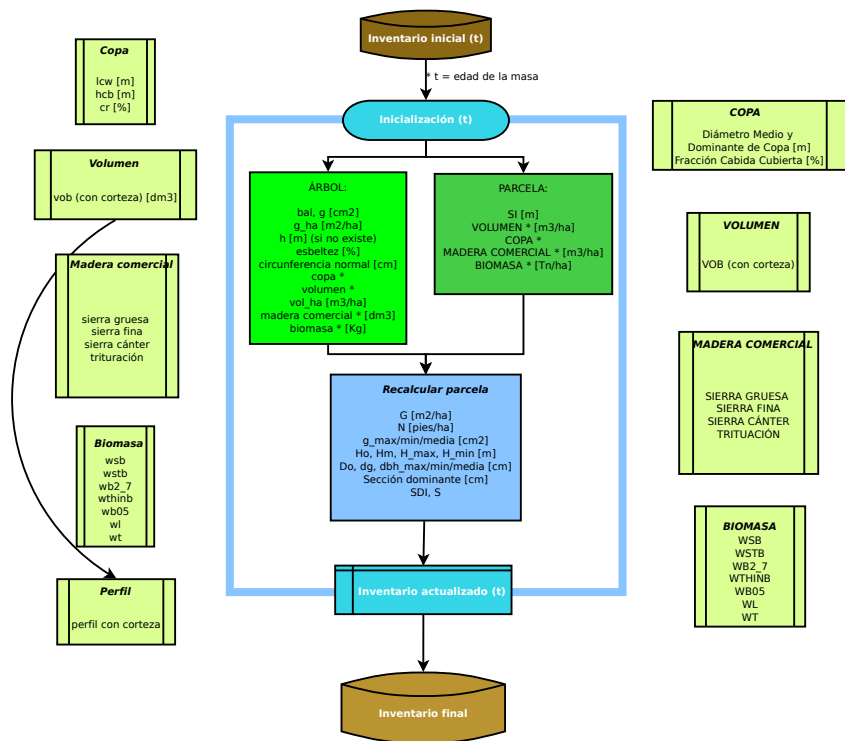
SIMANFOR (2022). Individual tree static model for maritime pine (*Pinus pinaster mesogeensis*) in Galicia inland and León (Spain).

## Model components:

- **Site Index equations:**  
Álvarez JG, González AD, Soalleiro R, Barrio-Anta M (2005). Ecoregional site index models for *Pinus pinaster* in Galicia (northwestern Spain). *Annals of Forest Science*, 62(2), 115-127
- **General calculations: bal, g, slenderness, normal circumference:**  
Standard equations
- **Generalized height-diameter equation:**  
Diéguez-Aranda U, Rojo A, Castedo-Dorado F, et al (2009). Herramientas selvícolas para la gestión forestal sostenible en Galicia. *Forestry*, 82, 1-16
- **Crown equations:**  
Crecente-Campo F, Álvarez-González JG, Castedo-Dorado F, Gómez-García E, Diéguez-Aranda U (2013). Development of crown profile models for *Pinus pinaster* Ait. and *Pinus sylvestris* L. in northwestern Spain. *Forestry*, 86(4), 481-4
- **Taper equations over bark (volume):**  
Diéguez-Aranda U, Rojo A, Castedo-Dorado F, et al (2009). Herramientas selvícolas para la gestión forestal sostenible en Galicia. *Forestry*, 82, 1-16
- **Biomass equations:**  
Diéguez-Aranda U, Rojo A, Castedo-Dorado F, et al (2009). Herramientas selvícolas para la gestión forestal sostenible en Galicia. *Forestry*, 82, 1-16
- **Technological wood uses information:**  
Rodríguez F (2009). Cuantificación de productos forestales en la planificación forestal: Análisis de casos con cubiFOR. In *Congresos Forestales*
- **Value for Reineke Index equation:**  
Standard

## Figures:

- **Figure 1:** by MAMM Miguel Angel is licensed under CC BY 2.0
- **Figure 2:** by 'A description of the genus *Pinus*', Aylmer Bourke Lambert
- **Figure 3:** extracted from MAPA



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## Interest Links

**SIMANFOR** - Support system for simulating Sustainable Forest Management Alternatives. Accessed 11 May 2021, in <https://www.simanfor.es/>

**iuFOR** - Sustainable Forest Management Research Institute UVa-INIA. Accessed 11 May 2021, in <http://sostenible.palencia.uva.es/>

**ETSIIAA Palencia** - Higher Technical School of Agricultural Engineering of Palencia. Accessed 11 May 2021, in <http://etsiiaa.uva.es/>

**UVa** - University of Valladolid. Accessed 11 May 2021, in <https://www.uva.es>

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