Forest products research institutions in Portugal

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Principal objectives</th>
</tr>
</thead>
</table>
| National institute of agrarian research (I.N.I.A.) | . Wood anatomy and identification  
. Defects and abnormality of woods |
| National forest research station (E.F.N.) | . Properties and characteristics of woods  
. Wood quality |
| Forest products technology department (D.T.P.F.) | . Sylvo technology  
. Sylvoindustrial harmonization  
. Mechanical transformation of woods.  
. Non-destructive reconstitution  
. Wood preparation. Drying : air drying and deshumidification drying  
. Wood improvement. Durability and impregnability  
. Cork quality. Production and zonal quality  
. Cork preparation technology  
. Valorization of the secondary resources of cork forests, corkoak forest and coppice forests  
. Forest products chemistry. Cork. Resins  
. Resin production technology. Stimulation  
. Specious forestry : essences and fruits  
. Pulpwood and paper : phenotypic variability and technological aptitude  
. Wood preparation. Drying : air drying and deshumidification drying  
. Wood improvement. Durability and impregnability  
. Cork quality. Production and zonal quality  
. Cork preparation technology  
. Valorization of the secondary resources of cork forests, corkoak forest and coppice forests  
. Forest products chemistry. Cork. Resins  
. Resin production technology. Stimulation  
. Specious forestry : essences and fruits  
. Pulpwood and paper : phenotypic variability and technological aptitude |
| Cork and resin products laboratory (L.C.P.R.) | . Cork products control  
. Resin products control  
. Industrial and quality control development |
. Gluing woods  
. Longitudinal slicing technology  
. Corkboard technology  
. Insulation board densification  
. Bark technology |
| Technological Unity for wood and cork industries (U.T.I.M.C.) | . Wood durability. News preservative products  
. Structural timbers recuperation  
. Nondestructive methodologies of mechanical strength of timbers  
. Mechanical fastening. Nails  
. Laminated timbers |
| National laboratory of civil engineering (L.N.E.C.) | . Wood durability. News preservative products  
. Structural timbers recuperation  
. Nondestructive methodologies of mechanical strength of timbers  
. Mechanical fastening. Nails  
. Laminated timbers |
| Wood nucleus (N.M.) | . Wood durability. News preservative products  
. Structural timbers recuperation  
. Nondestructive methodologies of mechanical strength of timbers  
. Mechanical fastening. Nails  
. Laminated timbers |
| Superior agronomy institute (I.S.A.) | . Wood quality of the Eucalyptus globulus in different conditions of the production  
. Anatomy, chemistry and pulping  
. Growth and chemistry characterization of the corks. Incidence in the industrial processing |
| Forest engineering department (D.E.F.) | . Wood quality of the Eucalyptus globulus in different conditions of the production  
. Anatomy, chemistry and pulping  
. Growth and chemistry characterization of the corks. Incidence in the industrial processing |
Tras-os-montes and alto Douro University (U.T.A.D.)
Forestal department (D.F.)
- Growth and quality of forest products. Wood and cork
- Genetic improvement support

Superior engineering institute (I.S.T.)
Engineering materials department (D.E.M.)
- Cork: structure, physical and mechanical properties of cork tissue

Tropical research scientific institute (I.I.C.T.)
Agrarian research department
Research center for forest technology studies (C.E.T.F.)
- Wood technology
- Wood chemistry
- Afforestation
- Multi-purpose trees

Technological center of cork (C.T.C.O.R.)
- Industrial production control
- Industrial development
- Technological formation

Technological center of timber and furniture (C.T.I.M.M.)
- Industrial production control
- Industrial development
- Technological formation

---

M.A.- Ministry of Agriculture
M.I.E.- Ministry of Industry and Energy
M.O.P.C.- Ministry of Public Works and Communications
M.E.- Ministry of Education
A.I.- Industrial Associations

Forest products research institutions in Portugal.