# Single tree silviculture (STS)



Silvicultural approach that early selects a limited number of target trees to which ensure a free and harmonious development of crown and trunk. The thinnings are selective or from above and they are oriented to remove the direct competitors of the target trees, preserving the remaining stand. The target trees are chosen as a function of vigor, stability, tree morphology, spatial distribution. The number of released target trees (from 50 to 120 per hectare) depends on the site characteristics, the species, the biotic and abiotic risks, the type of owner, the silvicultural goal. · This approach can be applied in high forests and in coppices, in conifers (as Pinus nigra and Pseudotsuga Douglasii) and broad-leaved species, to social (Fagus sylvatica and Quercus sp.) and valuable (Castanea sativa) or sporadic tree (Prunus avium, Sorbus sp., Fraxinus sp., …) species, in public or private property. To apply this method is necessary: Specific training and care of technicians and workers from tree marker to logging Specific training of people involved in the control of the forest utilization. · From an economic and productive point of view: decreasing the management costs reduction of rotation time increasing of quantity and quality of assortments production of high-quality timber relatively quickly enhancement of phenotypes and / or species potentially able to produce quality timber - From an ecological and environmental point of view: increase of individual and stand stability increase of biodiversity increase of structural complexity maintenance of an irregular canopy cover protection of sporadic species - From a social point of view: integration with the traditional forestry increase of non-wood products increase of landscape value

## DETAILS

### HERKUNFT DES HOLZES
Wald

### ART DES HOLZES
Stammholz

### ART DES BETROFFENEN HOLZES
Stemwood

### AUSWIRKUNGEN AUF UMWELT UND BIODIVERSITäT
Positive effects

### EINKOMMENSEFFEKT
Possibility to obtain income more frequent during the rotation period

### VERWERTUNGSPOTENZIAL
--

### NABE
--

### WIRTSCHAFTLICHE AUSWIRKUNGEN
Enhancement of valuable assortments; decrease of management cost but increase of expertise of forest companies

### MOBILISIERUNGSPOTENZIAL
Similar to traditional silviculture but with a higher amount of big and more valuable assortments

### POTENZIAL FüR NACHHALTIGKEIT - WERT
--

### LEICHTE IMPLEMENTIERUNG
Medium implementation due to the great attention during the cutting and logging phases

### LEICHTE IMPLEMENTIERUNG - BEWERTUNG
--

### WICHTIGE VORAUSSETZUNGEN
Awareness of all stakeholders in the supply chain

### ART DER VERANSTALTUNG, AUF DER DIESE BPI VORGESTELLT WURDE
--

### ARBEITSPLATZEFFEKT
Connection to other wood and no-wood chain

### KOSTEN DER IMPLEMENTIERUNG (EURO - €)
--

SPEZIFISCHES WISSEN ERFORDERLICH

Forest training

## MEHR DETAILS

ANGESPROCHENE HERAUSFORDERUNG

--

DOMäNE

Waldmanagement, Waldbau, Ökosystemleistungen, Resilienz

ART DER LöSUNG

--

SCHLüSSELWöRTER

--

DIGITALE LöSUNG

Nein

INNOVATION

Nein

HERKUNFTSLAND

Italien

UMFANG DER ANWENDUNG

National

ANFANGS- UND ENDJAHR

2010 - 2019

## KONTAKTDATEN

EIGENTüMER ODER AUTOR

francesco.pelleri@crea.gov.it

REPORTER

## REFERENCES AND RESOURCES

HAUPT-WEBSITE

http://www.selvicoltura.eu/

PROJEKT-WEBSITE

--

PROJEKT-REFERENZ

--

RESSOURCEN

--

## PROJEKT, IN DESSEN RAHMEN DIESES FACTSHEET ERSTELLT WURDE

Rosewood

## BEITRAGSDATUM

18 Sep 2019

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

## A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY