



GEOSPATIAL  
**FORESTRY**  
PLATFORM

# SITE SPECIES MATCHING TOOL

2022

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# INTRODUCTION

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The **Species Site Matching Tool (SSMT)** helps growers select the most suitable species for their sites, by matching species requirements to the growing conditions of different locations. Free PDF maps have been produced for Kenya, Tanzania, and Uganda. Other areas are under production. These can be easily accessed for download from the GFP website.

SSMT uses the term suitability to describe the likely success of a particular tree species establishing and growing to the rotation age on a given site achieving expected productivity depending on other factors such as silviculture. Very and moderately suitable are the most recommended in a site while marginally suitable is only recommended where no other options exist or when production goals are of lesser importance as a site objective. *More precise assessment of suitability should be carried out through undertaking microsite assessment.*

## DESCRIPTION OF MODULE

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**Species Site Matching Tool (SSMT)** is a Geographical Information System based tool that overlays the growing conditions across Kenya and Tanzania (based on temperature, rainfall, evapotranspiration, soil types, soil depth and topographic data) with the growing requirements of different species and matches them to different climatic areas. The tool is designed to be a preliminary guide in selection of ecologically suited species to sites, instead of selecting a species and trying to modify the site to suit.

### Suitability Legend

The Georeferenced PDF maps with a limited number of species for Kenya and Tanzania have been generated accessible via the GFP For each species, four (4) suitability ranges have been defined and symbolized as shown in the legend below.

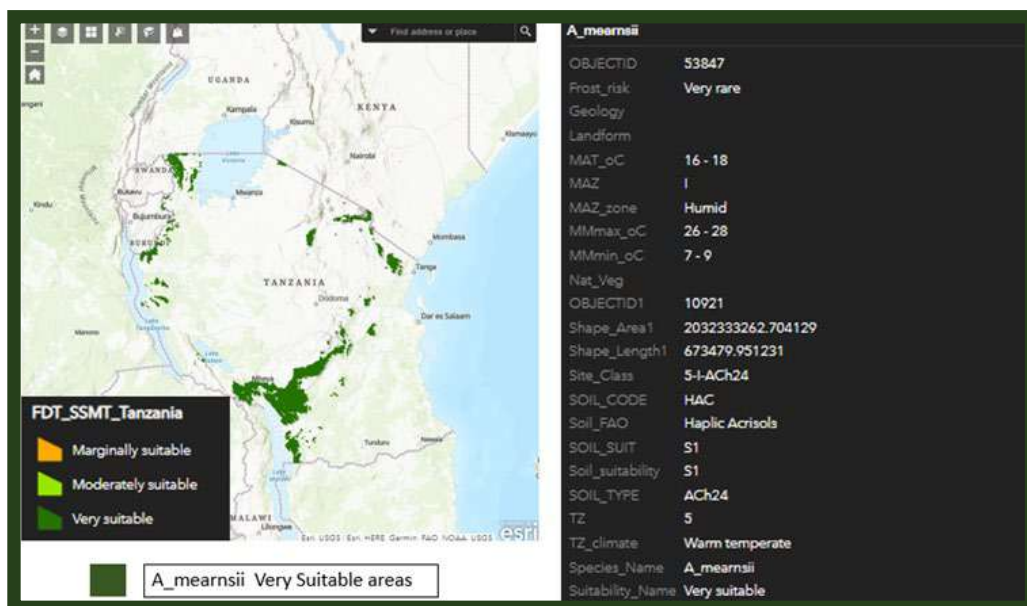


**Analysis is displayed dynamically on your GFP Dashboard and PDF downloads of your specific analysis on the dashboards can be downloaded as a PDF Map.**

## GFP Dashboard Interactivity

Interaction with the dashboard enables the user to drill down into more information linked to the suitability assigned for each species namely:

- Species – larger number than the species available in the free PDF SSMT Maps
- Soil Types and Soil Suitability
- Frost risk
- Geology and Landform information
- Temperature information
- Natural vegetation in the area
- Climate data



## BENEFITS

This module gives insight into

1. Preliminary guide for growers in selection of ecologically suited species to sites.
2. Larger number of species available for suitability compared to the limited list available in the free SSMT PDF Maps
3. The option to have analysis run on your species of interest and have them added to your dashboard (**Please Contact Us to get more information on this process**).
4. Other spatial datasets and basemaps can be loaded onto the map to obtain more context.
5. Helps mitigate planting of unsuitable species in areas where they will be prone to disease and other susceptibility at a later stage.
6. Helps growers and organisations to plan areas of expansion as well as which species to buy.
7. Helps in the planning of what species are viable for market productivity and associated risks of planting unsuitable species.
8. This gives insight into why some species that have already been planted are not flourishing.

# REQUIREMENTS

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The following requirements are needed for this module:

- Forestry Mapping and Query
- Climate Scenarios Suitability

## CONTACT

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