



## Brochure for the collection of soil samples in stone pine

### Introduction

The analysis of soil samples collected in stone pine forests allows knowing the physical and chemical characteristics of the soil, constituting, together with foliar analysis, support for the most appropriate fertilization recommendation.

However, although this practice is not new, it is not a practice followed by the majority of forestry producers, who, although viewing pine nuts production as a lucrative economic activity, do not understand the need to analyse the nutritional status of forest stands and carry out necessary fertilization and soil amendments.

The collection of soil samples must be carried out well in advance of the application of fertilizers, being advisable the period in which the soil has a moisture content that allows this operation to be carried out, which generally happens in autumn - winter.

If the land is not uniform, it should be divided into relatively homogeneous plots with regard to color, slope, drainage and type of forest management.

Samples must not be taken in wet areas, near paths, houses, stables or in places that have been occupied with manure, sludge, fertilizers, ashes or other products.

### Lessons learned

Thus, to sensitize forestry producers, a publicity leaflet was prepared, which is available in paper and online, in accessible and easy-to-understand language. The leaflet defines when the analysis should be carried out, how it should be carried out depending on the type of existing forest stand: before the stand, in a young stand, in an adult stand. It also defines what equipment is necessary for the correct collection of samples and how to pack and send them to the laboratory to obtain the results.

**Figura 1.** Material necessário à colheita das amostras de terra



- No caso de se utilizar uma sonda, é necessário possuir também um punho e uma marreta Fig. 1 e Fig. 2.

**Figura 2.** Pormenor do punho e da sonda de meia cana



Figure 1. Upper photos - needed material to gather soil samples. When using a soil sampler probe, a sledgehammer is needed. Lower photo - use of the soil sampler probe on the field.

**Figura 4.** Esquema da orientação da colheita das amostras de terra

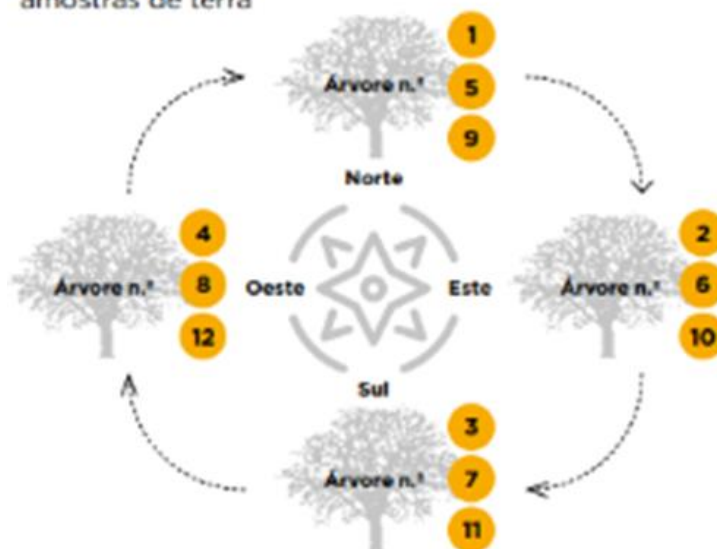


Figure 2. Scheme showing the soil sampling orientation (cardinal direction).

The information presented in this factsheet was developed by the FOREST4EU partner, drawing on the innovations and knowledge generated by the indicated operational group with their explicit authorization.

## Further information

<https://www.unac.pt/index.php/id-i/grupos-operacionais-accao-1-1-pdr2020/fertipinea>



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