

ANNEX 5

As specified in the Appendix No 1 of the Fellowship Agreement No PAN.BFB.S.BDN.255.022.2022 concerning the project AIMSUSFOR “Extending assessment of the environmental impacts to the forest ecosystem due to forest management: a comprehensive approach to enhance sustainable forestry in the context of climate change”, funded under the PASIFIC Call 1 announced by the Polish Academy of Sciences, the project activities require some external analyses which, for logistic issues, cannot be performed by the project team.

In particular these activities concern the analysis of soil microarthropods biodiversity (QBS-ar index) and the tomographical analysis of the wound occurred during timber extraction. All these analyses are requested for the three Italian study areas (regions Tuscany, Lazio, Calabria). Further details about the location of the parcels will be given to the contractor who will result the winner of the announcement.

QBS-ar index (soil biological quality index based on microarthropods)

Soil samples for QBS-ar index estimation have been already collected for the three study areas and will be provided to the contractor, in details 54 samples for Mount Amiata, 42 samples for Simbruini and 30 samples for Molochio. The expected data to be provided are:

- EMI (ecomorphological index) scores for the various taxonomic groups for each sample
- QBS-ar value for each sample (6 samples per experimental treatment)
- Total QBS-ar value calculated grouping all the six samples per experimental treatment

Tomographical analysis

For the various study areas are requested the following data, the trees to be analyzed will be indicated to the contractor by the principal investigator:

- Mount Amiata - Toscana: tomographical analysis of 5 forwarding and 5 skidding wounds occurred in the parcels harvested in 2012. Both images produced by the instrument for each wound and raw data have to be provided

- Simbruini - Lazio: tomographical analysis of 5 forwarding and 5 skidding wounds occurred in the parcels harvested in 2012. Both images produced by the instrument for each wound and raw data have to be provided
- Molochio - Calabria: tomographical analysis of 5 skidding wounds occurred in the parcel harvested in 2015. Both images produced by the instrument for each wound and raw data have to be provided

Requested profile for carrying out the mentioned above tasks

The present announcement is intended to Research Institution, Universities and freelance forest engineers who are able to perform the required research activities. Therefore it is requested experience in the evaluation of soil microarthropods biodiversity (QBS-ar index), the possess of a tools necessary to perform analysis of tomography and the ability to use such instrument.