

Biotechnologie B.T. Srl

Justification of the “best value for money”:

In the last phase of PHOSave project, after the production of the fertilizer, agricultural experience will be invaluable for the agronomic validation. Biotechnologie B.T. is one of the most qualified laboratories operating in the field of crop protection products. The laboratory is able to perform a wide range of tests on the chemical-physical, ecotoxicological (terrestrial and aquatic), efficacy, residue and microbiological field. **The laboratory was selected after the suggestion and recommendation from SIPCAM, end user of PHOSave project and customer of ProPHOS. The selection was done due to Biotechnologies B.T.’ long experience, high-qualified staff and technologically advanced equipment.** The Biotechnologie B.T.’s role is described in detail in the Task 6.3 Phytotoxicity test and formulation optimization. The task will last 13 months, as requested by the vigor vegetative and phytotoxicity tests. The complete list of infrastructure and technical equipment offered to the project is reported below and the detailed quotation for each task is reported in the table above. All these represent the explanation why the subcontractor and the price are appropriate.

Profile

Biotechnologie B.T. S.r.L. (website: <http://www.biotechnologiebt.com/>) is an Italian Contract Research Organization (CRO), certified in Good Laboratory Practice (GLP) and Good Experimental Practice (GEP). The company, which operates in the field of crop protection products, is composed of two Test Facilities:

- BT, located in Pantalla, Todi (PG) - Central Italy, is specialized in environmental impact assessment of chemical and biological Plant Protection products. It has developed a strong internal knowledge to evaluate, in laboratory and greenhouse, the efficacy of different types of products against targets. The laboratory has been authorized to work in GLP by the Italian Ministry of Health since 2005.
- BSS, located in Lodi – Northern Italy, has a long and consolidated experience in the field of agrochemical, chemical and xenobiotic products. This laboratory, authorized by the Italian Ministry of Health and the Italian Ministry of Agriculture, Food and Forestry to work in GLP and GEP respectively since 1995.

These two structures cover an overall area greater than 2.000 square meters, in terms of laboratories, greenhouses and offices, with a staff of 50 employees, having degrees in Chemistry, Biology, Agronomy, Biochemistry and Natural Sciences. Due to its long experience, to a high-qualified staff and to a technologically advanced equipment, Biotechnologie B.T. is able to support the Customers with the services necessary for their products registration dossier, following the requirements of European and American (USA and South America) Authorities. Recently, according to an ever growing market demand, and to a new rather constraining legislation, Biotechnologie B.T. is approaching also the biocides, pharmaceutical products and veterinary drugs. Biotechnologie B.T. on several occasions proved to be always focussed on the market demands as well as on research and innovation, which translated into investments in modern equipment, implementation of new tests and assistance to the companies of various sectors with the patent activities and with the participation to sponsored projects. Biotechnologie B.T. is a member of the Italian Laboratories Association; Research and Innovation Register of the European Community and French Laboratories Association, involved in research and development (CIR). It took part to community research projects through the European Commission, to national ones, through the Ministry of Scientific Research and the University and to regional projects through the Umbrian Region and the Local Action Groups. Moreover, thanks to more than 15 years of activity, Biotechnologie B.T. successfully developed a heritage of fermentation and technologies, with the availability of a wide collection of biocontrol agents and of a phytopathogenic agents’ collection

Infrastructure and technical equipment:

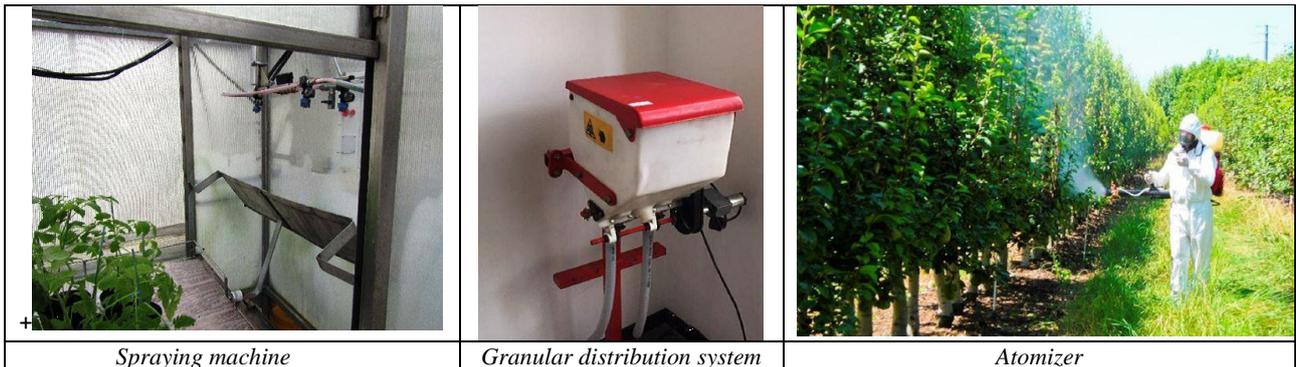
The instruments/equipment and spaces that will be used for the project are as follows:

A. Analytical instruments: ICP –MS, for chemical analysis of microelements: Inductively coupled plasma mass spectrometry (ICP-MS) is a type of mass spectrometry, which is capable to detect metals and several non-metals at very low concentrations. This is achieved by ionizing the sample with inductively coupled plasma, then using a mass spectrometer to separate and quantify such ions. Compared to atomic absorption techniques, ICP-MS has greater speed, precision and sensitivity. This instrument is able to determine trace amounts of microelements, present in the raw and finished products.



B. Equipment for the application of the technical/formulated products

- a. Spraying machine: This machine is an automatic system useful to simulate the application of products (PPP, fertilizers, etc.) in open field. The spraying pressure, the application speed and the dimension of nozzles can be set, as well as the application height. Each application can be done on a number of max. 30 plants, for a uniform distribution of the product. The surfaces of such machine are washable, in order to avoid contamination problems.
- b. Granular distribution system: In case of granular formulations, this equipment will be used for its distribution, during the sowing (i.e. maize) or transplanting (i.e. tomato) of the crops.
- c. Atomizer: In order to apply in open field a liquid product or a powder, according to Good Agricultural Practices (GAP), this equipment will be used for its distribution at different BBCH stages of the crops



C. Structures/facilities committed to trials:

- a. Phytotron: The phytotron (dimensions: 60 sqm) will be used to evaluate, under controlled environmental conditions (i.e. temperature, light, humidity), the plants growth and the eventual phytotoxic effects after application of the technical or formulated products. The plants will be opportunely marked and a suitable number of assessments will be done.
- b. Greenhouse: Biotecnologie BT owns no. 3 greenhouses (dimensions: 170 sqm/each) able to hold a large number of plants, that is: no. 10 trolleys each greenhouse, no. 70 / 80 plants are contained in each trolley.

