

Turkish Agricultural Research Institute is looking for partnerships applying for HORIZON-MISS-2023-SOIL-01-05 project call

Summary

Profile type	Company's country	POD reference
Technology offer	Turkey	TOTR20230823010
Profile status	Type of partnership	Targeted countries
PUBLISHED	Research and development cooperation agreement	• World
Contact Person	Term of validity	Last update
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General Information

Short summary

Turkish Agricultural Research Institute since 1963 carries out R&D research activities on biodiversity and genetic resources, breeding of field crops and horticulture with getting advantages from plant tissue culture and biotechnology, seed production and apiculture (beekeeping techniques, bee diseases and pests, pollination, food technology on bee product, breeding/genetics, honey bee behavior, and Bumblebee breeding) in using 2053 decades(open field) and 10,000m2 (closed area-greenhouses)

Full description

Turkish Agricultural Research Institute from Turkey has been expertised mainly on the breeding of horticulture and field crops as well as seed production and conservation of these genetic resources, bu using soil practices. The Aegean Agricultural Research Institute, operating under the Ministry of Agriculture and Forest was established in 1963 in Izmir, Turkey. There are 95 researchers (Agricultural Engineer (Field Crops, Horticulture, Plant Protection, Agricultural Economics, Animal Science, and Agricultural Machinery), Veterinary Medicine, Food Engineer, Biologist, and Chemist) in the technical staff of Institute. As a R&D Institute with 202 technical and support personnel on 2053 decades of open field and 10,000 square meters of closed area (Greenhouses, fast-track breeding systems, and hydroponic), Institute follows the recent advances in sustainable agriculture, such as integration of unmanned aerial vehicles in agriculture, GPS based controlled instruments, and reducing the use of inputs that are plant protection products, fertilizers, and water in

horticultural and field crops. The institute has a wide range of facilities that has potential for the application of novel practices in both protected (speed breeding, greenhouses, and hydroponics) and open field systems. To benefit soil health and related ecosystem services, the identified horticultural practices can be applied, developed, and promoted using management practices under the institute's open and closed field areas with digital technologies by the institute's production systems as well as with the support of professional and amateur horticulture producers with whom the institute is in contact. To increase awareness, test materials can be distributed and training can be conducted to encourage the adoption of soil-friendly horticultural practices. With these horticulture practices, the institute can generate data to improve alternative growing media under different life-cycle perspective.

The institute have a range of product produced and transferred to the farmers and sectors. The research programmes under the departments of biodiversity and genetic (the National Gene Bank of Seed, 58,050 seed samples from 3,339 species, 36,700 IZ-coded herbarium samples from 141 families, and 1,374 mushroom samples), horticulture (vegetables (tomatoes, peppers, eggplants, melon, lettuce, bean, cucumber, cauliflower), field crop (Barley, Wheat, Potatoes, Medicinal plants, Tobacco, Oilseeds, Forage crops, and Edible grain legume), fruits (pomegranates, quinces, mandarins, troyer, almonds, sour cherries, green plums, European plums, Japanese plums, plum rootstocks), and ornamental plants), plant protection (rust diseases seen in cereal fields), the advanced R&D centers such as cereal rust diseases and apiculture research centers as well as supporting laborator services (Plant Tissue Culture Center, Biotechnology Laboratory, and Technology (Quality) Laboratory) have been in service in institute.

The institute has also succesfully leaded various projects about mainly breeding, development, and protection of plants such as 71 pieces projects funded by TAGEM (Republic of Türkiye Ministry of Agriculture and Forestry General Directorate of Agricultural Research and Policies) (such as "Development of New Pomegranate (Punica granatum L.) Varieties by Crossbreeding in the Aegean Region"), 3 pieces projects funded by TUBITAK, and 16 pieces projects funded by private sector on the national platform, 2 pieces project funded by CIMMYT & FAO on the international platform. The institute is offering their strong competences in new project partnership within the call of HORIZON-MISS-2023-SOIL-01-05 Soil-friendly practices in horticulture, including alternative growing media.

Advantages and innovations

- Knowledge, experience, and applications on horticulture practices
- Modern equipment
- Large land uses and infrastructure
- Having more than 10 greenhouses, fast-track breeding system, and hydroponics
- Varieties on horticulture species
- Connection with professional and amateur horticulture producers
- Connection with municipalities, private cooperatives, people education centers in whole country to provide citizens' engagement and with horticulture and soil scientists and researchers from the other institutes and universities in Turkey

Technical specification or expertise sought

Stage of development

Concept stage

Sustainable Development goals

- **Goal 1: No Poverty**
- **Goal 2: Zero Hunger**

IPR Status

No IPR applied

Partner Sought

Expected role of the partner

Turkish Institute is looking for networking opportunities and partnership for applying HORIZON-MISS-2023-SOIL-01-05 Horizon project call.

Type of partnership

Research and development cooperation agreement

Type and size of the partner

- **R&D Institution**
- **SME 11-49**

Dissemination

Technology keywords

- **07001001 - Agriculture Machinery / Technology**
- **07001005 - Horticulture**

Targeted countries

- **World**

Market keywords

- **09005 - Agriculture, Forestry, Fishing, Animal Husbandry & Related Products**

Sector groups involved

- **Agri-Food**