



AGRICULTURAL UNIVERSITY - PLOVDIV
 4000 Plovdiv, Bulgaria12, Mendelev Blvd.
 tel. +359/32/654300 www.au-plovdiv.bg



Research and Innovation Profile

General information

Description

Title of the research entity/group

DIGITAL TECHNOLOGIES IN AGRICULTURE

Field of expertise

/in conjunction with Horizon 2020-Societal Challenge 2 (SC2): 'Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy'/

- Sustainable agriculture and forestry;
- Vegetation monitoring
- Land use of fields, pastures, forest crops
- Food security;
- Improving the quality of life;
- Biodiversity;
- Bioeconomy
- Ecosystem services

Research products and services provided by the entity/group

- Use of GIS and remote sensing for the optimized use and monitoring of agricultural lands
- Bio-geophysical products for the state of the Earth's surface under the Copernicus program - leaf area index; land cover; soil water index; surface soil moisture; land cover - forest areas, pastures, vegetation cover; portions of photosynthetic solar radiation; Fraction of Absorbed Photosynthetically Active Radiation,
- High resolution earth coverage in different classes of land use, cadastral maps and land surveying
- Natura 2000 mapping using Copernicus data, cadastral map data and terrain crawling
- Sustainable land use for growing crops

Participation in previous/ ongoing H2020 or other EU projects

STACCATO - SusTaining AgriCultural ChAnge Through ecological engineering and Optimal use of natural resources 02/2 ERASMUS+ - CUPAGI 597962-EPP-1-2018-1-EE-EPPKA2-CBHE-JP
 ERASMUS+ - NICOPA 597985-EPP-1-2018-1-KZ-EPPKA2-CBHE-JP



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Number of researchers involved /including young researchers e.g. doctoral, post-doctoral, habilitated, etc./

Research Team:
Assoc. Prof. Zhulieta Hristova Arnaudova, PhD.
Assoc. Prof. Dimka Ignatova Haitova, PhD.
Assoc. Prof. Atanas Sevov, PhD.
Assoc. Prof. Ivan Braykov Ivanov, PhD.
Assoc. Prof. Rada Popova, PhD.

Research infrastructure used

The whole infrastructure of Agricultural University - Plovdiv, Several farms and gardens, natural habitats.

Profile of the leading researchers in entity/group

The participants in the team have diverse specialists, related to the subject, which is of interdisciplinary nature. They have considerable knowledge in the field of mapping, remote sensing and geographic information systems, vegetable crops, pastures, perennials, soils, influence of bio-geophysical indices and soil characterization and climate on plant development.

In which calls of Horizon 2020-SC2 or Horizon Europe the entity/group is ready to participate and how

- Food security, sustainable agriculture and forestry, marine and maritime research, and bio-economy research;
 - Biodiversity in action: between farmland and the value chain;
 - Genetic resources and pre-seed communities;
 - Developing modern rural policies for long-term vision and public engagement
- Cluster: Food, Bioeconomy Natural Resources, Agriculture and Environment
Call - Sustainable Food Security
C. [2020] From agrobiodiversity to dynamic value chains
B. [2019] Capitalising on native biodiversity in farmland landscape (RIA)

Research entity/group contact person /name, postal address, e-mail, phone number/

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