Biofoodonmars

BIOFORTIFIED AND CLIMATE-RESILIENT FOOD AND FODDER PRODUCTION ON MARGINAL SOILS



Field trial in Bavaria

| 3° Call: | 2019 |
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| Project period: | 01/2020 - 12/2022 |
| Topic: | Activation of marginal soils for production of food and |
| | non-food products |
| Keywords: | Silicon, selenium, soil, biofortification, valorization, climate change |
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| Project partners: | Estonian University of Life Science, Estonia : Warsaw University of Life Sciences, Poland : INRAE (National Research Institute on Agriculture, Food and Environment), France : UHasselt Belgium (Flanders: FWO); Helmholtz Zentrum München GmbH, Germany ; Lithuanian research centre for agriculture and forestry, Lithuania . |
| Total funding: | 1.354.000 € |
| Website: | projects.au.dk/faccesurplus/research-projects-3rd-call/ biofoodonmars/ |
| | www.biofoodonmars.com |







BACKGROUND

In the EU and world-wide, agriculture is in transition. Future land use must embrace efficient production and utilization of biomass for improved economic, environmental, and social outcomes, as subsumed under the EU Green Deal, including also sites that have so far been considered as marginal and excluded from production. Another frontier is to supply high-quality food and feed to increase the nutrient density (including micronutrients such as Se, I, et cetera.) of staple crops.

OBJECTIVE

To combat the decreasing productivity of arable soils and progressive climate changes, the BioFoodOnMars project will develop new opportunities to increase the amount and quality of food and feed crops in Europe using new strategies for sustainable growth of plant production and increasing climate change resilience of agroecosystems. This project aims at mapping potential crop yields and the valorization opportunities on marginal soils under various regional conditions in Europe and trying to optimise the biomass production and valorization with biofertilizers, soil additives, foliar fertilization (Si, Se, and I) and management changes supported by remote sensing and digitalization.



METHODOLOGY

To combat the decreasing productivity of arable soils and progressive climate changes, the BioFoodOnMars project will develop new opportunities to increase the amount and quality of food and feed crops in Europe using new strategies for sustainable growth of plant production and increasing climate change resilience of agroecosystems.



FUTURE

Data from the field trials and ecotron data will be analyzed and suggestions will be defined. The results will be aligned to design toolboxes for farmers and policy makers.