



CropBooster-P summary progress year 4

Introduction

In the fourth year of the project, the CropBooster-P Project was finalized and the main outcome of the project, the CropBooster Roadmap, was officially handed-over to the Commission in a meeting on October 17th 2022 in Brussels. Also, the results of the project were published in a number of scientific publications, most of which will appear in a special issue of Food and Energy Security: "Future proofing crop production to meet the needs of society". In total, presently 19 manuscripts have been accepted for publication. Below, the main results and highlights of year 4 are presented:

WP3

In the framework of WP3, two "Citizen Juries" were organized to discuss with the general public the pro's and con's of modern plant breeding and to obtain their opinion about the potential use of New Breeding Technology. These juries were organized as online events and were held respectively in The Netherlands and in the UK. The most important outcome of these Citizen Juries was that both in The Netherlands as in the UK, the juries deemed the use of New Breeding Technologies acceptable, but under conditions, for instance, that the use of these technologies would be safe, and some kind of regulation and supervision would be in place. The results of both Citizen Juries were compiled in the "Report on the Dutch and British Citizens' Juries" (Deliverable 3.2).

Furthermore, the WP3 team organized a number of online meetings and started a number of surveys both on the topic of communication of scientific results and technologies. The results hereof lead to the "Recommendation dossier on mid-term outreach measures to increase public awareness and understanding of novel technologies" (Deliverable 3.3). This report contains a number of recommendations for a future research programs on developing "crops for the future" by including new plant breeding techniques such as CRISPR/Cas.

WP5

As part of the CropBooster Roadmap a layout has been drafted by work package 5 of the organization of a future research consortium that will be required to execute the research program defined in the roadmap. Such a large, pan-European consortium will need a strict modus operandi to effectively carry out a very large research program, and at the same time foster and maintain a strong relation with society in order to guarantee the successful uptake of the research outcome by, and in, society.



In year four, two further documents have been prepared describing specific elements of this modus operandi: the "Report describing programme management structure" (Deliverable 5.3) and the "Report describing the framework for expressing the moral correctness of the programme social necessity to ensure public support for the programme" (Deliverable 5.4).

The main task of the WP5 team in the final year of the CropBooster-P project was collecting and amalgamating all results of all work packages produced during the entire lifespan of the project and to compile everything in the final product of the project; the CropBooster Roadmap. Also, a related task of WP5 was to identify missing or poorly covered topics amongst the results of the different work packages and if applicable, consult with external scientific experts to generate additional data. In this way, a robust CropBooster Roadmap was produced; "White paper describing the route to improved crop yields in Europe, including the future consortium" (Deliverable 5.7) containing of two separate parts; the "Research plan for a future European crop yield programme" (Deliverable 5.6) and an Implementation Plan (based on Deliverables D5.1 – D5.5).

WP6

The CropBooster-P Executive Committee prepared the Final Report for the Commission, detailing all work and all results over the past four years. This report plus all produced Deliverables were evaluated by an external committee in July 2022 who drafted an evaluation report. The CropBooster-P project received a very positive evaluation by this committee, exemplified by one of the remarks in the evaluation report: "The project has delivered exceptional results with significant immediate or potential impact".

In October 2023, the Coordinator organized a meeting in Brussels with the Commission where the results of CropBooster-P were presented and where options for a follow-up program to execute the CropBooster Roadmap were discussed.