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DOCUMENT ID	19_Executive board meeting_August 2021 Ljubljana_minutes

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AGENDA

ECOBREED 19th EB Meeting

Slovenia, 25 - 27 of August 2021

https://us06web.zoom.us/j/87496244577?pwd=aEd0MXZLVzUrbVY1dzFWNzIvcEc3Zz09

Meeting ID: 874 9624 4577

Passcode: 808846

Wednesday, 25th of August | 14:30 - 19:00

14:30 – 15:00 | Introduction & general items

15:00 – 19:00 | 2nd Periodic Report: review

Thursday, 26th of August | 08:00 - 20:00

08:00 – 20:00 | Visit of the 59. INTERNATIONAL FAIR OF AGRICULTURE AND FOOD (AGRA) in Gornja Radgona (**https://www.sejem-agra.si/en/**)

- *Entry only possible with EU digital COVID certificate containing one of the following: proof of vaccination; proof of recovery from COVID -19 valid 180 days; negative result of a COVID -19 test. All details are subject to change by the organiser.*
- *Tickets are guaranteed by KIS.*

Friday, 27th of August | 9:00 - 18:00

08:00 – 16:00 | Amendment

- *Each WP1 to 9 leaders will have 15 min to present proposed changes and 30 min for discussion and agreement.*
- *Focus on both Part A and Part B as well as budget and use of resources if needed.*
- *Work with the most recent documents (after the first amendment).*
- *Please collect inputs from the partners involved in your WPs.*

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Executive Board members present in person: Vladimir Meglič (co-ordinator), Pavol Hauptvogel (WP1 leader), Heinrich Grausgruber (WP2 leader), Peter Dolničar (WP3 leader), Kristina Petrović (WP4 leader), Dagmar Janovská (WP5 leader), Werner Vogt-Kaute (WP6 leader), Mario A. Pagnotta (WP7 leader) and Antoaneta G. Kuhar (project manager and WP8 leader).

Executive Board member present online: Paul Bilsborrow (deputy co-ordinator)

Day 1

The Co-ordinator welcomed everyone and explained what the focus of the 19th EB meeting is; the agenda was presented and accepted; some logistics matters discussed.

The Project manager made an overview of the requested additional explanations of the Financial Statements and Use of resources for 9 beneficiaries. Only one Financial Statement is still pending to be checked and submitted.

FPT database is facing challenges to be accessed. Heinrich suggested putting the data as publicly available to Zenodo as a backup after the growing season. Werner agreed and some data will be uploaded until mid-September. Discussion on the translation to be conducted on Friday, August 27th.

Heinrich asked if we shall report only activities that were conducted during PR2 or we also outline what has happened during the summer. Co-ordinator answered that we should stress on that period and also be ready to give some more information on the ongoing activities.

Mario opened the debate about the responsiveness of some partners. Co-ordinator reminded the EB about the managerial structure and hierarchy.

Co-ordinator reminded about the annual meeting that should be organised in fall, he was asking Maria (ATK) with the response of new dates November 8-19, 2021. Heinrich added that one week later is the Gumpenstein conference, November 22-24, 2021. So, we could have the annual meeting on November 25-26 with special section of ECOBREED at the Gumenstein conference. If there will be covid-19 travel restrictions, then the annual meeting will be run in a way that separate WP meetings are executed online.

Co-ordinator asked to what kind of depth the IP sub-committee should scrutinise the papers. Requirements and information for partners how to submit scientific articles to IP sub-committee along with deadlines will be distributed; raw data should be submitted through Zenodo. Paul added that IP sub-committee members should not be proofreading the scientific content of articles, but checking the acknowledgements, authorship, data presented/used and funding source are correct and appropriate.

Dagmar reported that there are 18 persons registered for the Buckwheat Symposium, Antoaneta reported just 2 for the Advanced Phenotyping Workshop in Slovenia mid-September 2021.

Co-ordinator opened the discussion for the review meeting.

WP1: “core” is replaced with “working” on all slides.

WP2: still under preparation, but Heinrich outlined its content.

WP3: still under preparation, but Peter outlined its content.

WP4: Kristina presented, all in line.

WP5: Dagmar presented, all in line.

WP6: Werner presented; translation of FTP needs to be elaborated in a way it was needed for the input of data from farmers, but since the data input is done by researchers, no translation is needed.

WP7: Mario presented the performed activities, problems encountered, mitigation measures and some proposals for the amendment and plan for future activities.

WP8 & 9: Antoaneta outlined the content of the presentation.

Day 2

Visit of the AGRA fair in Gornja Radgona, where meetings with stakeholders and RGA project partner took place.

Day 3

Helena Valas, IP sub-committee member had a short presentation on the IP and exploitation activities in the near future. Presentation sent for EB members for in depth check, feedback set for Tuesday, next week (August 31, 2021).

Later the amendment was opened. Project manager explained the general changes we plan to cover (extension, GEO, UP/MATE, other budget shifts, etc.). Further changes within each WP were presented and discussed.

WP1:

- Delete 'core' from the title and from the text of WP1
- End of M69
- Obj 2: delete 'core'
- Task 1.3 (end M69): title replace 'core' with 'working'; replace 'putative' with 'working'; "A user-friendly information portal will, therefore, be established to make the characterisation data widely available ~~and ensure integration with~~ to other relevant Plant Genetic Resources for Food and Agriculture (PGRFA) portals i.e. EURISCO, GBIS/I, etc. The portal will be available via the project website hosted by KIS."
- Change D1.4 into Milestone
- D1.5 end date is M69

WP2:

- Task 2.1: change end date to M60 (the last season ends in M53). WSU and GEO removed as partners.
- BIOMILA: remaining PMs from WP2 are moved to WP6
- Task 2.2: end date changed to M48
- Task 2.3: end date changed to M57
- Task 2.4: end date changed to M54; WSU and SEC removed from this task
- Task 2.5: end data changed to M69; WSU replaced by NATUR (PM 0.9)
- D2.3 due date M55
- D2.4 due date M60
- D2.5 due date M60
- D2.6 due date M57

- D2.7 due date M69
- D2.8 due date M69
- D2.9 end date M69
- MS14 changed to M54
- MS39 changed to M66
- GEO distribution:
    - +6PM UNITUS (+12,000€ + 1,200€ ODC + overhead)
    - +6PM BOKU (+12,000€ + 1,200€ ODC + overhead)
    - +0.9PM NATUR (+1,800€ + 180€ ODC + overhead)

WP 3:

Changes in the dates and lead beneficaries

- End date M60 - M69
- Task 3.1: end date M60 - M66
- Task 3.2: end date M36 - M48
- Task 3.3: end date M54 - M66
- Task 3.4: end date M54 - M58
- Task 3.5 and 3.6: end date M60 - M69;
- D3.3 & D3.6: due date M54 - M66, lead beneficiary is UNEW
- D3.4: due date in M54 - M58
- D3.5: due date in M54 - M66
- D3.7: due in M54 - M67, lead beneficiary IHAR
- D3.8: due in M60 - M69, lead beneficiary KIS
- MS17: due date M48 - M66
- MS38: due date M48 - M56

Lead beneficiaries are changed according to the agreed task leaders.

Changes in the milestones

MS17: Advanced breeding lines available for further selection and varietal development (potato): Material received by partners

change to: Material available for partners

- Justification: The exchange of the potato breeding material is under serious threat of quarantine and other diseases. Therefore we can't guarantee that

all the material will be delivered to partners. The material will be available and if all the safety measures will be in place, partner can decide if he takes a risk and accept new material into his breeding programme or not.

Changes in the partner

Partner Potato Research Institute moved from UP to MATE

Changes in text of objectives

Obj. 1 'core' replaced with 'working'

Obj. 4 'multiple' and 'races' are crossed, since we do not guarantee to how many P. infestans races they will be resistant, hopefully to multiple races.

Changes of text in Description of work

Task 3.1:
'core' collection is replaced with 'working'

'year 3 and 4' are crossed, since high throughput phenotyping will be used also in later years

'The row spacing…in a plot.' Is crossed since the technology changed and use of drones replaced it.

Task 3.2:
'Partner involved: KIS' is crossed since only UNEW is working in this task.

Task 3.3:
'Solanum sisymbriifolium' is crossed since we were not able to obtain enough seed. It was replaced with mixture of all 5 cover crops.

Task 3.4:
'trenches around plots…beetle suction methods… and larvae' and several genotypes is crossed.

The trenches were not implemented since we couldn't found suitable organic fields, where potato was grown in nearby fields previous year and there was no available equipment for suction to implement rather old fashion method of collecting beetles. Instead of that modern RNA-I technology was tested.

There is no need to have several genotypes to evaluate efficiency of certain strategy. The preference of CPB to certain cvs. can be performed in separate experiment.

In the experiment we put more focus on CPB elimination methods
It should be written in the first sentence:
A range of CPB control strategies such as fungal and bacterial sprays and RNA-I technology will be evaluated in CPB trials in organic or low input fields.

Task 3.5:
'Blight' is replaced with Late blight

Late blight resistance genes should be those which they proved to be efficient and work with:
(Ry-sto, Ry-chc, R8, Rpi-Blb2, Rpi-Smira2/R8, Rpi-chc, Rpi-vnt1.1, Rpi-vnt1.3)

Task 3.6:
Rpi-Smira1 is crossed, other genes are added:
for selection of quantitative and qualitative resistance particularly to late blight (focusing particularly on R8, Rpi-Blb2, Rpi-Smira2/R8, Rpi-chc, Rpi-vnt1.1, Rpi-vnt1.3)

'other pathogens' is replaced with PVY – we proposed to work on two most important pathogens

Changes of text in Part B

Page 9:

- The potato variety Sarpo Mira is highly resistant to late blight since the cultivar possesses few R-genes against P. infestans. Among them only the genes Rpi-Smira1 and Rpi-Smira2 seem to be really important for late blight resistance (Tomczyńska et al 2014; Hajianfar et al., 2016). The DNA markers for both of these R-genes have already been published. The *S. chacoense, S. venturii, S. phureja and S. bulbokastanum R* genes have been utilized in Polish, Hungarian, Dutch, German and Slovenian varieties so far. The partners IHAR, UP and KIS will establish a set of existing markers (linked in particular to resistance to late blight and PVYother pathogens), which will

be used in genotyping the core working collection and newly developed populations in ECOBREED together with the selection of organic cultivars.

WP 4:

- End date of WP4 changed to M69
- NATUR added as partner.
- Task 4.1 end date M69
- Task 4.2 end date to M68, Kristina will rewrite the text. GEO replaced by NATUR, but with chilling. BOKU deleted.
- Task 4.3 Kristina removes '(AT and RS)'.
- Task 4.5 GEO is removed, end date is 54
- Task 4.6 end at M69
- D4.2 end date M58
- D4.3 end date M69
- D4.4 end date M69
- D4.7 changed to MS and end date M69
- D4.8 end date M69
- MS40 changed to M69
- New MS added: Multiplication of soybean CCPs (IFVC), M48, seeds sent to farmers
- GEO distribution: (+52,400€ personnel + 5,240€ ODC + overhead): TBD till the end of next week

  Suggestion based on below text is that ~33.000 euro should go to IFVC and the rest to NATUR.

  (1) IFVC can offer in T4.1:

  Applying precision agriculture methods can greatly improve modern agricultural production, achieve significant savings and protect the environment. Using multispectral cameras and current software, we can provide considerable information about the crop condition and, with great precision, replace the expensive classic methods that took a long time, required monumental human work, and took only a small sample. After two years of field trials of the competitive ability of soybean genotypes with weeds, the third year will include analyses with DJI Phantom 4 multispectral RTK. We would like to establish efficient methods for determining leaf canopy and leaf area index (LAI) as an excellent indicator of the competitiveness of different soybean

genotypes with weeds. In this way, in our process of breeding and testing many genotypes, we can quickly get information about the competitive abilities of every variety of soybean.

For the last few years, farmers have had the biggest problem with insect attacks in the summer months when the soybean is in the grain pouring phase, and it is not possible to use a tractor sprayer to apply sulfur. Therefore, an essential segment of this task will be developing a method for treating mites with a drone for the application of sulfur, which would not trample the crop and treat only the zones where insects spread. Also, by mapping with a multispectral camera, stress zones in plants can be determined, which will also be one of the goals in this task. This research will give a strong potential and great opportunities to the practical application of drones in organic soybean production and the affirmation of these methods for other applications.

Note: If you agree with the above proposal, I would like to suggest Dr. Miloš Rajković take the task leader position for T4.1 instead of Dr. Vuk Đorđević since Dr. Rajković will perform mentioned trials and the task will be extended to the 69th month.

(2) IFVC can offer in T4.5:

Additional analyses can strengthen the results gained from trials that were established within task 4.5. After introducing cover crops in organic soybean production, the content of N, P, K, and microelements in plant material (both cover crops and soybean) and wider physical soil properties will be obtained. From a nutritional perspective, the content of total phenols and flavonoids in soybean plant material and grain after harvest of trials with cover crops will be measured. Also, additional microbiological analyses (soil) are crucial to reflect the effect of inoculant use and micronutrient seed coatings in organic soybean production. These additional analyses will better elaborate the effect of cover crops and inoculant use that will be presented in deliverable 4.4 „Report on recommendations for improving seed multiplication via the use of cover crops and seed inoculation treatments'' (M69).

List of additional analyses:

1. Determination of total phenolics contents;
2. Determination of total flavonoids contents;

3. Determination of total microbial number Ammonifiers, Azotobacter, Fungi, Actinomycetes;
4. Determination of dehydrogenase activity;
5. Determination of β-glucosidase activity;
6. Determination of soil compaction;
7. Determination of specific soil gravity;
8. Determination of microelements in soil and plant material;
9. Determination of macro-elements in cover crop material;

(3) NATUR can offer in T4.2:

Chilling tolerance additional in the flowering stage of soybean based on farmer's demand in regions with colder climate. Text in T4.2 will be updated as “Chilling tolerance evaluation will take place in Austria, Romania and Germany to characterise 50 accessions in years 3 and 4 (or 4 and 5) allowing selection following initial phenotyping (Task 4.1) for their broader adaptation and enhanced robustness to limiting and changing agro-climatic conditions i.e. drought and chilling stress.”

WP5:

- End date M69
- Task 5.1: end date M54; Dagmar will prepare changes to the text.
- Task 5.2: end date M57
- Task 5.4: end date M54
- Task 5.5: end date M69
- D5.2: due date M60
- D5.3: due date M62
- D5.4. due date M64
- D5.5: due data M66
- D5.6: due date M68
- D5.7: due date M69
- MS28: due date M48
- MS36: due date M60
- MS41: due date M60

WP6:

- end M69

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- deputy: PRO-BIO (Adam Brezani)
- partner GEO removed; IFVC and SZG added
- Task 6.1: end date in M69; “establishment and maintenance”; IFVC to be added.
- Delete part of sentence “and translated … in the field”
- New sentences: “Protocols will be translated in the languages of participating partners. Bulletins for each season and each crop will be sent to participating farmers.”
-
- Task 6.2: end date M67; delete ‘EL’ in wheat and put instead ‘IT, RS’; delete ‘EL’ for soya and put instead ‘AT, SI’; SZG add; ATK and GEO removed; PO to be replaced with PL; length to be changed
- Addition: minimum 2 farms: “SK, IT (min 2 farms), RS (min 2 farms) for wheat, UK, CZ, SI for buckwheat, PO, HU, SI for potato and DE, RS, RO, AT (min 2 farms), SI (min 2 farms)”
- Add: for example “plot size a for example minimum of 3 m wide x 50 m length”
- Add: for example “The use of large for example 100 m length”
- Task 6.3: end date M69; remove KIS in the last sentence; remove SEC.
- PM table:
    - delete GEO
    - delete KIS in the text
    - reduce SEL to 0.5PM; for the rest 16.5PM we have a separate meeting with SEL, NATUR, BOKU, CRI, KIS
    - GEO distribution:
        - introduce SZG with 1PM (+2,000€ + 200€ ODC + overhead)
        - introduce IFVC with 5PM (10,000€ + 1,000€ ODC + overhead)
        - NATUR + 4PM (8,000€ + 800€ ODC + overhead)
        - KIS + 5PM (10,000€ + 1,000€ ODC + overhead)
    - UP – 23PM that go to WP3, 12PM remain WP6, -3PM go to WP7
    - PROBIO: Werner is meeting with Adam to check how the PMs are going to be spent.
    - D6.2, D6.3 (NATUR lead) and D6.4: due in M69
    - MS24: due date M48

WP7

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Due to GEO resignment the new Vice WP leaders would be Marjana Vasilević

All Tasks will change from M7-48 to M7-68 to accommodate training events post M48 i.e. July 2022

7.1
End date 69 in accord with the extension requested.
Add KIS which was not inserted by mistake even if it already contributed to this task with the training material.
Change the bursaries distribution rather than 6 by 4 workshop, 24 all tighter this since some workshop did not utilized bursaries due to the on-line structure. So this resources could be utilized for others workshops.
Sentence to be modify is:
24 bursaries at a value of up to 500€ will be made available

7.2
End date 68 in accord with the extension requested.
Change the bursaries distribution rather than 10 by 6 workshop, 60 all tighter this since some workshop did not utilized bursaries due to the on-line structure. So this resources could be utilized for others workshops.
Sentence to be modify is:
60 bursaries at a value of up to 200€ will be made available

7.3
End date 68 in accord with the extension requested.
Delete WUS since from the US it could not run the task.
Remove GEO due to its resignation and insert UNITUS instead.
In parallel the geo PM in WP 7.3. will be pass to UNITUS
Add UP with 3 PM in the budget missing by mistake.

- Change D7.4 due date to M69 due to changing the project time.

Part B:

Training

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In many European countries there has been a decrease in the number of **plant breeding and genetics** focused modules available in **Agricultural Science** and related Degree programmes. These have often been replaced in the curriculum by environmental, food and/or social science (e.g. consumer or rural studies) modules, which are perceived by students as 'easier' and have an added advantage of potentially providing employment opportunities outside the agricultural production sector. Also, there is often limited opportunity for detailed training in **(a) plant molecular biology, (b) molecular assisted breeding/selection** and **(c) associated biometrics**, even though these are of increasing importance in commercial crop breeding. As a result, breeding companies and crop research institutions increasingly report **difficulties in recruiting Early Stage Researchers,** who have knowledge and skills in the areas of **(a)** traditional plant breeding, **(b)** plant genetics and **(c)** applied plant molecular biology/biometrics. **An extensive training programme is used in ECOBREED** to address these limitations and **to facilitate rapid technology transfer from the project (improved genotyping and phenotyping, together with PPB and FPT management) into commercial practice**. Training workshops will be held at locations that can be easily reached by inexpensive and cost effective means of travel from most locations in Europe and will be developed and delivered by teams of senior scientists selected from within the consortium. Facilities of project partners (seminar rooms, laboratories, field trials etc.) will be used to deliver workshops in TASKs 7.1 and 7.2 while farmer where FPT are located will be used to host training activities in TASK 7.3. The project proposes to run a minimum of 4 workshops in TASK 7.1, 6 in TASK7.2 and 20 in TASK 7.3. For Task 7.1 the total days offered would be 12 divided among the four workshops and will be limited to a number of participants related to the laboratory space and equipment requirements. For TASK 7.2 which will be both in the field and in the classroom total days of workshop offered will be 12 days and be limited to a number of participants related to the workshop organization. For TASKS 7.1 and 7.2 each workshop will have 50% of places reserved for participants from outside the consortium within Europe. Bursaries will be available (500 euros per person for TASK 7.1 and 200 euros per person for TASK 7.2 for 50% of the places in both of these TASKS) to support travel and accommodation costs for participants from countries outside the consortium within Europe where the organic sector is low and/or where participants have insufficient funds available to attend the workshops. For running the 4 workshops in TASK 7.1 bursary support will be 12,000 euros, with an additional 12,000 euros for bursary support in TASK 7.2 providing a total of 24,000 euros in bursary support, the bursary amount could be shifted among workshops and among tasks in accord with the needs. No bursary support is provided for TASK 7.3 as the training activities will take place within a day and it envisaged that participants will be relatively local to the training centres. The co-ordinator has requested a budget of 24,000 euros to cover this bursary support.

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The workshops will be **advertised on the external project website** and by e-mail postings **to organisations involved in research and advice,** crop breeding and organic/low input agriculture (using existing networks and databases of partner organisations). The use of Agricultural training networks i.e. Bionet Austria (www.bio-net.at), the Czech Technology Platform for Organic Agriculture (www.ctpez.cz), Association of Organic Farming (Zväz ekologického poľnohospodárstva) in Slovakia (http://www.ecotrend.sk/zvaz-ekologickeho/) and the Association of Slovenian Ecological Farming and Chamber of Agriculture and Forestry of Slovenia (http://www.kgzs.si/gv/eko.aspx) will provide a vehicle for advertising the training workshops and also the transfer of knowledge to farmers. These and other existing training networks could also be used to jointly host the events, especially those in TASK 7.2 and particularly TASK 7.3, but also to deliver further training workshops after completion of the ECOBREED project. Once the training programmes have been developed, there also exists the potential for Partners to offer these courses on a stand-alone self-funded basis.

WP8

- Paul Bilsborrow deputy
- End date M69
- Rewrite the text
- Task 8.2:
    - end date M69
    - International organisation like ECO-PB and OPB
    - International conference in M67
    - Naturland replaces with NATUR
- Task 8.3:
    - end date M69
- Task 8.4:
    - End date M66
    - GEO is replaced by NARDI
    - GS added
    - Operations in year 2-5; over 4 years period
    - Update changed with maintenance
- Task 8.6:
    - End date M69

    - Demo: year 3 and 5, put number of events from Task 8.4, Task 7.3 and Task 6.3
    - Local media: out 'signed by the author'.
    - Add field days.
- Task 8.7
    - End date M69
    - Zenodo
- GEO delete from PM table
- D8.3: due date M67
- D8.4: due date M69
- D8.5: due date M69
- D8.12: due date M69
- GEO distribution:
    - +3PM KIS (+6,000€ + 600€ ODC + overhead)

WP9

- end date also for Tasks is M69
- GEO goes out
- Task 9.1: all partners involved
- Task 9.2: all partners involved
- GEO distribution:
    - +0.2PM KIS (+400€ + 40€ ODC + overhead)

PR3 proposed period: M37-M53

PR4 proposed period: M54-M69