



RATI*o*N

Risk AssessmentT InnOvationN for low-risk pesticides

Title: Gender Balance Strategy

Deliverable : 7.1.

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Nature of the Deliverable		
R	Document, report (excluding the periodic and final reports)	√
DEM	Demonstrator, pilot, prototype, plan designs	
DEC	Websites, patents filing, press & media actions, videos, etc	
DATA	Data sets, microdata, etc.	
DMP	Data management plan	
ETHICS	Deliverables related to ethics issues.	√
SECURITY	Deliverables related to security issues	
OTHER	Software, technical diagram, algorithms, models etc.	

Dissemination level		
PU	Public, fully open, e.g. web (Deliverables flagged as public will be automatically published in CORDIS project's page)	√
SEN	Sensitive, limited under the conditions of the Grant Agreement	
Classified R-UE	EU RESTRICTED under the Commission Decision No2015/444	
Classified C-UE	EU CONFIDENTIAL under the Commission Decision No2015/444	
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List of partners

N°	Name	Short name	Country
1	PANEPISTIMIO THESSALIAS	UTH	Greece
2	AIT AUSTRIAN INSTITUTE OF TECHNOLOGY GMBH	AIT	Austria
3	UNIVERSITE CATHOLIQUE DE LOUVAIN	UCL	Belgium
4	METABOLIC INSIGHTS LTD	MI	Israel
5	AEIFORIA HELLAS LTD	AFA	Bulgaria
6	ECT OEKOTOXIKOLOGIE GMBH	ECT	Germany
7	IDRYMA TECHNOLOGIAS KAI EREVNAS	FORTH	Greece
8	INTERNATIONAL BIOCONTROL MANUFACTURERS ASSOCIATION	IBMA	Belgium
9	WAGENINGEN UNIVERSITY	WU	Netherlands
10	JULIUS KUHN-INSTITUT BUNDESFORSCHUNGSINSTITUT FUR KULTURPFLANZEN	JKI	Germany
11	HELMHOLTZ-ZENTRUM FUR UMWELTFORSCHUNG GMBH	UFZ	Germany
12	INSTYTUT UPRAWY NAWOZENIA I GLEBOZNAWSTWA, PANSTWOWY INSTYTUT BADAWCZY	IUNG	Poland
13	BIOBEST GROUP NV	BBEST	Belgium
14	INSTITUT NATIONAL DE RECHERCHE POUR L'AGRICULTURE, L'ALIMENTATION ET L'ENVIRONNEMENT	INRAE	France
15	ELLINIKOS GEORGIKOS ORGANISMOS – DIMITRA	HAO	Greece
16	SYNGENTA AGRO GMBH	SYN	Germany
17	WEIZMANN INSTITUTE OF SCIENCE	WI	Israel
18	EUROQUALITY SARL	EQY	France
19	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	CSIC	Spain
20	BAYER AKTIENGESELLSCHAFT	BAYER	Germany
21	CBC (EUROPE) SRL	CBC	Italy
22	Genolution	Genolution	Korea

Project summary

This report is part of the deliverables from the project "RAT^{ION}" which has received funding from the European Union's Horizon Europe research and innovation program under grant agreement No. 101084163.

Low risk pesticides (LRP) including (i) plant extracts (ii) semiochemicals like pheromones and allelochemicals, (iii) microbial pesticides, are gaining ground in the global market, as substitutes of synthetic pesticides. In addition, new microbial solutions (phages, protists, microbial consortia) and ds-RNA pesticides are emerging, low-risk solutions are expected to reach the market in coming years. Despite on-going regulatory efforts by the European Commission, we are still lacking a concrete risk assessment (RA) scheme relevant to LRPs, a point which blocks LRPs reaching the EU market. RAT^{ION} timely comes to address these regulatory constraints and aims to develop a novel RA scheme, supported by the necessary guidance on methods and tools, tailored to the specific characteristics of established and emerging LRP solutions. This main goal will be achieved through a series of interrelated WPs aiming (i) to map the current status of LRPs in Europe and identify main regulatory constraints (WP1). In this quest it will be supported by a stakeholders forum composed of all relevant actors (industry, regulators, academics, farmers, general public); (ii) to develop and validate, through a proof-of-concept exercise, innovative RA (and associated tools) for microbials (WP2), plant extracts, semiochemicals, pheromones (WP3) and, ds-RNA (WP4); and from there (iii) build a harmonized RA for all LRP and determine its socioeconomic impact (WP5), (iv) to effectively communicate and disseminate the new RA knowledge and its associated tools developed by RAT^{ION} to relevant actors ensuring sustainability beyond project duration (WP6). RAT^{ION} will benchmark EU regulatory science, uplift blockers holding back LRP uptake by the EU market and motivate research innovation in plant protection.

To achieve these goals 22 partners from academia, industry and regulatory bodies, representing 10 member states and 2 non-EU member states, will join forces in a multi-sectoral and multi-disciplinary effort.

Objectives and Introduction

This deliverable on the Gender Balance Strategy of RATION, embodies the ambition of all partner institutions striving for gender equality and diversity in research, and describes (a) the monitoring procedures of the gender issues at the various facets of the project, (b) the RATION research aspects that may be influenced by the gender dimension, (c) the actions taken to ensure gender balance in RATION activities including the training and awareness-raising of all its members, and (d) future planned actions aimed to further improving the gender equality indices in RATION, towards creating a culture of inclusion and openness.

All partners in RATION are committed to integrate gender aspects into their research and development schemes, including equal opportunities for women and men and consider the gender dimension of research contributing to excellence in research. Moreover, a Gender Equality Action Plan (GEP) is in place for most of the partners (17/22); in other cases, institutionally gender equality is protected in the framework of normative texts that consider gender as a basis for discriminatory treatment and social exclusion (Table 1).

Equality between women and men and non-discrimination are common values on which the EU is founded and are firmly embedded in the Treaties of the European Union, the Charter of Fundamental Rights of the European Union and secondary legislation. Gender Equality Action Plans (GEAPs) are stipulated by the Commission's Gender Equality Strategy 2020-2025 with COM/2020/1527, as the means of commitment for Member States, and Academic and Research Institutions, to strategic European goals for equality. In developing the GEAPs, institutions consider national laws alongside a range of legislative documents designed to promote gender equality and balance, including (but not limited to) such as:

- a) "Recast" Directive (2006/54/EC)13 on equal opportunities and equal treatment of women and men in employment and occupation, which requires the prohibition of direct and indirect sex discrimination, harassment and sexual harassment in pay and access to employment,
- b) the Directive 2010/41/EU14 on the prohibition of direct and indirect (sex) discrimination to self-employment,
- c) the Directive (92/85/EEC)15 on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding,
- d) the Directive 2010/18/EU16 on Parental Leave,
- e) the Directive 97/81/EC17 on Part time Work,
- f) the Racial Equality Directive (2000/43/EC)18 that prohibits discrimination on the ground of racial or ethnic origin in employment, and
- g) the Employment Equality Directive (2000/78/EC)19, covering the grounds of religion or belief, disability, age and sexual orientation.

A review of the GEAPs currently in place indicates a primary focus on three key areas. First, these plans **aim to enhance the recruitment process** to increase the representation of women scientists in professional and managerial roles, addressing existing gender imbalances at higher organizational levels. Second, they **emphasize the training and capacity-building of employees** directly involved in the implementation of gender policies within the institute, ensuring they possess the necessary skills and knowledge to effectively carry out these initiatives. Lastly, the plans **prioritize raising awareness** among institution managers through targeted educational

programs, fostering a deeper understanding of gender equity issues and promoting their integration into institutional policies and decision-making processes.

In RATION a similar three-prong strategy is implemented throughout the duration of the project to ensure gender equality and balance. Monitoring and assessment of the procedures and practices employed in the project is conducted to identify gender bias and corrective measures are shaped and implemented. In addition, the Dissemination, Communication and results Exploitation Plan (DcrE) of RATION specifically describes gender as a central consideration with respect to beneficiaries and targeted audiences. RATION has designated a Gender Officer, Prof. Kalliope Papadopoulou, to oversee gender representation within the network and to promote awareness of gender-related issues among its partner organization.

The gender balance strategy has been developed in agreement with the members of the consortium and is based on the “GEAR Tool”¹, the “Practical Guide to Improving Gender Equality in Research Organizations”², and the “Horizon Europe Guidance on Gender Equality Plans”³ tools. An update of the action plan will be discussed during each annual meeting of the project.

¹ https://eige.europa.eu/gender-mainstreaming/toolkits/gear?language_content_entity=en

² <https://scienceeurope.org/our-resources/practical-guide-to-improving-gender-equality-in-research-organisations/>

³ <https://op.europa.eu/en/publication-detail/-/publication/ffcb06c3-200a-11ec-bd8e-01aa75ed71a1>

Section 1. Gender balance in RATON and its dynamics

A general overview of the gender balance at the partner institutes or departments (Table 1) shows that majority of them (12/22) have a percentage of female employees higher than 50%, with only 7 institutes with a percentage of women lower than 40% and a percentage of 0.06% of gender neutral employees (Table 1, Figure 1).

Table 1: Gender balance monitoring of workforce in RATON (M24)

Partners	Workforce in RATON BENEFICIARIES							GEPs in place
	Number of women	Number of Men	Number of gender-neutral (GN) persons	Total per partner	Women%	Men %	GN %	
UTH	409	623	0	1032	39.6	60.4	0.0	YES
UCL	3616	3828	0	7444	48.6	51.4	0.0	YES
AIT	396	767	0	1163	34.0	66.0	0.0	YES
UFZ	652	631	1	1284	50.8	49.1	0.1	YES
BBEST	179	113	0	292	61.3	38.7	0.0	NO
CBC	21	54	0	75	28.0	72.0	0.0	NO
WI	2454	2334	0	4788	51.3	48.7	0.0	YES
JKI	783	552	0	1335	58.7	41.3	0.0	YES
HAO	71	110	0	181	39.2	60.8	0.0	YES
GENO	39	48	0	87	44.8	55.2	0.0	NO
MI	2	4	0	6	33.3	66.7	0.0	YES
IUNG	180	116	0	296	60.8	39.2	0.0	YES
AFA	0	1	0	1	0.0	100.0	0.0	NO
WU	1851	1736	NA	3587	51.6	48.4	0.0	YES
ECT	17	12	0	29	58.6	41.4	0.0	YES
FORTH	152	106	0	258	58.9	41.1	0.0	YES
SYN	10655	21338	97	32090	33.2	66.5	0.3	YES
BAYER	42,128	49,242	NA	91,370	46.1	53.9	0.0	YES
IBMA	5	2	0	7	71.4	28.6	0.0	NO
INRAE	4146	4083	NA	8229	50.5	49.5		YES
EQY	24	8	0	32	75.0	25.0	0.0	YES
INIA	442	271	0	713	62.0	38.0	0.0	YES
Total personnel	68222	85979	98	154299				
% TOTAL	44.2	55.7	0.1					

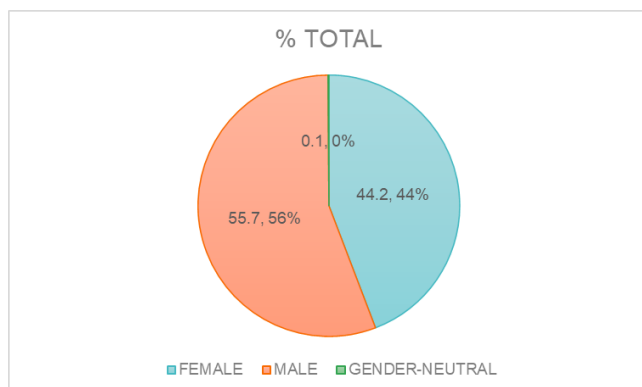


Figure 1: Gender composition of workforce in the RATION beneficiary institutions

Recruitment procedures were based on criteria of excellence but care was taken to respect gender balance as well. Thus, employment in all positions in RATION is represented by 40% women scientists, while in 9/22 partner institutions, the leading scientists are females. Although, monitored for, gender-neutral scientists are not recorded in RATION (Table 2, Figure 2).

Table 2: Gender balance monitoring of researchers workforce in RATION (M24)

Partners	Employment in Research in RATION						
	Number of women	Number of Men	Number of gender-neutral (GN) persons	Total per partner	Women%	Men %	GN %
UTH	4	6	0	10	40.0	60.0	0
UCL	1	2	0	3	33.3	66.7	0
AIT	2	2	0	4	50.0	50.0	0
UFZ	2	3	0	5	40.0	60.0	0
BBEST	1	1	0	2	50.0	50.0	0
CBC	1	1	0	2	50.0	50.0	0
WI	1	1	0	2	50.0	50.0	0
JKI	0	2	0	2	0.0	100.0	0
HAO	1	2	0	3	33.3	66.7	0
GENO	1	0	0	1	100.0	0.0	0
MI	1	2	0	3	33.3	66.7	0
IUNG	3	1	0	4	75.0	25.0	0
AFA	0	1	0	1	0.0	100.0	0
WU	1	6	0	7	14.3	85.7	0
ECT	7	3	0	10	70.0	30.0	0
FORTH	0	2	0	2	0.0	100.0	0
SYN	1	2	0	3	33.3	66.7	0
BAYER	1	2	0	3	33.3	66.7	0
IBMA	1	2	0	3	33.3	66.7	0
INRAE	0	1	0	1	0.0	100.0	0
EQY	2	1	0	3	66.7	33.3	0
INIA	2	2	0	4	50.0	50.0	0
Total personnel	26	35	0	61			
% TOTAL					42.6	57.4	0.0

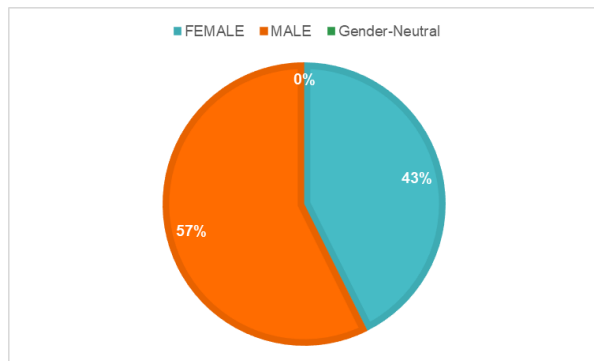


Figure 2: Female/ Male composition of researchers in the RATION consortium

Furthermore, a well-balanced distribution of genders is observed for the management and implementation of RATION, with a 50% percentage of women being present in the General Assembly, which is the highest decision body in RATION. The Steering Committee, composed by the Co-ordinator and the WP leaders, has a slightly imbalanced 37% of women representation but in this case the ratio was formed based on the expertise and the willingness of the participating institutions to lead a WP. The Project Management Board comprises a majority of women, with 3/4 of its members being female (Table 3)

Table 3: Management Roles sorted by gender in RATION

ROLE	Female	Male	Total
General Assembly	12 (50%)	12 (50%)	24
Steering Committee (WP leaders and co-leaders)	3 (37%)	5 (63%)	8
Project Management Board	3 (75%)	1 (25%)	4

Section 2. Gender Balance and Research activities in RATION

The gender dimension is not relevant for the majority of RATION research activities, with the exception of the activities and survey studies that will be undertaken during the **co-creation approach** towards formulating a new and harmonized Risk Assessment scheme for LPR. This approach involves (a) the establishment of a **Stakeholders Forum (StaFo)** and (b) the production of different sets of **questionnaires** that address the current regulatory issues, distributed to national and EU regulatory authorities (in WP1) and the socioeconomic impacts of implementing the proposed RA at the EU level (WP5).

At the current stage of the project, the StaFo has been established successfully and the survey addressed to the national and EU regulatory authorities has been completed.

- StaFo memberships are open throughout the duration of the project and currently represent entities from all sectors of industry, regulatory bodies, policy makers, NGOs and academia from Europe and other countries (Figure 3).

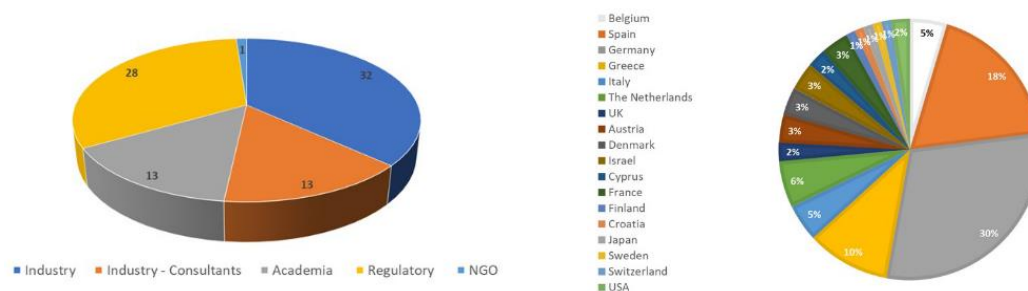


Figure 3: Sector Composition and countries involved in RATION StaFo

StaFo members are in continuous interaction with the RATION consortium and their involvement is crucial in maximizing the outputs and outcomes of RATION, since they serve multiple roles in the project (i.e. provide insights on upcoming and on-going changes in the regulatory framework, pinpoint relevant procedures for LRP, provide feedback on technical issues, disseminate results and represent consumers and end-users). Thus, monitoring and recording the gender balance of StaFo is highly important for RATION. At the latest record, 52% of the StaFo members are women (Figure 4). It should be noted though that a targeted question to declare gender identities was not included in the registration portal of the Open Digital Channel (ODC) that has been established for the communication between RATION partner and StaFo.

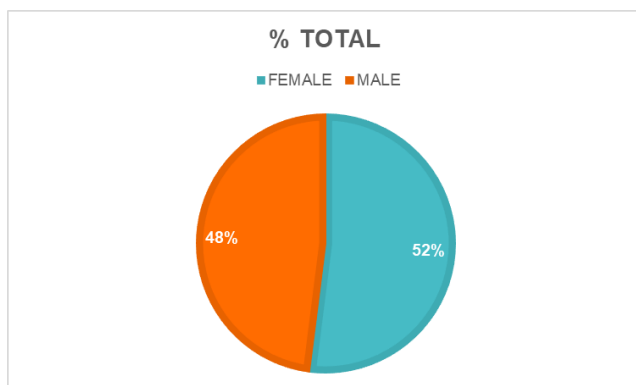


Figure 4: Gender percentage of the persons representing the StaFo entities in RATION

In addition, gender balance dimension was considered as much as possible in the organization of the periodic workshops targeting the Stakeholders interests in RATION. These are virtual webinars (half-day long) that aim to inform the involved stakeholders in various aspects of LRP nature, applications and regulatory issues and to promote discussions between the StaFo and RATION partners. Among the invited speakers in these workshops, 25% were female scientists and experts. These numbers will be further improved and there will be a continuous effort to have a good gender balance in the frame of StaFo.

In the frame of WP1, Task 1.3. questionnaires were prepared and distributed to the regulatory authorities to explore the capacity of the national authorities to process and deliver decisions as regards the regulation of LPRs. No gender dimension was identified in the scope of the study and as such neither questions relevant to gender issues were included nor the gender of the person responding to the questionnaires was considered relevant and went unrecorded.

On the social side, adopting novel agricultural is interlinked with the demographic composition of the agricultural sector and producers. Factors such as age, educational attainment, average income, and gender characterize the producers, actively engaged in agricultural production. In particular, gendered forms of social organization are deeply embedded at various scales in food systems, at the household and community levels, and extend to international organizations such as the Food and Agriculture Organization of the United Nations and the World Forum of Rural Advisory Services (Zafeiriou et al, 2024 & references within). On a global and macroeconomic scale, gender has gained increasing prominence in international development agendas. The fifth goal of the 2015 UN Sustainable Development Goals calls for the achievement of gender equality and the empowerment of all "women and girls" (UN, 2015), though its precise interpretation remains contested. Within the realm of "Agriculture for Development" (A4D), women and gender have now become central themes. The European Union supports its agricultural sector through the Common Agricultural Policy (CAP), which includes specific measures for young farmers. Gender considerations are also part of this framework, reflecting the CAP's efforts to promote gender equality in agriculture.

Women and gender are increasingly central to rural development initiatives, as evidenced in scientific research (e.g., Bahta et al., 2017; Zossou et al., 2017; Farnworth et al., 2018) and participatory action research (e.g., Kiptot & Franzel, 2012; Kristjanson et al., 2017). Gender equality is recognized as essential for driving economic growth (Kleven & Landais, 2017; Gil-Lafuente et al., 2019), with governments establishing frameworks to ensure gender equality as a means of fostering economic development, promoting social justice (Cornwall and Rivas, 2015), addressing global challenges and facilitating peace (Rourke, 2017). Research indicates that modern agricultural practices are more frequently adopted by female farmers than their male counterparts, at least in less modernized agriculture schemes (Fisher & Kandiwa, 2014). More

recently, partners of RATION (UTH) have been involved in a targeted study aiming to examine the impact of gender on the acceptance levels of innovative plant protection tools, including microbials, dsRNAs and plant metabolites (Zafeiriou et al, 2024). The results of this study will be used to map this particular realm further and feed the information to the Gender Equality Plan as well as the DcrE of RATION.

In RATION, taking into consideration the above, all relevant gender dimensions and diversity requirements will be respected in developing the questionnaires to address the objectives of WP5 in analysing the socio-economic impacts of implementing the proposed by RATION RA scheme at the EU level. In addition, the survey will measure parameters of Willingness to-Pay (WTP) among 3,600 consumers from 6 countries, on fresh vegetables and/or fruits with a label indicating a LRP use. An analysis of gender differences across the groups of respondents and the country of origin, will aim to underscore gender-sensitive discussions within sustainable agriculture technologies and to propose context-sensitive strategies to address to address gender issues in the agro-food sector.

Section 3. Continuous Monitoring and Training Aspects

The role and the importance of recognising and respecting the gender aspects in research and innovation were specifically discussed during the kick-off meeting of the project. The gender-balanced participation in all activities of RATION is continuously monitored and corrective measures are implemented as needed. To this end, collaboration with equal opportunity offices at partner sites, where they exist, is sought to obtain valuable insights and recommendations for improving the project's approach to gender-related issues.

To raise the profile of the scientific network of RATION among female researchers, the project website is linked to webpages of organisations striving for the advancement of women in science or to documents highlighting the gender dimension in research and awards in the field of sustainable agriculture. For example:

<https://epws.org/>

<https://www.advance-he.ac.uk/equality-charters/athena-swan-charter>

<https://www.greekwomeninstem.com/>

<https://www.athenastemwomen.org/>

<https://awis.org/about-awis/>

<https://prima-med.org/shaping-equality-prima-gender-dimension-report-is-now-available/>

<https://prima-med.org/woman-greening-award/>

RATION partners, and especially young researchers, are encouraged to follow the events organized by the European Institute of Gender Equality (e.g. the EIGE Gender Equality Forum in December 2024) or events related to EU policies involving the gender dimension (e.g. EU Green Week) etc. Monitoring of these participations is undertaken.

Ensuring gender-balanced participation in internal meetings, workshops, external conferences, and exhibitions is considered instrumental to untapping the human resources potential within the project and establishing a gender-balanced public face. These aspects will be closely monitored in the second half of the project when the dissemination of RATION's outputs is scheduled for.

A number of activities are planned for raising awareness among the RATION partners:

- The Gender Officer will report on monitoring and implementation of GEP activities to the General Assembly during the annual meetings
- The Gender Officer will be responsible for the organization of roundtables on gender equality during the annual meetings as a dedicated space within the RATION consortium, to discuss and exchange experiences that can lead to the development of new ideas for increased female representation in science.
- The Steering Committee will be responsible for the organization of dedicated events in RATION partner sites, especially for those partners with low representation of women, to discuss gender balance and to define actions to be undertaken.
- A 1-day Symposium on 'Gender Impact on acceptance and adoption of LRP' will be organized inviting experts in the field of socioeconomics to inform about developments in the field, and to highlight current gaps and future challenges.

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