SELECTION OF ONE ASSOCIATE PROFESSOR FOR THE ACADEMIC RECRUITMENT FIELD 07/B1 "AGRONOMY AND FIELD, VEGETABLE, ORNAMENTAL CROPPING" AT THE PLANT SCIENCE RESEARCH CENTRE - ACADEMIC CLASS OF EXPERIMENTAL AND APPLIED SCIENCES, FUNDED BY MINISTRY DECREE 364/2019, RESERVED, PURSUANT TO ART. 24, SUBSECTION 6, OF ITALIAN LAW 240/2010, FOR RESEARCHERS EMPLOYED AT THE SCHOOL, ISSUED BY RECTOR DECREE NO. 332 DATED 24/05/2022.

#### MINUTES OF THE THIRD MEETING

The Review Committee for the selection of one professor (level 2) for the Academic Recruitment Field 07/B1 "Agronomy and field, vegetable, ornamental cropping" – Academic Discipline AGR/02 "Agronomy and Field Crop" at the Plant Science Research Centre - Academic Class of Experimental and Applied Sciences, Funded by Ministry Decree 364/2019 reserved for researchers employed at the School to be selected pursuant to art. 24, subsection 6 of the Italian law 240/2010, nominated by the Rector by decree No. 436 dated June, 30, 2022, consists of:

- Prof. Luciana Gabriella Angelini, Full Professor of the Academic Recruitment Field 07/B1 "Agronomy and field, vegetable, ornamental cropping" at the University of Pisa;
- Prof. Roberto Confalonieri, Full Professor of the Academic Recruitment Field 07/B1 "Agronomy and field, vegetable, ornamental cropping" at the University of Milano;
- Prof. Carlo Grignani, Full Professor of the Academic Recruitment Field 07/B1 "Agronomy and field, vegetable, ornamental cropping" at the University of Torino, as designed member by Plant Science Research Centre;
- Prof. Marie-Helene Jeuffroy, Directrice de Recherche UMR Agronomie INRAE Francia;
- Prof. David Natali, Full Professor of the Academic Recruitment Field 14/A2 "Political Science" at the Scuola Superiore Sant'Anna, member of the Recruitment Committee;
- Prof. Christine Watson, Professor of Agricultural Systems, SRUC, Scotland's Rural College
  Gran Bretagna.

The committee convened for the third time, on October 12, at 1:30 pm CET, via teleconference (as authorized by the Rector, on October 5, 2022), at this link <a href="https://unito.webex.com/join/carlo.grignani">https://unito.webex.com/join/carlo.grignani</a> from the following locations:

Prof. Angelini located in Pisa.

Prof. Confalonieri located in Milano,

Prof. Grignani located in Grugliasco (To),

Prof. Jeuffroy located in Paris (F),

Prof. Natali located in Pisa,

Prof. Watson located in Aberdeen.

The President, having ascertained the presence of all the members, opened the session.

The members of the Committee states that the Personnel Office of the School has provided them with an electronic copy of the documentation submitted by the applicant containing: application, curriculum, publications with a declaration in lieu of an affidavit certifying compliance with the original, letters of recommendation, and a list of all the documents accompanying the application.

The members of the Committee state that they have examined the publications, curriculum and teaching activities of the candidate and made their individual assessments, which are reported in Annex 1 of these minutes.

The Committee then examines the publications, curriculum and teaching activities of the candidate, confronts their individual assessments and reviews the collegiate assessment annexes sub 2 attached to the minutes of which they are an integral part.

Then after a full discussion, on the basis of a unanimous decision, the Committee declares that the winning candidate is:

Dr. Anna Camilla Moonen.

Prof. Natali testifies that the evaluation of the candidate, the presentation of the individual assessments, the ensuing discussion and, in general, the whole procedure occurred in full compliance with the rules established by Scuola Sant'Anna and its recruitment committee.

The Committee then draws up a report summarizing the work carried out.

Given the conclusion of the selection procedure for filling a post of Associate Professor at the Plant Science Research Centre - Academic Class of Experimental and Applied Sciences, Funded by Ministry Decree 364/2019 reserved for researchers employed at the School to be selected pursuant to art. 24, subsection 6 of the Italian law 240/2010, the President declares the work closed and gives the proceedings to the Personnel Office in order for these proceedings to be verified, with a decree from the Rector.

The session closed at 18:15

Read, approved and signed.

The President

Carlo Grignani

### ANNEX 1 - INDIVIDUAL ASSESSMENTS

# Prof. Luciana Angelini

Dr Camilla Moonen obtained a MSc Degree from Wageningen University in Biology on 1995, the PhD Degree in "Sustainable Agriculture and Food quality' from the University of Pisa, on 2004, a post-doctoral Research Grant (2004-2007), and a fixed-term employment contract as Researcher (2007-2012) at the Scuola Superiore Sant'Anna in Pisa where (from 2012-today) she holds the position of Assistent Professor in Agronomy and Field Crops (AGR/02). She got on 07/01/2014 the National habilitation (Abilitazione Scientifica Nazionale) for Associate Professor (s.c. 07/B1).

## Teaching activity

The teaching activity has been carried out, from 2003 to today, with continuity and regularity. From 2003/2004 to 2008/2009 as Guest Lectures and from 2014 until 2019 as 'Professore Aggregato' conferred by The Rector of The Scuola Superiore Sant'anna di Pisa in Master and PhD courses at Scuola Superiore Sant'Anna di Pisa especially designed for PhD students and postgraduate students. In particular she gave a total of 104 h of lectures in the course 'Experimental methodology in agricultural sciences' from A.a. 2007 to 2014; 14 h in the course 'Analysis of spatial data'; co-lecturer of 'Principles of agrobiodiversity' from A.a 2009 until today; 16 h of practical work in 'Principles of agrobiodiversity – Practice' from 2016 until today; 14 h in 'Analysis of multivariate data using Canoco' from A.a 2013-today; 20 h in 'Experimental design for agricultural sciences' in A.a 2013,2014,2016, 2017 and 2019; 20 h in 'Weed Ecology and management' from A.a 2014, 2016, 2017, 2019; 4h of lectures in a similar course led by Prof. Barberi in 2008, 2009 and 2011; 20 h in 'Management of a field experiment - Practical Work' from A.a 2020 -today.

As regards integrative teaching, the candidate has a continuous commitment to roles of supervisor (9 students) and co-supervisor (4 students) of the Doctorate course in Agrobiosciences and of the International PhD programme in Agrobiodiversity. She was also tutor for 7 visiting PhD students. She was a member of the Exam Committee at Scuola Superiore Sant'anna for the Bsc and Msc Certificates of students of Sant'Anna in 2013, 2014, 2018, 2020, 2021, 2022. Since 2009 she participated in 10 PhD exam committees in Scuola Superiore Sant'Anna. She participated also as Member of the PhD Exam Committee at Padova University and at INRAE in France. She was organizer and teacher of several Winter/Summer Schools for PhD students from all over the world.

# The teaching activity of Dr. Camilla Moonen is of a GOOD LEVEL level and FULLY consistent with the themes of the SSD AGR / 02.

12 Scientific publications presented

The research topics covered by the 12 publications selected by the candidate, produced between 2008 and 2022, with excellent temporal continuity and excellent originality, are focused on the study of functional biodiversity for agroecosystem service provisioning with particular attention on pest control, weed control and crop pollination services. Publications 1, 5 and 12 are review papers.

The ranking of these articles is excellent as all, but one, have been published in 1st quartile journals. The total number of citations is 492. The 12 publications presented are all relevant to the subjects of the scientific disciplinary sector covered by the announcement (AGR/02). The individual contribution of the candidate to the works presented is good and clearly understandable.

In summary, the scientific publications selected by Dr. Camilla Moonen are VERY GOOD and FULLY consistent with the themes of the SSD AGR /02.

## Overall scientific publications:

The scientific activity of Dr. Camilla Moonen consists of 44 articles with citation index from Scopus and 492 total citations, 19 publications in journals referenced, 12 publications without citation index, 65 publications on international and national conference proceedings, and 7 book chapters with International Editors. It was characterized by good continuity and intensity over a long period of time (from 2001 to today). This is reflected in an h-index of 25.

In summary, the overall scientific production of Dr. Moonen is of VERY GOOD level and FULLY consistent with the themes of the SSD AGR/02. The scientific production is abundant, continuous, highly original and innovative, the scientific relevance and the journal rankings are almost always of an excellent level.

## Research management

During her activity, Dr. Camilla Moonen has participated in numerous national and international research projects (concerning topics related to the SSD AGR/02) both as a member of the research group and scientific coordinator of Scuola Superiore Sant'Anna (5 European, 2 regional, 2 national), and as scientific coordinator (1 national project). The fund-raising activity of the candidate can be considered as satisfactory, with more than one million euros since 2008.

From 2015 to 2020 she was a member of several international scientific networks/working groups/ advisory and study groups and a member of several European and international scientific societies. Between 1997 and 2021 Dr Moonen participated as a speaker in 6 international conferences (2 of these as invited speaker) and 9 national conferences (1 of these as invited speaker). In the same period she contributed to the organization of four international workshops, one national conference, besides several other local meetings/study days.

Since November 2014 she was a member of the Editorial Board of Weed Research and since March 2018 she was a member of the Advisory Board of the ISI Journal ITEA-Información Técnica Económica Agraria. She was technical editor of the EWRS Newsletter since 2004 and content manager of the EWRS website and communication officer since 2019. She was reviewer for various ISI journals and Guest editor of a 'Special Issue' of Agriculture, Ecosystems and Environment. She was a reviewer for the 'Agence Nationale de la Recherche' (French National Research Agency) for the evaluation of 3 research projects in 2010, 2012 and 2019 and for ANVUR in 2017.

In summary, the overall scientific curriculum of Dr. Camilla Moonen is of an EXCELLENT level and FULLY consistent with the themes of the SSD AGR/02.

### Prof. Roberto Confalonieri

The candidate graduated in 1995 from Wageningen University in Biology with a specialization in Landscape Ecology. After her PhD from the University of Pisa in Sustainable Agriculture and Food Quality (2004), she had a number of different contracts with Scuola Superiore Sant'Anna di Pisa reaching a permanent position in 2015, as assistant professor in Agronomy and Field Crops.

The candidate has more than 10 years of teaching experience in MSc and PhD courses, with an actual teaching load of about 90 hours per year, and covering topics as Principles of Agrobiodiversity, Multivariate Analysis and Experimental Design and Weed Ecology. From 2008 she is member of the PhD committee of the Doctorate Course 'Agrobiosciences' at the Scuola Superiore Sant'Anna and she has been the supervisor of nine PhD students within an international PhD program. She was invited member of Exam committee of 8 PhD students in Italy and abroad.

The overall impact of the candidate's production on the scientific community is very good, with almost 2900 citations for 44 publications (average number of citations per publication is excellent, being 61.5) and a h-index equal to 25. In particular, the quality of the 12 publications presented for being evaluated within this selection is very good in terms of originality and methodological rigor, as well as for the coherence with the field 07/B1 "Agronomy and field, vegetable, ornamental cropping" and the standard for a position of Associate Professor. The relevance of the journals within the subject category is overall good, with all the papers (but one) published in first quartile journals. The individual contribution of the candidate is clearly understandable in about half of the publications, the candidate being last in the authors' list in five publications out of 12.

The fund-raising activity of the candidate can be considered as satisfactory, with more than one million euros since 2008. Within the projects (international and national), the candidate led research units and work packages, this demonstrating the candidate's ability in project management and coordination of research teams.

Overall the teaching activity, the quality of publication and the ability for managing research is considered very good and fully compatible for a position as Associate Professor

# Prof. Carlo Grignani

Education and Professional status

The candidate has a MSC degree from Wageningen University in Biology (1995) with a MSc thesis in "Farming System, Field Margins and Landscape". She concluded her PhD from the University of Pisa in Sustainable Agriculture and Food Quality in 2004. After a three year post-doc and other several other contracts always with Scuola Superiore Sant'Anna di Pisa she reached a permanent position as Assistant Professor in Agronomy and Field Crops in 2012.

Teaching

The candidate has 19 years of teaching experience in MSc and PhD courses. She started in 2003 as guest lecturer on topics as Environmental Management, Agrobiodiversity and Experimental Methodology. Starting from 2009 she was charged of full responsibilities in different courses at MSC level. She has now a teaching load of about 110 hours per year in the following subjects: Agrobiodiversity, Multivariate Analysis, Experimental Design and Weed Ecology. The candidate is member of two PhD Committees of Doctoral Programme 'Agrobiosciences' and 'International Doctoral Programme in Agrobiodiversity' at the Scuola Superiore Sant'Anna. She was cosupervisor of 4 PhD students and supervisor nine PhD students. She was invited as member of Exam committee of 8 PhD students in Italy and abroad.

Research and Publication

Considering the total scientific production, the candidate has 44 publications in scientific journals and 11 book chapters, reaching almost 2900 citations, and a h-index equal to 25. The authorship shows an excellent capacity to work in medium and large groups internationally. The main scientific subjects of the 12 publications are the following: biodiversity in agriculture, weed management and evaluation of cropping systems. The candidate is active also in terms of technical papers (12) and conference paper (66). She has 11 presentations in international conferences and 15 in national ones.

The overall quality of the 12 publications presented for being evaluated is very good in terms of originality and methodological rigor, as well as for the coherence with the field 07/B1 "Agronomy

and field, vegetable, ornamental cropping". The relevance of the journals within the subject category is very good, with all the papers (but one) published in first quartile journals. The individual contribution of the candidate is clearly understandable in about half of the publications, the candidate being last in the authors' list in five publications out of 12.

## Research management

The candidate was actively involved in 10 research projects, out of which 5 are international and 4 where she was the coordinator. The fund-raising activity of the candidate can be considered as satisfactory, with more than one million euros since 2008.

Overall the teaching activity, the quality of publication and the ability for managing research is considered very good and fully compatible for a position as Associate Professor

# Prof. Marie-Helene Jeuffroy

After a PhD obtained on 2004, in the University of Pisa, Dr Camilla Moonen obtained a postdoctoral Research Grant (2004-2007). Since 2012, she obtained a permanent position of Assistant Professor in Agronomy and Field Crops at the Scuola Superiore Sant'Anna in Pisa. Since 2003, she has conducted teaching activities in Master and PhD courses at SSSA, in various courses, with an average of around 100 h per year. Her teaching mostly covers methodological aspects (e.g. spatial data analysis, experimental methods) and functional aspects of biodiversity in the agroecosystem (principles of agrobiodiversity, weed ecology and management. She already (co-)supervised 13 students of the PhD programme in Agrobiodiversity. She was member of the Exam Committee at Scuola Superiore Sant'anna for the Msc Certificates of students of Sant'Anna during 6 years, and participated to the committees for the defence of 5 PhD students at Padova, and 2 in France. Her research activities concern the functional aspects of agrobiodiversity for the provision of services pf pest regulation and pollination, mainly. She published 44 papers in peer-review journals of high level quality and 7 book chapters with international editor. In several papers, she is as last authors, indicating her role in supervising the activities. She participated in several national and international research projects, sometimes as coordinator. She also presented her results in several national and international conferences. She is member of the editorial board of the journal Weed Research, and she has been Guest editor of a Special Issue of Agriculture, Ecosystems and Environment. She has been invited to review several research projects for the National Research Agency in France.

In summary, the teaching activities, research activities and scientific publications by Dr. Camilla Moonen are very good and fully consistent with the themes of the SSD AGR /02. The overall scientific curriculum of Dr. Camilla Moonen is excellent.

#### Prof. Christine Watson

The candidate graduated in 1995 from Wageningen University and went on to a PhD at the University of Pisa in Sustainable Agriculture and Food Quality (2004). Since then, she has been based at Scuola Superiore S. Anna di Pisa where she is currently assistant professor in Agronomy and Field Crops.

Over ten years, the candidate has been a variety of subjects including both subject specialisms e.g. agroecology and generic skills e.g. experimental design and statistical analysis at postgraduate level. She has experience of PhD supervision and PhD examination at home and abroad. She has also been involved in organising and teaching on several summer/winter schools on a European level.

The candidate's publications illustrate different roles in research, showing where she has contributed to the results (as a "middle" author) but also where she has been a leading figure in the research as a last author on five of the highlighted 12 publications. The publications are generally in high quality journals and the contributions show her ability to work at both the field and the landscape scale and using a variety of approaches including short and long-term experimentation. This is reflected in an h-index of 25. Her interest in the application of research to practice is clear and there is good evidence of participatory approaches for achieving practical uptake.

She has been successful in grant winning in various roles including main applicant, WP leader and participant from a variety of local and European funders.

Her research, teaching and leadership experience are entirely appropriate for a position as Associate professor.

#### ANNEX 2 – COLLEGIATE ASSESSMENT

# Education and professional status

In 1995 the candidate completed an MSc degree in Biology from Wageningen University with a thesis in "Farming System, Field Margins and Landscape". In 2004 she concluded her PhD from the University of Pisa in Sustainable Agriculture and Food Quality and her thesis title was "A system approach to study the weed suppression capacity of autumn-sown cover crops in a biennial rotation of maize and durum wheat". After a three-year post-doc and several other contracts at Scuola Superiore Sant'Anna di Pisa she achieved the actual permanent position of Assistant Professor in Agronomy and Field Crops in 2012.

### Teaching

Teaching activity has been carried out, from 2003 to today, with continuity and regularity. From 2003/2004 to 2008/2009 as Guest Lecturer and from 2014 until 2019 as 'Professore Aggregato' conferred by The Rector of The Scuola Superiore Sant'Anna di Pisa. She has developed courses at Master and PhD level. In particular she gave a total of 104 h of lectures in the course 'Experimental methodology in agricultural sciences' from 2007 to 2014; 14 h in the course 'Analysis of spatial data'; co-lecturer of 'Principles of agrobiodiversity' from 2009 until today; 16 h of practical work 'Principles of agrobiodiversity – Practice' from 2016 until today; 'Analysis of multivariate data using Canoco' 14h from A.a 2013-today; 'Experimental design for agricultural sciences' 20h in 2013, 2014, 2016, 2017 and 2019; 'Weed Ecology and management' 20h in 2014, 2016, 2017, 2019; similar course led by Prof Barberi 4h of lectures in 2008, 2009 and 2011; 'Management of a field experiment - Practical Work' 20h from 2020 -today. At present her teaching load is about 110 hours per year. As regards integrative teaching, the candidate has a continuous commitment to the roles of supervisor (9 students) and co-supervisor (4 students) of the PhD programme in Agrobiosciences and the International Doctoral programme in Agrobiodiversity. She was also tutor for 7 visiting PhD students. She was a member of the Exam Committee at Scuola Superiore Sant'anna for the BSc and MSc Certificates of students of Sant'Anna in 2013, 2014, 2018, 2020, 2021, 2022. Since 2009 she participated in over 9 PhD exam committees in Scuola Superiore Sant'Anna, 5 in other Italian Universities and 2 in France. She was organizer and teacher of several Summer Schools for PhD students from all over the world.

The teaching activity of Dr. Camilla Moonen is of a VERY GOOD LEVEL and FULLY consistent with the themes of the SSD AGR/02.

# Research and publications presented

The research topics covered by the 12 publications selected by the candidate, produced between 2008 and 2022, with excellent temporal continuity and excellent originality, are focused on the study of functional biodiversity for agroecosystem services provisioning with particular focus on pest control, weed control and crop pollination services. Publications 1, 5 and 12 are review papers. The ranking of these articles is excellent as all but one have been published in 1st quartile journals. The total number of citations is 492. The 12 publications presented are all relevant to the subjects of the scientific disciplinary sector covered by the announcement (AGR/02). The individual contribution of the candidate is clearly understandable in 5 of the publications, the candidate being last in the authors' list in 4 publications and the first author in 1 out of 12.

The overall scientific production of Dr. Camilla Moonen was characterized by good continuity and intensity over a long period of time (from 2001 to today). It consists of 44 articles that have obtained about 2890 total citations from Scopus and an H-index of 25, and 7 book chapters with international editors.

The candidate was active also in terms of technical papers (12) and conference papers (66). She has 11 presentations in international conferences and 15 in national ones.

In summary, the scientific research activity and the quality of the 12 publications selected by Dr. Camilla Moonen show that her production is abundant, continuous, highly original and innovative. The scientific relevance and the journal rankings are almost always of an excellent level. In synthesis this activity can be considered VERY GOOD and FULLY consistent with the themes of the SSD AGR/02.

Research management

research projects in 2010, 2012 and 2019.

During her activity, Dr. Camilla Moonen has participated in numerous national and international research projects (always concerning topics related to the SSD AGR/02) both as a member of the research group or scientific coordinator of Scuola Superiore Sant'Anna (5 European, 2 regional, 2 national), and as scientific coordinator (1 national project). From 2015 to 2020 she was a member of several international scientific networks/working groups/ advisory and study groups and a member of several European and international scientific societies.

Between 1997 and 2021 Dr Moonen participated as a speaker in 8 international conferences (2 of these as invited speaker) and 9 national conferences (1 of these as invited speaker). In the same period she contributed to the organization of four international workshops and one national conference. Since November 2014 she was a member of the editorial board of Weed Research and since March 2018 she was a member of the advisory board of the ISI Journal ITEA-Información Técnica Económica Agraria. She actively contributed to the communication activities of the EWRS. She was Guest editor of a 'Special Issue' of Agriculture, Ecosystems and Environment. She was a reviewer for the 'Agence Nationale de la Recherche' (French National Research Agency) for the evaluation of 3

The overall research management experience of Dr. Camilla Moonen is of an EXCELLENT level and FULLY consistent with the themes of the SSD AGR/02.

In conclusion the candidate Dr Camilla Moonen is considered EXCELLENT for filling the position of Associate Professor at the Plant Science Research Centre – at Scuola Superiore Sant'Anna in Pisa, in the Academic Class of Experimental and Applied Sciences - SSD AGR/02