

Research evaluation

FINAL RESUME ON THE RESEARCH UNIT: Biochemistry and Plant Molecular Physiology (BPMP)

UNDER THE SUPERVISION OF THE FOLLOWING INSTITUTIONS AND RESEARCH BODIES:

Centre national de la recherche scientifique – CNRS

Institut national de recherche pour l'agriculture, l'alimentation et l'environnement – INRAE

Université de Montpellier - Montpellier SupAgro

EVALUATION CAMPAIGN 2019-2020 GROUP A

Report published on May, 25 2020



In the name of Hcéres¹:

Nelly Dupin, Acting president

In the name of the experts committee²:

Christine Foyer, Chairwoman of the committee

Under the decree No.2014-1365 dated 14 November 2014,

¹ The president of Hcéres "countersigns the evaluation reports set up by the experts committees and signed by their chairman." (Article 8, paragraph 5);

² The evaluation reports "are signed by the chairman of the experts committee". (Article 11, paragraph 2).

Biochemistry and Plant Molecular Physiology, BPMP, CNRS, INRA, U Montpellier, Montpellier SupAgro, Mr Christophe Maurel



Tables in this document were filled with data submitted by the supervising body on behalf the unit.

UNIT PRESENTATION

Unit name:	Biochemistry and Plant Molecular Physiology
Unit acronym:	BPMP
Current label and N°:	UMR 386 INRA, UMR 5004 CNRS
ID RNSR:	195817959Н
Application type:	Renewal
Head of the unit (2019- 2020):	Mr Alain Gojon
Project leader (2021-2025):	Mr Christophe Maurel
Number of teams and/or themes:	9

EXPERTS COMMITEE MEMBERS

Chair:	Ms Christine Foyer, University of Birmingham, United Kingdom
Experts:	Ms Anna Amtmann, University of Glasgow, United Kingdom Mr Peter Doerner, University of Edinburgh, United Kingdom Ms Antonella Furini, University of Verona, Italy Ms Karine Gallardo-Guerrero, Inrae, Dijon Mr Michael Hodges, CNRS, Gif sur Yvette (representative of CoNRS) Mr Johann Joets, Inra, Gif-sur-Yvette (supporting personnel) Mr Enrico Martinoia, University Zurich, Switzerland Mr Benoît St-Pierre, Université François-Rabelais, Tours (representative of CNU) Mr Andreas Weber, Heinrich-Heine-Universität, Germany
Experts:	Mr Peter Doerner, University of Edinburgh, United Kingdom Ms Antonella Furini, University of Verona, Italy Ms Karine Gallardo-Guerrero, Inrae, Dijon Mr Michael Hodges, CNRS, Gif sur Yvette (representative of CoNRS Mr Johann Joets, Inra, Gif-sur-Yvette (supporting personnel) Mr Enrico Martinoia, University Zurich, Switzerland Mr Benoît St-Pierre, Université François-Rabelais, Tours (representati CNU)

HCÉRES REPRESENTATIVE

Mr Steven Ball

REPRESENTATIVES OF SUPERVISING BODIES

Mr François Pierrot, Université de Montpellier Ms Catherine Rechenmann, CNRS Mr Norbert Rolland, INRAE Ms Marie Stéphanie Tixier, Montpellier SupAgro



INTRODUCTION

HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The UMR "Biochimie et Physiologie Moléculaire des Plantes" (BPMP) is located on the INRA/Montpellier SupAgro Campus ("La Gaillarde"). With almost 150 team members organised into 11 research teams, this is a large unit. Originating from the "Laboratoire de Biochimie et Physiologie Végétales" (BPV) BPMP is now associated with four institutions and directed by Dr. Alain Gojon.

BPMP has several technological platforms and common facilities that are located in a single building (the "Institut de Biologie Intégrative des Plantes"). BPMP also has another minor location in the Faculté des Sciences (Campus Triolet, University of Montpellier) for teaching activities. The BPMP has long standing collaborations with the UMR LEPSE ("Laboratoire d'Etude des Plantes sous Stress Environnementaux").

BPMP is associated to the LabEx AGRO which in Montpellier drives research on mostly tropical crops from genes to the field.

The focus of the unit is water and mineral nutrition, and the responses of plants to abiotic stresses.

Management team

BPMP is managed by a direction team. Alain Gojon was the former Director, Christophe Maurel, the former Deputy-Director is now the proposed new head.

HCÉRES NOMENCLATURE

SVE1, SVE2

THEMATICS

The general theme of the unit focuses on plant water and mineral nutrition, as well as responses to environmental abiotic stress factors. The activities of the unit focus on basic research in these areas, but with a significant emphasis on higher education. All the research teams study aspects of the functional and/or developmental processes determining plant water and mineral status, particularly membrane transport processes required for the acquisition of water and minerals roots. The second main scientific theme of BPMP research concerns the stress perception and signaling mechanisms that allow adaptive responses. This topic encompasses genome-wide transcription reprogramming and large-scale proteome modifications associated with changes in growth and development. In addition, the LabEx AGRO has undertaken research related to the agricultural development in Southern countries, as well as other international activities.

UNIT WORKFORCE

Biochemistry and Plant Molecular Physiology (BPMP)		
Active staff	Number 06/30/2019	Number 01/01/2021
Full professors and similar positions	3	3
Assistant professors and similar positions	4	4
Full time research directors (Directeurs de recherche) and similar positions	10	11
Full time research associates (Chargés de recherche) and similar positions	27	26



Other scientists ("Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.")	0	0
High school teachers	0	0
Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)	37	36
Permanent staff	81	80
Non-permanent professors and associate professors, including emeritus		
Non-permanent full time scientists, including emeritus, post-docs (except PhD students)	5	
PhD Students	19	
Non-permanent supporting personnel	7	
Non-permanent staff	31	
Total	112	80

GLOBAL ASSESSMENT OF THE UNIT

This excellent unit undertakes fundamental research into plant nutrition and responses to environmental stresses. It has achieved commendable success in terms of the quality of publications published in well-respected international journals, the organisation of conferences and the level of funding achieved, particularly in terms of European grants. While the unit does not have a large number of interactions with industry, there have been a good number of activities that allow dissemination of important findings and other information to the general public and society at large. The Unit is composed of a vibrant interactive community of researchers, with outstanding leadership and excellent management and communication throughout the different levels of the organisation. The researchers are highly supportive of the Unit as a whole and its activities, and there is a good sense of wellbeing and pride in joint research endeavour throughout. There is a good number of PhD students, most of whom archive first author publications during or soon after the completion of their studies. The 5-year plan was built through consultation and input from the researchers, and hence has a firm foundation of engagement from all the staff. The research plan is generally, novel, timely and innovative and well placed at the cutting edge of scientific endeavour in this field globally.

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