

Mário Campos Cunha

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One page presentation:

Mario Cunha - MC received a B.S., an M.Sc. and Ph.D. degrees in Agrarian Sciences. In this area, he has been developing academic and research activities and the administration and technical consulting in several institutions and farms.

He is currently an Associate Professor at Sciences Faculty, University of Porto (FCUP) and senior researcher at Institute for Systems and Computer Engineering, Technology and Science ([INESC-TEC](#)), TEC4AGRO-FOOD, Centre for Robotics in Industry and Intelligent Systems ([CRIIS](#))* and collaborator of the Research Center for Geo-Space Science (CICGE).

His research interests include various topics in agronomy and agricultural engineering, mostly focused on crop modelling (statistical or process-based), crop yield forecast, remote sensing applications (climate change included), agricultural machinery and precision agriculture (field phenotyping included). He was the (co)author of more than 160 scientific publications ([Orcid](#)), including 88 scientific papers published in journals listed in JCR - WoS and/or SCOPUS (h-index 22).

He is/was the principal investigator or institutional leader of 11 research projects* and participates(d) in the team of 28 R&D projects with different funding sources such as FCT, H2020, P2020, Aga Khan, LIFE. He maintains consistent (>5 years) agronomic technology transfer programs with five international institutions/companies and 3 Portuguese institutions/companies. He has the record of intellectual property* of the Spray_image App© (Copyright transferred to a multinational company), the MaChoice© and the ACFertS© programs. MC is/was the evaluator of several projects (R&D) applicants for funding (National/International), scholarship evaluation programs of PhD and Posdoc (e.g ERASMUS Mundus, FCT PhD grants), integrates the editorial board of three journals listed in WoS-JCR - “Agronomy, section Precision and digital agriculture”, “remote Sensing, section of agriculture and vegetation” and “Open agriculture” -, and is reviewer assiduous of more than 30 scientific journals listed in the base JCR-WoS, having reviewed more than 100 papers. MC was a recipient of the Syngenta “Innovation in Agriculture award” in 2007.

In terms of academics, MC supervises(d) 5 post-doctoral grants, 17 PhD and 38 M.Sc. students, teach courses in the 1st, 2nd and 3rd cycles in the areas of agronomy, food science and remote sensing, is Co-Director of the M.Sc. in Agronomy and the Director of the PhD program in Agrarian Sciences*.

***More information**

[Academic activities.](#)

[Publications.](#)

Projects.

- [LamSat XXI](#), *Monitoring semi-natural meadows using remote sensing data.*
- [AgriSat XXI](#), *Remote Sensing based of crop biophysical parameters.*
- [PhenoSat](#) *Remote sensing and Crop phenology.*
- [VineSPECTra](#) *Modelling grapevine Predawn leaf water potential based on hyperspectral data.*
- [DOPPLER](#) *DevelOpment of PaloP knowLEdge in Radioastronomy*
- [PRySM](#) *Precision Sprayer Ground Robot*
- [Smart Fertilizers](#) *Machinery for precision application of fertilizers.*
- [DIVA](#) - *Boosting innovative DIgitech Value chains for Agrofood, forestry and environment*
- [METBOTS](#) - *Metabolomic robots with self-learning artificial intelligence for precision agriculture*

Intellectual propriety rights:

- [SprayImage-Mobile©](#) – *SmartPhone application to improve crop spray parameters*
- [MAChoice©](#) – *Machinery costs and breakeven point.*
- [ACFertS©](#) - *image-based system to assess agricultural fertilizer spreader pattern*

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