

MED – MEDITERRANEAN INSTITUTE FOR AGRICULTURE, ENVIRONMENT AND DEVELOPMENT

BACHELOR'S DEGREE RESEARCH SCHOLARSHIP -1 VACANCY

1 of March of 2023

A call for tenders is open for 1 Bachelor's Degree Research Scholarship within the scope of the project “SUMO – Sustainability of the Montado” (“PRR-C05-i03- I000066-LA 6.2”), financed by national funds through the action “i03 - Research and innovation schedule for the sustainability of agriculture, food and agribusiness”, measure “C5. Business Capitalization and Innovation”, through the “PRR - Recovery and Resilience Plan” Program, under the following conditions:

Scientific Area: Agricultural Sciences

Admission requirements:

Hold a bachelor's degree in the scientific area of Agricultural Sciences and assure the execution of the agreed work plan.

Preferential factors: (i) scientific publications (author/co-author) in journals with international circulation in the scientific area of Agricultural Sciences; and (ii) experience as participant in projects of “Precision Agriculture”.

As set forth FCT Research Scholarship Regulation No. 950/2019 of December 16, 2019, article 3 and 6, candidates for “BI” (Research Grants) must comply as a rule condition for the award of the scholarship, the effective inclusion in study cycles leading to the attribution of academic degrees or in courses not leading to an academic degree. Courses that do not confer an academic degree correspond to the courses provided for in subparagraph e) of paragraph 3 of article 4 of Decree-Law No. 74/2006 of 24 March and must be developed in a higher education institution in association with at least one R&D unit, including a course plan in one or several research areas of the unit.

SUMMARY OF WORK PLAN:

I- APRIL-AUGUST/2023: Initial (pre-grazing) assessments of soil, vegetation and animals (sheep)

0-Verification of the logistical conditions in the 4ha “Eco-SPAA” experimental plot (animals, fences, grazing parks, drinking fountains, feeders, etc.), at Mitra Experimental Farm - April /2023;

1-Survey of variability in the experimental plot;

- Georeferenced survey of apparent electrical conductivity and soil moisture - April 2023;

- Exhaustive soil sampling (0-30cm) in 48 georeferenced sampling points (12 in each park) to determine texture (clay, silt and sand), pH, MO, N, P, K, Mg, Mn, CTC-April 2023;
- Survey of pasture floristic composition at 48 georeferenced sampling points (12 in each park) - April-May/2023;
- Analysis of field data and decision making on possible improvements (pH correction, fertilization,...) – June-August/2023;

II- SEPTEMBER/2023-MARCH/2024: Establishment and monitoring of the grazing systems under study (continuous, PC vs deferred, PD) in the different parks of the experimental plot (P1 to P4, each with 1 ha)

- Expected stocking rates: P1- PC (1 Livestock Unit, LU/ha); P2- PD (2 LU/ha) with 2 subareas (0.5 ha each); P3-PD (2 LU/ha) with 2 subareas (0.5 ha each); P4-PC (1 LU/ha);
- acquisition of 2 electric fences (due to the division of subareas)
 - purchase of 2 drinking fountains.

1-Regular monitoring of grazing animals and logistical support;

2-Regular soil and pasture assessment:

- Evaluation of pasture height at the 48 sampling points of the parks in PD (P2 and P3);
- Measurements with remote optical sensors (Sentinel-2), complemented with measurements with proximal sensors (productivity and pasture quality);
- Pasture floristic composition analysis of the pasture simultaneously with NIR to establish correlations throughout the phenological cycle of the species present in the 4 treatments;
- Measurement of cone index (CI) and soil moisture at the 48 sampling points;
- Registration of dates (entry /exit of animals in each plot in PD);

3-Analysis of animal behaviour taking into account the 48 points sampled and the respective food value throughout the year.

In addition to the tasks inherent to the line of research on grazing systems in sheep, the researcher must provide support to the remaining lines of the project whenever requested by the project coordination team.

Applicable legislation and regulations: The granting of the Research Scholarship will be carried out upon the signing of a contract between the University of Évora and the scholarship holder, as set in the template, pursuant to the Research Scholarship Statute (Law No. 40/2004 of August 18 and Decree-Law No. 123/2019 of August 28) and in accordance with the legislation and Regulation of Research Grants of the Foundation for Science and Technology, IP in force, regulation nº950/2019 of December 16, 2019: <https://files.dre.pt/2s/2019/12/241000000/0009100105.pdf> and other applicable rules.

Place of work: The work will be developed at MED (Mediterranean Institute for Agriculture, Environment and Development) of the University of Évora, under the scientific guidance of the Prof. João M. P. R. Serrano and Prof. Alfredo M. F. Pereira.

Duration of the scholarship(s): The scholarship will have a duration of 12 months, starting on April of 2023.

Amount of monthly maintenance allowance: The amount of the scholarship corresponds to €930.98, according to the table of scholarships awarded directly by FCT, I.P. in Portugal (https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM_2023.pdf) payments being made monthly, by check or bank transfer.

Selection methods: The selection methods to be used will be the following:

-Curriculum evaluation:

(i) Scientific publications (60%); (ii) Experience in AP projects (40%).

After the curriculum evaluation, for tie-breaking purposes or to clarify doubts, the jury may decide to conduct interviews with the candidates involved.

In these case, the evaluation elements will be as follows:

- curriculum evaluation (60%)
- interview (40%).

Composition of the Selection Jury:

President: Professor João Manuel Pereira Ramalho Serrano

1º effective member – Professor Alfredo Manuel Franco Pereira

2º effective member – Professor José Rafael Marques da Silva

1º alternative member – Professor Elvira Sales Batista

2º alternative member – Professor Maria Isabel Ferraz de Oliveira

Advertising/notification of results: The final results of the evaluation will be publicized, through an ordered list (by final grade obtained) posted in a visible and public place (Rural Engineering Department, Évora University, Mitra Farm), being the candidate approved notified through of email.

To ensure the right of prior hearing of interested parties, the Final Classification project will be announced by email to all interested parties.

After communicating the provisional list of the results of the evaluation, candidates have a period of 10 working days to express their opinion in a preliminary hearing of interested parties.

Application deadline and submission of applications: The tender is open from 1 to 15 March of 2023 and the results of the selection will be published by 20 March of 2023.

Applications must be formalized, obligatorily, by sending an application letter with the following documents: Curriculum Vitae; certificate of qualifications; other supporting documents considered relevant.

For the purposes of application, the evidence may be replaced by a declaration of honour signed by the candidate, but the failure to demonstrate that evidence, in the contracting phase, possession of the required degree on the deadline for application or the non-presentation of proof of enrolment in the study cycle or non-degree course, for scholarships with this component, imply the cancellation of the candidate's application.

Academic degrees obtained in foreign countries require registration by a Portuguese Institution in accordance with Decree-Law no. 66/2018, of August 16 and Ordinance No. 33/2019, of January 25th.

The presentation of the certificate is mandatory for the signing of the contract. More information can be obtained at: <https://www.dges.gov.pt/pt/pagina/recognition?plid=374>

Applications must be sent by email to:

Professor João Manuel Pereira Ramalho Serrano
Departamento de Engenharia Rural da Universidade de Évora
e-mail: jmrs@uevora.pt



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Este projeto recebeu financiamento da União Europeia, através do
Mecanismo de Recuperação e Resiliência.