DOCTORAL PROGRAMME
IN
AGRICULTURAL AND ENVIRONMENTAL SCIENCES
Coordinator prof. Giacomo Pietramellara
XXXVII cycle – academic year 2021/2022

TECHNOLOGICAL AREA
ADMINISTRATIVE OFFICE
Department of Agri-food, Environment and Forestry Sciences and Technologies

POSITIONS AVAILABLE: 7
Positions with Scholarship: 6
Position without Scholarship: 1

SCHOLARSHIPS: 6
University of Florence

STUDY/RESEARCH PERIODS ABROAD
Mandatory only for positions with scholarship

MANDATORY PERIOD REQUIRED
3 months

DOCUMENTS REQUIRED FOR THE ADMISSION
(copy of the Identification Document
Self-declaration for qualifications (bachelor’s/Master’s/combined cycle degree) obtained in Italy with a list of all exams taken and their mark, title of the thesis and graduation mark
Foreign qualification required to access with a list of all exams taken and their mark, title of the thesis and graduation mark.

*Mandatory only for positions with scholarship*

The same documentation except for the final mark must be submitted by those who will graduate by 31/10/2021

DOCUMENTS REQUIRED FOR THE EVALUATION
MANDATORY
Curriculum vitae (european format)
Research Project

OPTIONAL
Publications
Any other scientific qualification document

REFERENCE LETTERS
A section is provided in the online application to specify the e-mail addresses of two professors/researchers willing to provide information about candidates training path and activities performed within a scientific field related to the Ph.D course.

RESEARCH PROJECT
Research project has to be prepared in Italian or English in no more than 12.000 characters including spacing, and structured in introduction, state of the art, objectives, materials and methods with temporal distribution of the phases, expected results. For XXXIV cycle, several priorities of interest have been selected. The project must relate, and should make specific reference, to
one of them listed in the section below: “Thematics”.
The research project should be attached to the application form and it should be made as the project pattern uploaded into the following departmental webpage (section “dottorato di ricerca”): www.dottoratoscienzeagrarieambientali.unifi.it. The research project should be focused on a possible research activity, which the applicant will be going to execute during the three-year doctoral program.

**MODALITY OF EVALUATION**

- Evaluation of curriculum vitae, research project, publications and other qualification documents
- Interview

As detailed in the section below “Evaluation Marks”

**OTHER LANGUAGE FOR THE EXAMINATIONS**

English

**INTERVIEW MODE**

In-person

N.B. In the application form the candidate can ask to take the interview remotely.

**FURTHER INFORMATION**

The interview can be equally taken in Italian or in English language; if it is taken in Italian, English skills will be tested during interview.

**EVALUATION MARKS**

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<thead>
<tr>
<th>parameter</th>
<th>minimum score</th>
<th>maximum score</th>
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<tbody>
<tr>
<td>Curriculum vitae, scientific qualification documents,</td>
<td>10/120</td>
<td>15/120</td>
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<tr>
<td>Research Project redaction</td>
<td>30/120</td>
<td>40/120</td>
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Applicants who obtain a mark of at least 40/120 according to the minimum score for each parameter will be admitted to the interview

| Interview: discussion of the research project and any other qualification document | 40/120 | 65/120 |

Eligibility is achieved with a minimum score of 80/120

**THEMATICS**

Wood degradation mechanisms as a key factor in foliar symptoms development in Esca-complex diseases of grapevine;
Studying and designing urban soils to optimize their ecosystem services in "smart cities”;
Microalgae cultivated in wastewaters and their application as biostimulants in agriculture;
Study of microorganisms for the degradation of PLA (polylactic acid) blend bioplastics;
Curtobacterium flaccumfaciens pv. flaccumfaciens: an integrated multidisciplinary approach as a model for the control of neglected EU quarantine bacterial plant pathogens;
In-season assessment of crop yields: combining crop models and seasonal forecasts;
Role of multiple cropping in the conservation of soil fertility and in the reduction of greenhouse gas emissions
Heavy metal bioremoval and biorecovery using exopolysaccharide-producing cyanobacteria;
Assessment of ornamental tree species ability to remove atmospheric pollutants and mitigate climate change in urban environments.
Additional information on the course is available on the following web page:
www.dottoratoscienceagrarieambientali.unifi.it

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<th>EXAMINATION SCHEDULE</th>
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<tr>
<td><strong>DATE</strong></td>
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<td>INTERVIEW</td>
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The list of the candidates admitted to the interview and the final ranking will be published online at the following website page: [https://www.unifi.it/p12018.html](https://www.unifi.it/p12018.html)