



**"Annex 1" updated on 26<sup>th</sup> May 2020**

**(The updates and the corrections are highlighted in red colour)**

**(ANNEX 1)**

## CALL FOR PHD POSITIONS – 36<sup>th</sup> CYCLE PHD PROGRAMME IN AGRICULTURAL, FOREST AND FOOD SCIENCES

<b>PhD Programme Coordinator</b>	Prof. Eleonora BONIFACIO
<b>Department</b>	Agricultural, forest and food sciences
<b>PhD Programme Length</b>	3 years
<b>PhD website</b>	<a href="http://dott-safa.campusnet.unito.it">http://dott-safa.campusnet.unito.it</a>
<b>Course start date</b>	1 <sup>st</sup> October, 2020
<b>Departments involved in PhD programme</b>	Department of Agricultural, Forest and Food Sciences

<b>Positions offered<sup>1</sup> by the PhD Programme</b>	
n. <b>15</b> positions with scholarship, of which n. 2 reserved to candidates with international qualifications	of which: <ul style="list-style-type: none"><li>- 7 scholarships funded by the University of Torino</li><li>- 1 scholarship funded by the Department of Agricultural, Forest and Food Sciences</li><li>- <b>5 scholarships funded by the Department of Agricultural, Forest and Food Sciences</b></li><li>- <b>1 scholarship funded by Agroinnova</b></li><li>- <b>1 scholarship funded by Soremartec Italia S.r.l.</b></li></ul>
n. <b>3</b> positions without scholarship	
n. 1 position reserved to students selected within the project "ETN MSCA Ferticycle Marie Curie Training Network"	
n. 2 positions reserved to students selected within the CSC (China Scholarship Council)	

<sup>1</sup> All additional scholarships and apprenticeship contracts (Legislative Decree no. 81/2015 art.45), which may become available after the publication of this Call, will be announced on the University websites [Dottorati di Ricerca](#) and [PhD](#) until Call's deadline.



**CALL FOR NON-RESERVED (ORDINARY) POSITIONS**

**Admission procedure for non-reserved (ordinary) positions**

Assessment of qualifications, research project and interview

**Qualifications to be uploaded in the online application**

- Curriculum vitae et studiorum (CV)
- Publications (max. 2)
- Research project (max 1000 words, excluding references) written in English by the candidate choosing a title within those offered by the PhD Programme

**Assessment criteria (for non-reserved positions)**

**Maximum score 100 points**

**Assessment of qualifications (final grade, publications and other qualifications)**

**Maximum score 18 points**

**Final grade of Laurea/ second cycle degree (or list of examinations taken during the Laurea Triennale and Laurea Magistrale/2<sup>nd</sup> cycle degree for candidates applying under condition)**

maximum score 14 points

110-110L/110 or average examination score 28.1-30/30: 14 points

From 107 to 109/110 or average examination score 27.1-28.0/30: 12 points

From 104 to 106/110 or average examination score 26.1-27.0/30: 10 points

From 100 to 103/110 or average examination score 25.1-26.0/30: 8 points

=< a 99/110 or average examination score <25.0/30: 7 points



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<b>Publications</b> Max 1 point for each publication (max 2 published papers will be evaluated)	maximum score 2 points
<b>Other qualifications:</b> <ul style="list-style-type: none"><li>- Second/additional master degree: 1 point</li><li>- Any other pertinent specialising course related to the topics of the PhD course: 0.5 point</li><li>- Qualified training experiences carried out abroad: 1 point</li><li>- Research scholarships: 1 point</li></ul> <i>Titles relating to professional skills, or not pertinent with the research activity, will not be evaluated</i>	Maximum score 2 points
<b>Minimum threshold for admission to the next examination</b>	<b>8 points</b>
<b>Research project</b>	<b>Maximum score 20 points</b>
<b>Minimum threshold for admission to the interview</b>	<b>10 points</b>
<b>Interview</b>	<b>Maximum score 62 points</b>
<b>Minimum threshold for passing the interview</b>	<b>40 points</b>



**Further information on assessment for ordinary positions:**

The evaluation of the **research project** (max 1000 words, references excluded) will take into account the scientific interest of the project, its feasibility, the relevance of its aim and the impact of the outcomes. The project must be written in English, selecting a title within those proposed by the PhD programme. The project should consider:

- a) the state of the art in the specific field;
- b) the aim of the project;
- c) the research plan over the three years.

The **interview** will mainly cover the presentation and defence of the research project, and the topic of the master thesis.

Knowledge of the English language is compulsory and will be assessed during the interview.

**CALL FOR POSITIONS RESERVED TO APPLICANTS WITH INTERNATIONAL QUALIFICATIONS**

**Admission procedure for positions reserved to applicants with international qualifications**

Assessment of qualifications, research project and interview

**Qualifications to be uploaded in the online application**

- Curriculum vitae et studiorum (CV)
- Master Thesis Abstract
- Publications (max. 2)
- Research Project (max 2000 words, excluding references) written in English by the candidate choosing a title within those offered by the PhD Programme

<b>Assessment criteria for positions reserved to applicants with international qualifications</b>	<b>Maximum score 100 points</b>
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<b>Assessment of qualifications (cv, thesis abstract and publications)</b>	<b>Maximum score 35 points</b>
<b>Curriculum vitae et studiorum</b>	Maximum score 20 points
<b>Abstract of the Master thesis</b>	Maximum score 5 points
<b>Publications</b> Max 2,5 points for each publication (max 2 published papers will be evaluated)	Maximum score 10 points
<b><i>Minimum threshold for admission to the next examination</i></b>	<b><i>20 points</i></b>
<b>Research project</b>	<b>Maximum score 30 points</b>
<b><i>Minimum threshold for admission to the interview</i></b>	<b><i>18 points</i></b>
<b>Interview</b>	<b>Maximum score 35 points</b>
<b><i>Minimum interview threshold for passing the interview</i></b>	<b><i>20 points</i></b>



**Further information on the assessment for reserved positions**

The **thesis abstract** (max 400 words) must focus on:

- 1) purpose of the thesis;
- 2) methodology used;
- 3) results obtained.

The evaluation of the **research project** (max 2000 words, references excluded) will take into account the scientific interest of the project, its feasibility, the relevance of its aim and the impact of the outcomes. The project must be written in English, selecting a title within those proposed by the PhD programme. The project should consider:

- a) the state of the art in the specific field;
- b) the aim of the project;
- c) the research plan over the three years.

The **interview** will mainly cover the presentation and defence of the research project.

Knowledge of the English language is compulsory and will be assessed during the interview. Courses are held in English.

Knowledge of the Italian language is not mandatory.

**Titoli progetti di ricerca**

**Dottorato di Ricerca in Scienze Agrarie, Forestali ed Alimentari**

**Titles of research projects**

**PhD Programme in Agricultural, Forest and Food Sciences**

1. Caratterizzazione e valutazioni economico-politiche del settore agricolo e forestale - Characterisation and economic-political evaluations of the agricultural and forestry sector (Filippo Brun)
2. Gestione sostenibile delle colture cerealicole e foraggere – Sustainable management of cereals and forage crops



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3. Validazione agronomica di tecniche per l'agricoltura di precisione – Agronomic Validation of precision farming techniques (A. Reyneri, [apprendistato](#))
4. *Strategie innovative per la coltivazione del riso in ambiente temperato. / New strategies in temperate rice cropping. (Dario Sacco) (titolo di ricerca abbinato a borsa finanziata dal Dipartimento di Scienze Agrarie, Forestali ed Alimentari / research project linked to the scholarship funded by Dipartimento di Scienze Agrarie, Forestali ed Alimentari)*
5. Ricerca ed innovazione in sistemi colturali orto-floricoli avanzati e tecnologici - Research and innovations in advanced and technological horticultural growing systems
6. Strategie per il miglioramento delle produzioni frutticole e viticole e per l'incremento della resilienza nei nuovi scenari ecologici - Strategies for improving fruit and grapevine production and for increasing resilience in new ecological scenarios
7. Marker fisiologici e molecolari della resilienza a stress idrici in piante coltivate - Searching for physiological and molecular markers of drought stress resilience in crop plants (Francesca Cardinale, Francesca Secchi)
8. Resilienza dei boschi e mitigazione di impatto a seguito di disturbi distruttivi - Forest resilience and impact mitigation after stand-replacing disturbances
9. *Impatto del cambiamento climatico sulle foreste del bacino del Mediterraneo: composizione specifica e dinamiche della copertura forestale a scala regionale - Climate change effect on Mediterranean basin forests: species composition and dynamics at the regional-scale (Matteo Garbarino) (research project linked to the scholarship funded by Dipartimento di Scienze Agrarie, Forestali ed Alimentari)*
10. Ricerca e sviluppo di prodotti legnosi innovativi e sostenibili - Research and development on innovative and sustainable wood-based products
11. Genomica strutturale e funzionale in specie ortive - Structural and Functional genomics in horticultural species
12. Scenari di scalabilità dei rilevamenti multi- e iper-spetttrali da remoto per la valutazione degli effetti del cambiamento climatico sulla componente vegetale del territorio - Scenarios of



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scalability of multi- and hyper-spectral remotely sensed data for evaluating climate change effects on vegetation (Enrico Corrado Borgogno Mondino)

13. Impianti automatizzati per la distribuzione dei fitofarmaci in vigneto – Automated systems for pesticide application in vineyards (Paolo Balsari)
14. Interazioni degli insetti con altri organismi (piante, artropodi, microrganismi e virus) -. Interactions between insects and other organisms (plants, arthropods, microorganisms and viruses). *(Elena Gonella) (titolo di ricerca abbinato a borsa finanziata dal Dipartimento di Scienze Agrarie, Forestali ed Alimentari / research project linked to the scholarship funded by Dipartimento di Scienze Agrarie, Forestali ed Alimentari)*
15. Rilevamento, analisi genetica, trasmissione per seme e materiale propagativo di batteri e funghi fitopatogeni emergenti, allo scopo di standardizzare metodi di diagnosi - Survey, genetic analyses, transmission through seed and vegetative material of emerging bacterial and fungal pathogens focusing on standardization of detection methods
16. Biogeochimica degli elementi nel sistema suolo-pianta dalla scala molecolare alla scala di campo - Biogeochemical cycling of elements in the soil-plant system from molecular to field scale
17. Il ciclo del fosforo in suoli di risaia bilanciando produttività e conservazione dell'ecosistema. / Phosphorus cycling in paddy soils: linking rice productivity to ecosystem preservation. *(Luisella Celi) (titolo di ricerca abbinato a borsa finanziata dal Dipartimento di Scienze Agrarie, Forestali ed Alimentari / research project linked to the scholarship funded by Dipartimento di Scienze Agrarie, Forestali ed Alimentari)*
18. Processi pedogenetici e funzionalità del suolo in ambiente agrario o forestale - Pedogenic processes and soil functions in forest or agricultural ecosystems (Michele Freppaz)
19. Innovazioni nella tecnica enologica per il miglioramento della composizione fenolica e aromatica dei vini - Innovation in oenology to improve the phenolic and aromatic composition of wines (Susana Rio Segade)
20. Caratterizzazione compositiva di matrici grasse: uno strumento per la definizione della qualità





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e autenticità degli alimenti - Food lipids characterization: a tool for food quality assurance and authenticity (Vladimiro Cardenia) *(titolo di ricerca abbinato a borsa finanziata dal Soremartec Italia S.r.l. / research project linked to the scholarship funded by Soremartec Italia S.r.l.)*

21. Tecniche omic nello studio del comportamento di patogeni di origine alimentare - Application of omics to study the behavior of foodborne pathogens (Kalliopi Rantsiou) *(titolo di ricerca abbinato a borsa finanziata dal Dipartimento di Scienze Agrarie, Forestali ed Alimentari / research project linked to the scholarship funded by Dipartimento di Scienze Agrarie, Forestali ed Alimentari)*
22. Analisi dei fattori che influenzano la qualità dei prodotti di origine animale – Factors affecting the quality of animal products (Alberto Brugiapaglia)
23. Geni espressi nella mammella di dromedari appartenenti a diversi ecotipi - Genes expressed in the udder of dromedary camels belonging to different ecotypes (A. Pauciuolo)
24. Caratterizzazione di praterie permanenti e individuazione e sperimentazione di materiali vegetali autoctoni da impiegare nella rivegetazione di aree degradate. / Characterization of permanent grasslands, and identification and test of autochthonous plant material for the restoration of deteriorated lands. (Michele Lonati) *(titolo di ricerca abbinato a borsa finanziata dal Dipartimento di Scienze Agrarie, Forestali ed Alimentari / research project linked to the scholarship funded by Dipartimento di Scienze Agrarie, Forestali ed Alimentari)*
25. Biologia, epidemiologia e diagnosi di patogeni emergenti di colture frutticole, con particolare riguardo all'Italia nord-occidentale. / Biology, epidemiology and diagnosis of emerging fungal pathogens of fruit crops in northwestern Italy. (Maria Lodovica Gullino) *(titolo di ricerca abbinato a borsa finanziata da Agroinnova / research project linked to the scholarship funded by Agroinnova)*