

Notice 01/2025 of the Graduate Program in Plant Biology at the Institute of Biology, UNICAMP

Through this notice, approved by the CPG-IB on 04/04/2025, the Graduate Program in Plant Biology (PPG-BV) at the Institute of Biology, UNICAMP, announces the criteria for the selection process for admission to the Master's and Doctoral programs in the second semester of 2025.

1. Selection Process Schedule

1.1 Applications will be accepted exclusively online **from 17/04/2025** (d/m/y) to **16/05/2025**. The exam will be held on **09/06/2025**, and the selection process will take place on a platform to be communicated electronically (via email) to candidates with approved applications.

1.2 Complete schedule:

- **17/04/2025 to 16/05/2025:** Candidate applications for the selection process for admission to PPG-BV.
- **23/05/2025:** Final date for publication of the list of approved applications on the website <https://posbv.ib.unicamp.br/>
- **23/05/2025:** Virtual verification committee for candidates opting for ethnic-racial quotas (summons and information sent directly by DEDH-UNICAMP).
- **26/05/2025:** Virtual verification committee for candidates opting for ethnic-racial quotas (summons and information sent directly by DEDH-UNICAMP).
- **27/05/2025:** Appeals verification committee.
- **09/06/2025:** 8:00 AM to 12:00 PM (Brasília, BR)- Knowledge and English proficiency test.
- **25/06/2025:** Announcement of the list of approved candidates on the website <https://posbv.ib.unicamp.br/>
- **01/07 to 02/07/2025:** Deadline for submitting appeals (2 business days).
- **04/07/2025:** Publication of the final results.
- **14/07 to 16/07/2025:** Enrollment of incoming students for the second semester of 2025, according to the schedule of DAC - Academic Directorate of UNICAMP.
- **04/08/2025:** Supplementary enrollment for students admitted in the second semester of 2025, according to the schedule of DAC - Academic Directorate of UNICAMP.

2. Available Positions

- The selection process described in this notice covers the 20 positions offered by the faculty members accredited in the program, as previously announced on the Program's website.
- The PPG-BV adopts an affirmative action policy for ethnic-racial quotas, in the form of a bonus directed to candidates who self-declare as Black [Black or Brown], of Brazilian nationality, and validated by the Ethnic-Racial Quotas Verification Service of UNICAMP.

These candidates will be referred to as "opt-in candidates" and must submit the self-declaration as per Annex I and indicate their quota option in the application form.

- The validation of the self-declaration submitted by candidates opting for ethnic-racial quotas will take place after an interview conducted by the **Verification Committee on 26/05/2025**. The affirmative action policy adopted by the Graduate Program in Plant Biology is contingent on approval in this evaluation, substantiated in a Verification Term and as provided for in Resolution GR-074/2020, which establishes the Verification Committee and the complementary hetero-identification procedure for self-declared Black [Black and Brown] candidates selected under the ethnic-racial quota system for reserved positions for Black students at UNICAMP. To compete for quota program positions, self-declared Black [Black or Brown] candidates must expressly consent to the recording of images and audio related to the verification process, as stated in the Declaration (according to the model provided in Annex I).
- The interview with the candidate may be recorded in audio and video for archiving purposes and to be made available to the candidate upon request to the Graduate Program in Plant Biology at the Institute of Biology, UNICAMP, via email at coordbv@unicamp.br, and for use in analyzing any appeals submitted by the candidate. This documentation will be stored for six months from the date of the last enrollment call.
- Candidates whose self-declarations are not validated by the Verification Committee will have their applications maintained in the selection process but will be considered non-opt-in candidates.

Note: Supporting documents (Verification Statement) issued by Brazilian higher education institutions will not be accepted, except if issued by UNICAMP. Candidates who self-declare as Black or Brown must undergo the complementary hetero-identification procedure as established in Resolution GR-074/2020.

3. Application Process

3.1 To be eligible for application, candidates must hold an undergraduate degree or provide a declaration stating that they will complete their undergraduate studies by the enrollment date in a field related to this Program or similar areas. Applications from candidates who obtained their degrees from Brazilian institutions not recognized by the Ministry of Education (MEC) will not be accepted.

3.2 Candidates with undergraduate degrees obtained from foreign institutions must request validation from the Graduate Program in Plant Biology Committee (CPPG-BV) by emailing coordbv@unicamp.br before the application deadline.

3.3 Candidates must:

- Register on the SIGA platform (UNICAMP's Academic Management System).

- Complete the registration process at <http://www.ib.unicamp.br/pos/selecao> and upload the required documents in the corresponding fields as specified under "Application Documents."

3.4 Required Documents for Application:

- A fully completed **Application Form on the SIGA platform** (UNICAMP's Academic Management System). The Application Form is considered complete only when all mandatory fields are filled out, including uploading a passport-sized photo (3x4 cm) with a light-colored background.
- Registration on the <http://www.ib.unicamp.br/pos/selecao> webpage, including completing the required fields and submitting the following documents in PDF format:
 - Advisor Acceptance Letter from an accredited supervisor with an open position in the Program, explicitly confirming acceptance of the candidate as an advisee in case of selection (free format) (mandatory document).
 - Affirmative Action Quota Declaration (single PDF file). This document is mandatory only for candidates applying through the affirmative action quotas, following the model in Annex I.
 - Validation Document, certifying the candidate's self-declared racial/ethnic identity (Black or Brown). This document must be attached if the candidate has it; otherwise, they must undergo an interview with UNICAMP's Verification Committee on 26/05/2025.
 - Updated Curriculum Vitae in the Lattes format, highlighting professional experience, internships, teaching assistantships, participation in conferences with abstract presentations, and scientific production (articles, book chapters, etc.).
 - Supporting Documents for the Curriculum Vitae.
 - For candidates with undergraduate degrees from Brazilian institutions: a copy of the undergraduate diploma (front and back) or a declaration confirming they will complete their degree before enrollment. The document must certify that the course is recognized by the State Education Council or MEC—except for UNICAMP students who have already submitted this document to the Academic Directorate (DAC) when completing a previous degree at UNICAMP.
 - For candidates with undergraduate degrees from foreign institutions: a copy of the undergraduate diploma (front and back) or a declaration confirming they will complete their degree before enrollment. The document must be validated by the CPPG-BV. Candidates must contact CPPG-BV via email (coordbv@unicamp.br) before the application deadline for diploma approval.
 - Complete Undergraduate Academic Transcript.
 - Updated Master's Academic Transcript, if the candidate has completed or is currently pursuing a Master's degree.

Important: NO documents will be accepted via any method other than the intranet submission. Additionally, documents will NOT be accepted if resubmitted or sent after the deadline specified in this notice!

Note: Supporting documents (Inquiry Form) issued by Brazilian higher education institutions will not be accepted, except if issued by Unicamp, and candidates who self-declare as black [black or

brown] must undergo the complementary hetero-identification procedure provided for in Resolution GR-074/2020.

4. Examinations

4.1 The Graduate Program in Plant Biology Committee (CPPG-BV) will oversee the selection process, which will consist of:

a. Written Examination on Knowledge and English Proficiency:

- The knowledge and English proficiency exam will be conducted remotely via Google Meet, where candidates' presence will be monitored throughout the exam duration. This stage is eliminatory, requiring a minimum passing score of 5.0.
- The knowledge exam will also serve as an English proficiency assessment. The exam will consist of interpreting a scientific article related to the research areas of the PPG-BV: Plant anatomy, Plant ecology, Plant physiology, Plant genetics and evolution, Systematics and evolution of terrestrial plants.
- On the exam day, candidates will receive five different exams, each containing a scientific article in English. Each candidate must select one exam to read the corresponding article and answer the required questions.
- Candidates must choose an exam that corresponds to the research area of their prospective advisor.
- The exam duration is four (4) hours.
- Candidates may answer the exam in Portuguese, English, or Spanish.
- The only allowed reference material is a physical English-Portuguese or English-English dictionary.
- The exam will assess: Theoretical knowledge, Ability to analyze scientific results, and Understanding of experimental scientific approaches.
- Each scientific article will be accompanied by six (6) questions.
- PhD candidates must answer all six (6) questions.
- Master's candidates must answer the first four (4) questions.
- The CPPG-BV will grade the exam on a scale from 0 to 10, with one decimal place of precision.

The theoretical content covered in the exam articles is listed in Section 11 of this notice.

Important Notice: Candidates with an approved scholarship from a funding agency by **June 6, 2024 (the business day before the exam)** will be exempt from the knowledge and English proficiency exam. The CPPG-BV must be notified by this date, and proof of the approved scholarship must be sent by the specified deadline via email to coordbv@unicamp.br.

b. Curriculum Analysis:

- The CPPG-BV will evaluate the candidate's academic and professional activities based on the submitted Curriculum Vitae, verified through supporting documents.
- Scores for this component will be assigned on a 0 to 10 scale, with one decimal place of precision.

4.2 Curriculum Scoring for Master's Program

Item	Score	Maximum Points
Undergraduate Academic Record	With failed courses = 0.5 Without failed courses = 1.0	1.0
Scientific Research Internship (Undergraduate Research) *	With scholarship = 3.0 Without scholarship = 1.5	3.0
Scientific Production	First author in an article published in an indexed journal (Web of Science, SciELO, or Scopus). One article = 2.0 Co-author in an article published in an indexed journal (Web of Science or SciELO). Each article = 1.5 Author of a book chapter. Each chapter = 0.5	2.0
Conference Presentations (Abstracts)	Each event = 1.0	2.0
Teaching Assistantship or Didactic Activities	Each semester of assistantship or teaching activity = 0.5	2.0

*The **Undergraduate Research** must be officially affiliated with a **funding agency** or **research support foundation**.

4.3 Curriculum Scoring for Doctoral Program

Item	Score	Maximum Points
Graduate Academic Record	With failed courses = 0.5 Without failed courses = 1.0	1.0
Undergraduate Research (Scientific Initiation)*	Completed undergraduate research = 1.0	1.0
Master's Degree	Holds a master's degree = 1.0	1.0
Scientific Production	First author in an article published in an indexed journal (Web of Science, Scopus, or SciELO). Each article = 2.0 Co-author in an article published in an indexed journal (Web of Science, Scopus, or SciELO). Each article = 1.5 Author of a book chapter. Each chapter = 1.0	3.0
Conference Presentations (Abstracts)	Each event = 0.5	2.0
Teaching Assistantship or Didactic Activities	Each semester of assistantship or teaching activity = 1.0	2.0

*The **Undergraduate Research** must be officially affiliated with a **funding agency** or **research support foundation**.

5. Weights and Final Scores

5.1 Final Score Calculation

The final score will be determined by the average of the written knowledge exam and the curriculum analysis, as specified below:

Written knowledge exam (weight = 1)

Curriculum analysis (weight = 1)

For candidates with a validated self-declaration issued by the Verification Committee, an additional 2.0 points will be added to the final score. The published results will include this bonus.

The minimum final score for approval is 7.0.

5.2 Candidates Exempt from the Written Knowledge Exam

For candidates exempt from the written knowledge exam, the written exam score will be set to 7.0 for the final score calculation.

6. Announcement of Results

- The results will be published on the PPG-BV UNICAMP website (<https://posbv.ib.unicamp.br/>) on **June 25, 2025**.
- The written exam score, curriculum analysis score, and final score of all candidates will be published, including any applicable bonus.

7. Appeals Process

- The appeal period is from **July 1 to July 2, 2025**.
- To file an appeal, candidates must submit a formal request via email to coordbv@unicamp.br, including a justification for the appeal.
- Appeal results will be published on the PPG-BV UNICAMP website on **July 4, 2025**.

8. Additional Information

- The selection process, evaluation of exams, and publication of results are under the responsibility of the PPG-BV Selection Committee (CPPG-BV).
- By submitting an application, candidates agree to the terms of this call for applications.
- Any omitted cases will be analyzed and resolved by the PPG-BV Selection Committee.

9. Scholarships

Admission to the Master's or Doctoral program does not automatically guarantee a scholarship.

The distribution of CAPES and CNPq scholarships (allocated to the program) will be based on the final ranking in the selection process, determined by the final score.

In the event of a tie, priority will be given in the following order: Candidates with a validated self-declaration, Candidates with a strong academic record, Candidates with scientific publications, considering: Number of articles, Authorship position, Impact factor of the journals listed in the Lattes CV.

The final ranking for scholarships will be published before the enrollment period.

10. Enrollment Instructions

Approved candidates must submit the required documents to UNICAMP's Academic Directorate (DAC) within the deadlines set in the DAC Academic Calendar.

11. Theoretical Content Covered in the Knowledge Exam

Area 1: Plant Anatomy

1. Plant cell: structure and function.
2. Meristems (apical and lateral).
3. Tissues: general concepts and cell types, covering tissues (epidermis and periderm), ground tissues (parenchyma, collenchyma, sclerenchyma), and vascular tissues (xylem and phloem).
4. Secretory cells and tissues.
5. Root: primary and secondary structure; variations in secondary growth.
6. Stem: primary and secondary structure; variations in secondary growth.
7. Leaf: structure and environmental adaptations.
8. Flower: structure and reproductive cycle.
9. Fruit: structure and development.
10. Seed: structure and development.

Suggested bibliography: Appezzato-Da-Gloria B, Carmello-Guerreiro SM. 2012. Anatomia Vegetal. 3rd revised and expanded edition. Viçosa: Editora UFV.

Area 2: Evolution and Systematics of Land Plants

1. Methods and principles of biological systematics.
2. Historical classification systems for angiosperms.
3. Evolution of Viridiplantae: phylogenetic relationships, main clades, and synapomorphies.
4. Adaptation to the terrestrial environment.
5. Evolution of vascular plants: phylogenetic relationships, main clades, and synapomorphies.
6. Evolution of seed plants: phylogenetic relationships, main clades, and synapomorphies.
7. Evolution of angiosperms: phylogenetic relationships, main clades, and synapomorphies.
8. Principles of nomenclature.
9. Procedures for specimen preparation and identification.
10. APG IV System.

Suggested bibliography: Judd WS, Campbell CS, Kellogg EA, Stevens PF, Donoghue MJ. 2015. Plant Systematics: A Phylogenetic Approach. 4th Ed. Sinauer Associates Inc.

Area 3: Plant Ecology

1. The physical environment and terrestrial biomes.
2. Nutrient availability and cycling in ecosystems.
3. Ecology of individuals: survival and reproductive strategies.
4. Population ecology: structure, spatial patterns, and dynamics.
5. Plant interactions and their ecological significance.
6. Structure and dynamics of plant communities.
7. Biogeography, distribution patterns, and diversity.
8. Ecological pressures and natural selection.
9. Pollination and seed dispersal.
10. Primary production and its determinants.

Suggested bibliography: Cain ML, Bowman WD, Hacker SD. 2011. Ecology. Porto Alegre: Artmed.

Area 4: Plant Physiology

1. Water relations.
2. Photosynthesis.
3. Respiration.
4. Mineral nutrition and nutrient assimilation.
5. Phloem transport.
6. Tropisms and nastic movements.
7. Auxin, gibberellins, cytokinins, ethylene, and other growth substances.
8. Germination.
9. Flowering and fruit development.
10. Abscission and plant senescence.

Suggested bibliography: Taiz L, Zeiger E, Møller IM, Murphy A. 2013. Plant Physiology and Development. 5th edition. Porto Alegre: Artmed.

Area 5: Plant Genetics and Evolution

- Mendelian laws and genetic linkage.
- Genetic structure in self-pollinating and cross-pollinating populations.
- Mating systems and genetic variability.
- Molecular markers used in plant evolution and genetics.
- Detection and measurement of genetic variability.
- Genetics and polyploidy in plants.
- Phylogeny.
- Population genetics.
- Genotype × phenotype interaction.
- Quantitative and qualitative variation.

Suggested bibliography: Griffiths AJF, Wessler SR, Carroll SB, Doebley J. 2016. Introduction to Genetics. 11th Edition. Rio de Janeiro: Editora Guanabara Koogan.

ANNEX I – ETHNIC-RACIAL QUOTAS DECLARATION

D E C L A R A T I O N

I, _____, undersigned, of _____ nationality, born on ____/____/____, in the municipality of _____, State of _____, son/daughter of _____ and _____, marital status _____, residing at _____, ZIP code _____, holder of identity document (RG) No. _____, issued on ____/____/____, hereby declare, under penalty of law, that I am [Black or Brown] and acknowledge that, in case of ideological falsehood, I will be subject to the sanctions prescribed in the Penal Code and other applicable legal provisions.

I also declare that I consent to the recording of images and audio related to the verification process.

_____, ____ of _____, _____

Candidate's Signature

*** Article 299 of the Brazilian Penal Code (Decree-Law No. 2,848, of December 7, 1940) – Ideological Falsehood**

Art. 299: To omit, in a public or private document, a statement that should be included, or to insert a false or different statement from what should have been written, with the intent to harm a right, create an obligation, or alter the truth about a legally relevant fact:

Penalty – imprisonment from **one to five years** and a **fine**, if the document is public; imprisonment from **one to three years** and a **fine**, if the document is private.