

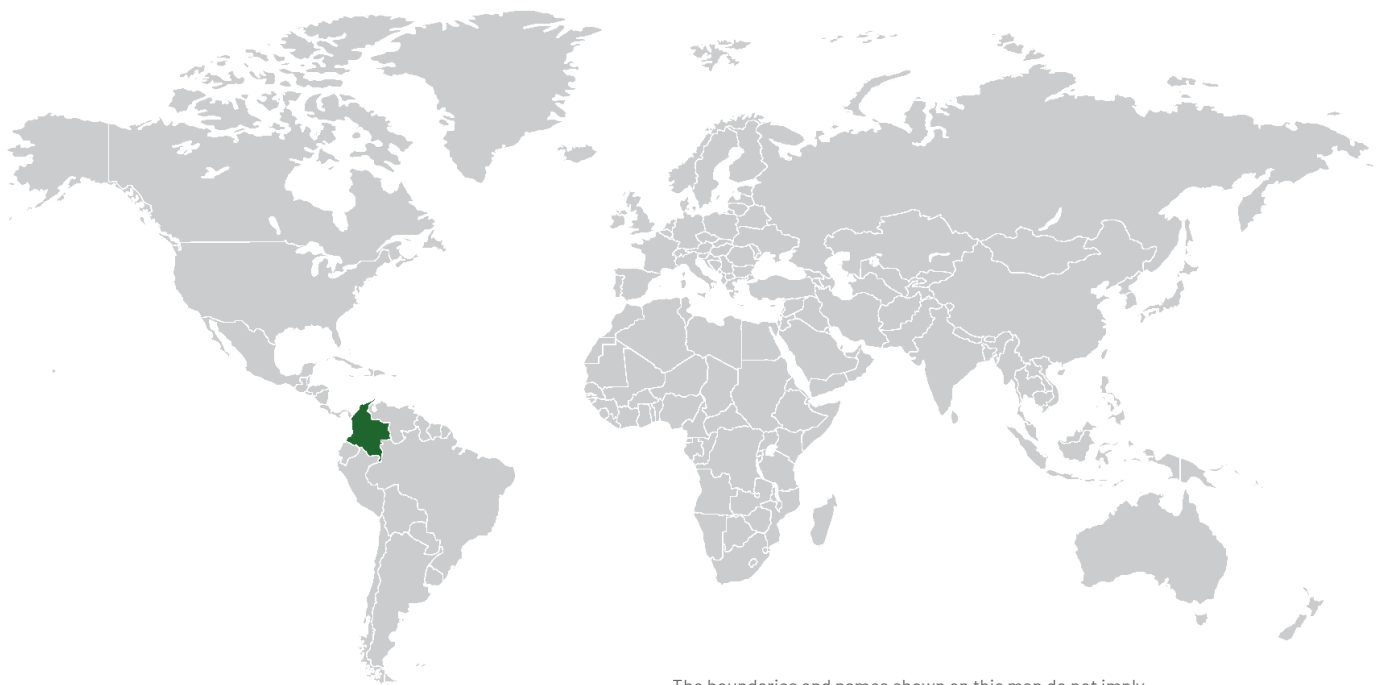
Goal

The laboratory ensures the availability of quality forage seeds for various Tropical Forages Program projects and shipments to partners. Its main goal is to analyze and identify the viable portion of seeds—those that are filled and capable of germination—allowing for successful planting and optimal outcomes in research and field activities.



Where we work

Alliance of Bioversity International and CIAT campus



The boundaries and names shown on this map do not imply official endorsement or acceptance by the Alliance of Bioversity International and CIAT.

How we do it

- **Vertical seed blower:** Separates a small volume of seeds based on their weight and response to airflow. Heavier seeds (viable filled seeds) settle at the bottom, while lighter ones (empty seeds) are discarded.
- **Cold storage room:** Ensures the proper preservation of seeds. It stores seeds from the three forage improvement programs: *Megathyrsus maximus*, *Urochloa humidicola*, Interspecific *Urochloa hybrids*.
- **Seed scarification:** This involves partially or completely removing the layers covering the seeds to facilitate water absorption and reduce the thickness of the seed coat. The process is carried out using concentrated sulfuric acid.
- **Germination tests:** These are experiments designed to optimize and accelerate the germination process of seeds by evaluating conditions that promote their efficient development.

The impact

Seeds from the three forage breeding programs stored in the cold room:



- **Megathyrsus maximus:** Approximately **1,300 genotypes**.
- **Urochloa humidicola:** Approximately **1,900 genotypes**.
- **Urochloa interspecific hybrids:** Approximately **2,100 genotypes**.



Hybrids offer higher nutritional quality, drought tolerance, pest and disease resistance, and better palatability.



Used for seed disinfection prior to germination testing, ensuring sterile and controlled conditions.

Innovations:



Laminar flow hood:

Used for seed disinfection prior to germination testing, ensuring sterile and controlled conditions.



Climate - controlled germination chamber:

A specially designed space that simulates ideal environmental conditions to accelerate seed germination.



Fume hood:

Used for seed disinfection processes intended for export and for scarification procedures, ensuring quality and safety standards.



Our partnerships



PAPALOTLA
SEMILLAS

Urochloa (syn. *Brachiaria*) hybrids, developed by CIAT in partnership with Grupo Papalotla, have transformed tropical livestock systems since 2001.

To know more about
the program, visit us:



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