

INTRODUCTION

Herbarium preparation is a meticulous process employed in botanical science to preserve plant specimens for scientific study, documentation, and reference. This vital practice ensures the longevity of plant samples while maintaining their morphological integrity, allowing researchers to delve into the diverse realms of plant taxonomy, ecology, distribution, and evolution.

MATERIALS

- ☐ Healthy plant specimens
- ☐ Absorbent paper
- ☐ Plant press
- ☐ Acid-free mounting paper or glue
- ☐ Herbarium sheets
- ☐ Transparent protective sheets
- ☐ Labels with relevant information
- ☐ Scissors
- ☐ Tweezers
- ☐ Pen or marker
- ☐ Database for recording information
- ☐ Herbarium cabinets (for storage)

Herbarium Specimen Preparation Protocol

1.Collection: Choose healthy and representative plant specimens from the field. Collect flowers, leaves, fruits, stems, and any other relevant parts. Make sure to record relevant information such as location, date, habitat, and collector's name.

2.Pressing: Place the collected plant parts between sheets of absorbent paper. Arrange them in a way that the parts are not overlapping. Place the sheets inside a plant press, making sure the specimens are centered. Add more layers of absorbent paper between specimens if needed. Tighten the press using straps or bolts.

3.Drying: Place the press in a dry and well-ventilated area, away from direct sunlight. Check regularly and replace the absorbent paper if it becomes damp. The specimens usually take about 1-2 weeks to dry completely.

Herbarium Specimen Preparation Protocol (cont)

4.Mounting: Once the specimens are dry, remove them from the press. Arrange the dried plant parts on a herbarium sheet. Include leaves, flowers, fruits, and stems if available. Use small pieces of acid-free mounting paper or glue to attach the plant parts to the sheet.

5.Labeling: Prepare labels with essential information: scientific name, location, date of collection, collector's name, habitat details, and any other relevant data. Attach these labels to the herbarium sheet near the mounted specimen.

6.Mounting Sheet: Attach the herbarium sheet to a standard size mounting paper using glue or specialized tape. The mounting paper provides support and protection for the herbarium sheet.

7.Covering: Place a protective transparent sheet over the mounted herbarium specimen to prevent physical damage, dust, and moisture. This helps preserve the specimen for long periods.

8.Cataloging: Record all relevant information about the specimen, including the scientific name, collection date, location, habitat, and collector's name, in a herbarium database. This helps in easy retrieval and reference.

9.Storage: Store the prepared herbarium specimens in a cool, dry, and pest-free environment. Ideally, a dedicated herbarium cabinet with controlled humidity and temperature should be used.

10.Maintenance: Regularly inspect the stored specimens for signs of deterioration, such as mold or insect damage. Make necessary repairs or replacements to ensure the long-term preservation of the collection.

📌 Data Collection: Record collection location, date, habitat, and collector's name.

📌 Observations: Note any changes in specimen appearance during drying and mounting.

📌 Results and Analysis: Analyze the quality of the prepared herbarium specimens.

📌 Conclusion: Successful preparation of herbarium specimens ensures their preservation and usability for future reference.



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Exploring e-Herbarium at virtual platform.

1. Access the Website: Open your web browser and go to the Indian Virtual Herbarium website.

2. Explore Navigation: Familiarize yourself with the website's layout. Look for navigation menus, search bars, and options.

3. Search Options: Locate the search bar, typically found on the homepage or in the navigation menu.

4. Keyword Search: Enter relevant keywords such as scientific name, family, country, collector, or any other criteria you have. Click the "- Search" button.

5. Browse Results: Browse through the search results. Thumbnails or brief information about the specimens should be displayed.

6. Filter Results (Optional): If available, use filters to refine your search. Filters could include family, location, collector, collection date, etc.

7. Select Specimen: Click on a specimen that interests you to view more detailed information.

8. Detailed View: You will be directed to a detailed page about the selected specimen. This may include images, collection details, taxonomy, and other relevant information.

9. Download or Save: If permitted, you might be able to download images or information about the specimen. Use the provided options to save the content if needed.

10. Back to Results: Use the back button or navigation to return to your search results.

11. New Search: If your initial search didn't yield desired results, modify your keywords, filters, or search criteria and try again.

12. Explore Additional Features: Check for any additional features on the website, such as interactive maps, data visualizations, or educational resources related to the specimens.

13. Feedback and Contact: If you encounter any issues or have feedback, look for contact information or a feedback option on the website to get in touch with the administrators.

Remember that the specific layout and features of the virtual herbarium website might evolve over time, so always refer to the website's current interface and instructions.



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