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Report
on
Field Visit for the Collection and Survey of the Wild Flora Diversity in Cultivated and Non-cultivated Lands of the Nearby Aren of Sohna

Date: 7/03/2024

Venue: Nearby area of KRMU Campus, Sohna, Gurugram

Event Type: Field visit

Mode of Activity: Offline

Target Group: Students of IV and VI semester, SOAS

Faculty organizer- Dr. Parita

Faculty Coordinators- Dr. Neha Sharma, Dr. Anjali Tomar, Dr. Deepak Loura

Organized by: School of Agricultural Sciences

Number of Participants: 24

School of Agricultural Sciences at K.R Mangalam University, located in Gurugram, conducted a field visit to the cultivated and non-cultivated lands of nearby area of the Sohna for the collection and survey of weed flora diversity in the region. The purpose of this visit was to study the diversity of weed species present in different types of land and to assess their impact on the surrounding ecosystem.

OBJECTIVES:

- Identify and document the various species of weeds in cultivated and non-cultivated areas
- To learn about the losses caused by weeds
- To know the management practices for the control of weeds

Brief Report:

The students visited various sites including cultivated fields, fallow lands, and natural habitats to Identify and document the presence of weed flora. Weed identification and collection are crucial aspects of agricultural and ecological management for the following reasons:

- Crop Protection: Identifying and collecting weeds allows differentiating between harmful species that compete with crops for resources. By effectively managing weed populations, farmers can protect their crops competition and potential yield losses.

- Ecological impact: Weeds can have significant ecological impacts on natural habitats by outcompeting native plant species, altering soil composition, and disrupting ecosystem dynamics. By accurately identifying and collecting weed species, researchers can better understand their ecological roles and develop strategies to mitigate their negative effects on biodiversity.

- Research and Monitoring: Weed identification and collection are essential for research purposes, such as studying weed biology, distribution patterns, and response to management practices. Collecting weed specimens allows for further analysis in laboratories, contributing to the advancement of weed science and management techniques.

- Weed Management: Effective weed management strategies rely on accurate identification of species to determine the most appropriate control methods. By collecting weed specimens, researchers can assess the effectiveness of different control measures and tailor management practices to specific weed populations.

- Regulatory Compliance: In some cases, weed identification and collection are necessary for regulatory purposes, such as monitoring the spread of invasive weed species or complying with quarantine regulations.

Outcome

In the cultivated lands, the students observed a variety of weed species: Cirsium arvense, Convolvulus arvensis, Conyza bonariensis, Cynodon dactylon, Cyperus rotundus, Parthenium hysterophorus and Sonchus asper. These weeds were found to compete with the cultivated crops for nutrients, water, and sunlight, potentially reducing the overall yield of the crops.

In the non-cultivated lands, a different set of weed species were identified, such Chenopodium album, Amaranthus spp., Stellaria spp., Taraxacum officinale, Cirsium arvense. These weeds provide a habitat and food sources for various organisms.

Conclusion:

Overall, the field visit provided valuable insights into the diversity and impact of weed flora in cultivated and non-cultivated lands. By implementing appropriate management practices, it is possible to strike a balance between controlling weeds in agricultural fields while preserving the ecological functions of non-cultivated lands. Students also prepared a consolidated herbarium of weeds.

Photographs:

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