

- At earlier, we conducted several survey of three district(Paschim Medinipure, Bankura, Purulia) and proper documentation and identification of the hemiparasitic plants growing in the area with help of local people

- We visited several villages and collected plant specimens from that area. Simultaneously, the interaction with local people helps us to recognize the patches of distribution, their medicinal uses and related data to collect from the spot area.

- In these survey note the important information i.e. Plant dominance, Habitat, Habit, Soil type, flowering time, mode of pollination, overall morphology, pollen and seed character etc. The collection trips during pre-monsoon (March-April), monsoon (June-August) and post-monsoon (October-November) will be under taken. 3-4 tours will be conducted in every year.

- Characterization of all the specimens will be done with the current circumscription by consultation of relevant literature.

- During field survey special emphasis will be given to their host specificity and host-parasitic interaction.

- The endemic taxa of that particular region will be also take account into account.

Plan of Work

- ❖ Thorough survey of literatures.
- ❖ Collection of specimens from study areas
- ❖ Identification of the specimens
- ❖ Morphological study and anatomical study of specimens with drawing and microscopic analysis with help of sophisticated microscope Leica DM1000
- ❖ Survey of relevant literatures continued
- ❖ The collection in most cases is done by villagers and tribal, then sun dried for a time period and store for long period under unsuitable period.
- ❖ Plant specimen dried and preserver for further study.
- ❖ Some parameter was checked to detect the effect of pollution on plant sample collected from different areas.
- ❖ Characterization of leaf powder was done first.
- ❖ Usually the dried powdery dust of medicinal plants is used for raw materials in production of drug.
- ❖ These plants metabolites are grouped into different chemicals nature like alkaloids, glycosides, corticosteroids, essential oils etc.
- ❖ Different extraction procedure was conducted to determine their solubility.
- ❖ Phytochemical screening was conducted to identify secondary metabolites
- ❖ Anti-microbial activity observed under different solvent extraction.
- ❖ Alpha-amylase inhibitory property detection
- ❖ Using specialized processes of extraction, isolation, fractionation and purification in the laboratory using techniques like HPLC, PSA, FTIR etc.