

TECHNICAL SERVICES FOR PLANT AND CRUDE DRUG IDENTIFICATION TO INDUSTRY (SME SECTOR)

CSIR-IIIM has an excellent plant sciences group which involved in the identification of plants and crude drugs. Following are facilities available with the plant sciences group:

- **JANAKI AMMAL HERBARIUM (RRLH):** The necessity of well preserved herbarium for any research Institute engaged in natural product chemistry, bio evaluation of natural products and herbal /botanical drug development cannot be over emphasized as it is used as an important tool for authentication. In addition, this facility is used for taxonomical studies leading to writing the flora of a region or other floristic and ecological notes on the Himalayan plants. This herbarium is recognized internationally. The acronym RRLH has been assigned to it which is registered in Index herbariorum at New York, U.S.A. The structure or organization of Janaki Ammal Herbarium is based on Bentham and Hooker's system of classification. International Code of Botanical Nomenclature incorporating the latest changes has been used in naming the plants. The preserved specimens in this herbarium include a large number of medicinal, aromatic and other economic plants from different parts of India and foreign countries, whereas the flora of North-West Himalayan region is very well represented. The herbarium at present houses more than 23,500 specimens representing 3,354 species, 1,175 genera and 218 families of Angiosperms, Gymnosperms and Pteridophytes. Besides technical details, habit, habitat, flowering and fruiting time of every specimen has been recorded in this herbarium for making it a ready reference and for use by the herbal drug industry for authentication of plant material.

- **CRUDE DRUG REPOSITORY (CDR):** The quality control for herbal drugs assumes great importance and it must start with the procurement of authenticated raw material. The first and foremost requirement is the botanical/herbal drugs of standard quality. Correct identification of botanical drugs would need reference standards. Therefore, a National Repository of such Botanical Drugs of Indian Systems of Medicine with an excellent herbarium having authentic voucher specimens is very important. IIIM, Jammu is having a well equipped herbarium with a major share of medicinal and aromatic plants, a herbal garden and a library with vast collection of literature on medicinal & aromatic plants and is actively engaged in research programme on herbal drug designing and development. In addition to all these facilities, a well stocked herbal drug repository is in place. Presently in this repository, more than 4,000 crude drug samples of authenticated parts of the plants, used as medicine, have been housed. The botanical drugs comprising, root, stem, leaves, flower, fruit, seed, root & rhizome, stem & leaves, fruit & seed, stem bark, root bark, heart wood, whole plant, whole plant without root, exudates, gum/resin, tuber and bulb, have been classified on the most scientific and modern lines. Currently this referral facility is accessible to pharmaceutical industry, traders, medicinal practitioners, natural product chemists, students and academics.

Following are the nominal charges for technical services for plant and crude drugs identification:

1. Plant Identification and Certification Charges:

- For Commercial Organizations and Industries : Rs. 200/- per plant
- For NGO's and Forest Department : Rs. 150/- per plant
- For Scientists/Officers/Gardeners : Rs. 100/- per plant
- For Research Scholars/Students : Rs. 50/- per plant

2. Supply of Planting Materials for Research:

- Plants of common occurrence : Rs. 500/- per kg fresh
- Plants of localised distribution : Rs. 1000/- per kg fresh

3. Crude drug identification and Certification Charges:

- Crude drug identification : Rs. 2500/- per sample

4. Voucher maintenance for Herbarium samples at internationally recognized Janaki Ammal Herbarium (RRLH)

- Isotype of common plant : Rs. 100/-per sheet
- Rare plant/critically endangered plant : Rs. 150/-per sheet
- New record for district/state : Rs. 200/-per sheet
- New record for country : Rs. 250/-per sheet
- New species discovered : Rs. 500/-per sheet

Note 1: For internal users identification and collection charges will be debited from the respective GAP/Network/ other Projects.

Note 2: Concerned scientist responsible for identification/ collection will be a part of any internal publication arising out from use of that plant material.

Note 3: Rare and endangered plants will not be collected in bulk quantity.