

PBO 3003: PLANT RESOURCES UTILIZATION, CONSERVATION AND BIOMETRY

Plant resource Utilization and Conservation

1. Perform the tests of Adulteration in plant products:
Oils: groundnut and sunflower,
Spices and condiments: pepper, carawax, cardemonas, saffron and clove,
Cereals and pulses: Bajara, Rice, Tur and Gram.

2. Scientific name, local name, family, useful organ, morphology and uses of :
 - (i) Food crops (Wheat, chicken pea, potato, groundnut)
 - (ii) Forage/fodder crops (bajara, guarbean)
 - (iii) Plant fibers: (cotton, jute, linen, sun hemp, cannabis, coir, silk cotton).
 - (iv) Medicinal Plants: *Atropa belladonna*, *Catheranthus roseus*, *Adhatoda vasica*, *Allium sativum*, *Rauvolffia serpentina*, *Papaver somniferum*, *Phyllanthus amaaratus* and *Aloe barbadense*.
 - (v) Dyes: (Turmeric, Indigo, *Butea monosperma*, *Lowsonia alba*)
 - (vi) Important fire-wood and timber-yielding plants: *Acacia nilotica*, *Tectona grandis*, *Dalbergia sissoo*, *Terminalia arjuna* (Arjun sadar), *Mangifera indica*.

3. Rubber: Introduction, chemical composition, plantation, production, processing and Uses of rubber.

4. A visit to protected areas of India – sanctuaries, national parks, biosphere reserves, mangroves and coral reefs for conservation of wild biodiversity, BSI, NBPGR, ICAR, CSIR, DBT and prepare the general account.

Biometry

1. Various examples of Sampling.
2. Various examples of Probability.
3. Chi-square analysis and 2 x 2 contingency.
4. Various examples on coefficient of correlation and regression.
5. Analysis of variance.