4. PLAN OF WORK

- Literature Survey.
- Selection and Authentication of Leaves of *Tecomaria capensis* Species.
- Preliminary Pharmacognosy Studies
  - Organoleptic Observation
  - Microscopical Study
- Preliminary Physico Chemical Evaluation
  - Moisture Content
  - Foreign Matter Content
  - Extract Value
  - Ash Value
- Preparation of Different Extracts by Successive Solvent Through Continues Hot Percolation Method.
- Phytochemical Screening
  - Preliminary Phytochemical Identification.
  - Isolation of compounds from Ethylacetate Extract
  - Characterization for Isolated Compound
- Toxicological Profile
  - Acute Toxicity Studies (as per OECD 423 Guidelines)
  - Sub-Acute Toxicity Studies ( as per OECD 412 Guidelines)
- Pharmacological Screening of ethyl acetate and ethanol extracts
  - Analgesic Activity
    - Tail Flick Method
    - Eddy’s Hot Plate Method
  - Anti-Inflammatory Activity
    - Carrageenan Induced Paw Edema Method (*in-vivo*)
    - HRBC Membrane Stabilization Method (*in-vitro*)
  - Anti-Ulcer Activity
    - NSAID Induced Ulcer
Hepato protective activity
  ✓ CCl₄ Induced Liver Toxicity
  ✓ Paracetamol Induced Liver Toxicity

CNS depressant activity
  ✓ Locomotor Activity
  ✓ Skeletal Muscle Relaxant Activity

Microbiological Assay

Cytotoxic Activity
  ✓ Short Term Cytotoxic Assay by Trypan Blue Dye Exclusion Technique
  ✓ Long Term Cytotoxic by MTT Assay

CVS Depressant Activity

Pharmacological Screening with Elucidated Bio-Markers.
  ❖ Analgesic activity
    ✓ Tail flick method
    ✓ Eddy’s hot plat method
  ❖ Anti-inflammatory activity
    ✓ Carrageenan induced paw edema method (*in-vivo*)
    ✓ HRBC membrane stabilization method (*in-vitro*)
  ❖ Cytotoxic activity
    ✓ Short term cytotoxic assay by Trypan blue dye exclusion technique
    ✓ Long term cytotoxic by MTT assay