PLAN OF WORK AND METHODOLOGY

1. Review of literature related to urolithiasis, drug profile and experimental models.
2. Collection of plant material
3. Authenticification of herbs
4. Preparation of extract in soxhlet apparatus by continuous hot extraction
5. Selection of animal models according to their mechanism of inducing urolithiasis.
   - Model 1: Ethylene glycol induced urolithiasis (Karadi RV et al., 2006)
   - Model 2: Calcium oxalate seed deposition by surgery (Barros ME et al., 2006)
   - Model 3: Gentamycin and Calculi-producing Diet induced urolithiasis (Doddola S et al., 2008)
   - Model 4: Combined use of 30% Lactose rich diet and 1% ethylene glycol induced urolithiasis (Lee YH et al., 2000)
6. Analysis of various parameters and histology study
   - In urine: volume, pH, calcium, oxalate, citrate, phosphate, urea, uric acid and creatinine
   - In serum: calcium, phosphate, urea, BUN, creatinine, uric acid
7. Statistical Analysis will be carried by one way ANOVA (analysis of variance)