Plan of Work

*Clitoria ternatea* Linn. is one of the most important plants of Ayurvedic system of medicine. *Clitoria ternatea* (CT) have relatively well documented brain tonic, nootropic, anti-anxiety, anti-stress, anti-depressant, anti-epileptic, and tranquilizing activities. It has anti-microbial, antipyretic, analgesic, anti-inflammatory, diuretic, local anesthetic, anti-diabetic, insecticidal, blood platelet aggregation inhibiting, and vascular smooth muscle relaxing properties (Mukherjee *et al*., 2008). The seeds and roots of CT were traditionally employed in the treatment of inflammation, swollen joints, enlargement of viscera, liver disorders, etc. (Kirtikar and Basu, 1935; Chopra *et al*., 1956). However, there are no enough documentation of its anti-inflammatory, hepatoprotective, anti-hyperlipidemic, and related activities. Therefore, in the light of above scenario, the present study was undertaken to investigate therapeutic potential of CT in inflammation, hepatic dysfunction, and related disorders in experimental models.

CT seed and root extracts, at the dose of 500 mg/kg, p.o., were investigated for,

- Anti-inflammatory activity against carrageenan-induced paw edema, carrageenan-induced pleurisy, and cotton pellet granuloma model in rats.
- Hepatoprotective activity against paracetamol and carbon tetrachloride-induced liver injuries in rats.
- Anti-hyperlipidemic activity against Poloxamer-407-induced acute hyperlipidemia and diet-induced hyperlipidemia in rats.
- Immunomodulatory activity using primary and secondary antibody responses in sheep red blood cells (SRBCs)–sensitized rats, delayed type hypersensitivity response in SRBCs–sensitized rats, neutrophil adhesion test, and *in vivo* phagocytosis by carbon clearance method.
- Wound healing activity using incision, excision, and dead space wound models.