CHAPTER 39

MEDICAL SCIENCES
PHARMACY

Doctoral Theses

318. AGARWAL (Renu)
Pharmacological, Biochemical and Ocular Toxicity Studies of Some Medicinal Plants for Their Potential Anti-Glaucoma Activity.
Supervisors : Dr. Rohit Saxena and Prof. S. S. Agrawal
Th 16408

Abstract

Evaluates the efficacy and safety of some of the medicinal plant extracts for potential antiglaucoma activity. The plants selected included Ocimum basilicum, Curcuma longa, Solanum basilicum, Foeniculum vulgare, Daucus carota and Aegle marmelos. Lowering of intraocular pressure is the main parameter monitored to assess the antiglaucoma potential of experimental drugs. All the aqueous herbal extracts evaluated showed significant IOP lowering effects in rabbit with normal IOP as well as with experimentally elevated IOP. The herbal combination also showed significant alteration of the parameters indicating possible neuroprotective effects in glaucomatous optic neuropathy.

Contents

1. Introduction. 2. Review of literature. 3. Lacunae. 4. Aims and objectives. 5. Materials and methods. 6.Results. 7. Discussion. 8. Summary and conclusions. 9. Bibliography and appendices.

319. THANGADURAI (S Ananda)
Synthsis, characterization and Pharmacological Evaluation of Some Heterocyclic Compounds.
Supervisors : Dr. Maninder Minu, Dr. S. R. Wakode and Prof. S. S. Agrawal
Th 16407

Abstract

Studies the synthesis of hexahydroindazole, octahydroquinazoline derivatives and their physiocochemical characterization. Structural elucidation of synthesized compounds by means of spectral studies. Also evaluate the anti-inflammatory and analgesic activity of synthesized compounds, in vitro antimicrobial activity of synthesizesd compounds. Correlation of biological activities with physicochemical parameters employing QSAR technique and statistical evaluation by standard procedures. The substituted-3,3a,4,5,6,7-hexahydro-2H-indazoles (102-122) and substitutes-1,2,3,4,5,6,7,8-octahydroquinazoline-2-thiones (123-143) are synthesized and evaluated for their pharmacological and anti- microbial studies.

Contents

1. Introduction. 2. Literature review. 3. Experimental. 4. Results and discussion 5. Conclusions. Bibliography and appendix.

320. YUSRA AHMAD
Role of Glutamate Receptors in Schizophrenia.
Supervisors : Dr. Pramod Kumari, Dr. K. K. Sharma, Dr. M. S. Bhatia and Dr. Subrata Sinha
Th 16423

Abstract

Investigates the role of gultamate receptor in schizophrenia using various agonists and antagonists of gultamate receptors and some standard antipsychotic drugs in animal models of schizophrenia. Further, the status of GRIK3 at codon T928 for Ser(T)/Ala(G) polymorphism in a case-control association study in Indian population is evaluated. The role of excitatory amino acids in the induction and expression of the behavioural sensitization to amphetamine is investigated.

Contents

1. Introduction. 2. Aims and objectives. 3. Review of literature. 4. Materials and methods. 5.Results. 6. Discussion. 7. Summary and conclusions. Bibliography.