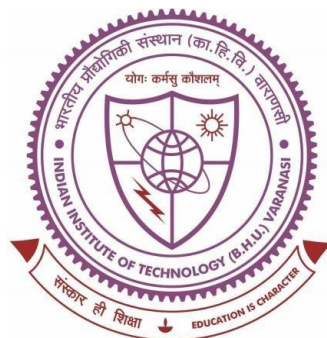


**PHYTOPHARMACOLOGICAL INVESTIGATIONS
ON *SIDA CORDIFOLIA* L. ROOTS FOR THE
TREATMENT OF CHRONIC PAIN**



*Thesis submitted in partial fulfilment for the
Award of Degree*

Doctor of Philosophy

By

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A HEARTFELT TRIBUTE
TO THE UNSUNG HEROES, WHOSE
SACRIFICE IS THE SYMPHONY OF A PAIN-
FREE TOMORROW



CERTIFICATE

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LIST OF ABBREVIATIONS

1. ACC : Anterior cingulate cortex
2. AMPA : α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid
3. ANOVA : Analysis of variance
4. ASIC : Acid sensing ion channels
5. ATP : Adenosine tri-phosphate
6. BDNF : Brain-derived neurotrophic factor
7. BSA : Bovine serum albumin
8. CaMKII : Calcium/calmodulin-dependent protein kinase II
9. cAMP : Cyclic adenosine monophosphate
10. CCI : Chronic constriction injury
11. CFA : Complete Freund's adjuvant
12. CGRP : Calcitonin gene-related peptide
13. CNS : Central nervous system
14. COX : Cyclooxygenase
15. CCSEA : Committee for the Control and Supervision of Experiments on Animals
16. CPP : Conditioned place preference
17. CREB : Camp response element-binding protein
18. DMSO : Dimethyl sulfoxide
19. DRG : Dorsal root ganglion
20. ECL : Enhanced chemiluminescence
21. EDTA : Ethylenediaminetetraacetic acid
22. EGTA : Ethylene glycol-bis(β -aminoethyl ether)-N,N,N',N'-tetraacetic acid
23. ERK : Extracellular signal-related kinase
24. GABA : Gamma-aminobutyric acid
25. GPCR : G protein coupled receptors
26. GSH : γ -L-glutamyl-L-cysteinylglycine
27. IASP : International Association for the Study of Pain

- 28. ICAM1 : Intercellular adhesion molecule 1
- 29. ICD : International Classification of Disease
- 30. KIFs : Kinesin superfamily proteins
- 31. LTP : Long-term potentiation
- 32. MAPK : Mitogen activated protein kinase
- 33. MDA : Malondialdehyde
- 34. NF- κ B : Nuclear factor kappa β
- 35. NMDA : N-methyl-D-aspartate
- 36. NPT : Normal pressure and temperature