

**EVALUATION OF NEATS FOOT OIL AND TRIDAX PROCUMBENS
ON DERMAL WOUND HEALING IN RATS**

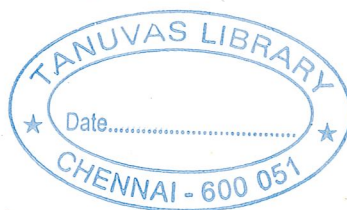
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I.D. No. MVN 00005 (PHA)

*Thesis submitted in partial fulfilment
of the requirements for the Degree of*
MASTER OF VETERINARY SCIENCE
in
PHARMACOLOGY & TOXICOLOGY

to the

**TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY,
Chennai - 51**



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CERTIFICATE

This is to certify that the thesis entitled "**Evaluation of Neats Foot Oil and Tridax procumbens on Dermal Wound Healing in Rats**", submitted in partial fulfilment of the requirement for the award of the Degree of **Master of Veterinary Science in Pharmacology & Toxicology** to the Tamil Nadu Veterinary and Animal Sciences University, Chennai is a record of bonafide research work carried out by **B. SIVASANKARI**, I.D. No. MVN 00005 (PHA), under my supervision and guidance and that no part of this thesis has been submitted for the award of any other degree, diploma, fellowship or other similar titles or prizes and that the work has not been published in part or full in any scientific or popular journal or magazine.

Place : Namakkal - 1

Date : 24-07-02

Dr. P. Hariharan 24/07/02
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ABSTRACT

Title : EVALUATION OF NEATS FOOT OIL AND
TRIDAX PROCUMBENS ON DERMAL
WOUND HEALING IN RATS.

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**Degree for which Thesis
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The objective of this study was to find out the effectiveness of neats foot oil and One of its fraction on dermal wound healing and comparing it with that of a standard drug ointment which is conventionally used for wound healing. Similarly an attempt was made to study the effect of extract of the leaves of *Tridax procumbens* on dermal wound healing.

An open excision wound of 4 cm² was created on Wistar rats under ketamine – xylazine anesthesia and the effect of various treatments like crude neats foot oil alone and with zinc oxide ointment, neats foot oil fraction -I alone and with zinc oxide ointment, and aqueous extract of the leaves of *Tridax procumbens* were studied.

Biophysical parameters namely the rate of contraction of wound and period of epithelialization of wound were studied. Biochemical parameters namely the total protein and total collagen were estimated for the granulation tissue formed on 4th, 8th and 12th post wounding days.

It was found that all the treatment groups showed a statistically significant difference ($P < 0.01$) when compared to that of the control. Neats foot oil fraction - I with standard zinc oxide ointment treated group was found to be the most effective in the wound healing property as evidenced by the parameters studied viz. rate of contraction, period of epithelialization of wound and total protein and total collagen content in the granulation tissue formed on the post wounding days.