$QWLQRFLFHSWLYH 3URSHUWLHV 7H R P L OGHPZ[ORDO DQR

:LVWDU 5DWV

-DQH : 0ELUL 6LFKDQJL .DWWOLFN ' .LVODQKDHO 1 0DWWKRZ 1 3DLQGURLOWRQ 0 0ELQGD

'HSDUWPHQW RI %LRFKHPLVWU\ DQG %LRWHFKQRORJ\ 6FKRRO RI 3XUH DQG $SSOLHG 6FLHQFHV 6RXWK

'HSDUWPHQW RI %LRORJ\ 6RXWK (DVWHUQ .HQ\D 8QLYHUVLW\ .HQ\D

'HSDUWPHQW RI %LRFKHPLVWU\ DQG %LRWHFKQRORJ\ .HQ\DWWD 8QLYHUVLW\ .HQ\D

'HSDUWPHQW RI 3K\VLFDO 6FLHQFHV 6FKRRO RI 3XUH DQG $SSOLHG 6FLHQFHV .DUDWLQD 8QLYHUVLW\

&RUUHVSRQGLQJ DXWKRU: 'HSDUWPHQW RI %LRFKHPLVWU\ DQG %LRWHFKQRORJ\ 6FKRRO RI 3XUH DQG

%R[.LWXL .HQ\D 7HO MDQH PELUL@JPDLO FRP

the antinociceptive activity of the extract at all three tested dose levels was
significant (p<0.01) when compared with the antinociceptive activity of the negative control. At all three tested
activity of the extract at a dose level in the first phase compared the extract at the
antinociceptive activity of the extract at a dose levels
gg kg bw was comparable to that of the reference drug diclofenac

Group	Treatment	Paw Licking Time After Treatment Sc...	
		Early Phase	Late Phase
Normal control	None	“ ᵈ	“ ᵈ
Negative control	Formalin DMSO	“ ᵃ	“ ᵃ
Positive control	Formalin diclofenac DMSO	“ ᶜ	“ ᶜ
Experimental Group	Aormalin mg kg bw DMSO	“ ᵃ	“ ᵇ
Experimental Group	Bormalin mg kg bw DMSO	“ ᵇ	“ ᶜ
Experimental Group	Cormalin mg kg bw DMSO	“ ᶜ	“ ᶜ

Values were expressed as Mean “ SEM for the five rats per group. Statistical comparisons w
significantly different by ANOVA followed by Tukey's post hoc tes p“   Values in bracket...

Table Anti nociceptive activity of ethanol leaf extracts of

"Discussion

The antinociceptive activity of the methanolic bark extract of
brownii was evaluated on formalin induced paw in the
of male Wistar rats. Acute the ical assays like the hot plate tail
and Hargreaves tests are other models that have been used to scre
for the antinociceptive activities of various agents [ ] Acetic aci
also be used to induce pain [ ] However the formalin assay was
chosen over other models because it has the potential to mimic huma
clinical pain conditions [ ] with the freely moving unrestrained
animals allowing for the observation of spontaneous pain related
responses [ ] Formalin produces a response in two distinct phases
and this allows researchers to model both acute and chronic pain us
a single ndély s allmé€ls ppain coe g€¶wduces a MÚa sing`l €•orm`Ma`is
m@cpp@9Á ,b@PPal@7Áh Qp"

EH VXJJHVWHG WKDW DW WKH GRVH OHYHO RI   PJ NJ EZ WKH H[WUDFW
GHPRQVWUDWHG WKH KLJKHVW DQWLQRFLFHSWLYH DFWLYLW\ GXH WR WKH SUHV
RI VDXyFLFRQQFHQWUEHWHFRXURGFLKSOH V LQ WKH H[WUDFW

H SK\WRFKHPLFDO FRPSRRZQDWWLFEOHHRQ ZLGHO\
VWXGLHG DQG YDULRXV SK\WRFDXHPLHWGRO FRQVWLWXHQWV KDYH EHHQ
H[LVW LQ WKLV PHHGLGEQXDGHSVODVQRLQV SRO\SKHQROV
~DYDQRSLKGWRVWHURO WDQQLQV FRXPDULQV DONDORLGV WHUSHQRLGV
SKHQROV DQG VWHURLGV >   @ 6HYHUDO FRPSRXQGV KDYH DOVR EHHQ
LGHQWLLQ}YGDULRXV FHUW0LYLOOXFGRLQJ E•HWXOLQLF DFLG
VLWRVWHURO DUMXQJHQLQ VWLJPDVWHURO PRQRJ\QRO $ > @ VHYHQ HOODJL
DFLG GHULYDWLJOHXFRS\21QWRRVWWHURO DQG DQ
ROHDQDQH W\SH WULWHUSHQRLG > @

H DQWLQRFLFHSWLYH SURSHUWLHV RI VRPH RI WKHVH VHFRQGDU\
PHWDEROLWHV KDYH EHHQ UHYHDOHG)ODYRQRLGV H[KLELW DQWLQRFLFHSWLY
DFWLYLW\ > @)ODYRQRLGV LQKLELW WKH DFWLYLW\ RI WKH HQ]\PH HQGR
SHUR[LGDVH SURVWDJODQGLQ V\QWKHWDVH OHDGLQJ WR D UHGXFWLRQ RI WK
V\QWKHVLV DQG UHOHDVH RI SURVWDJODQGLQV D SDLQ PHGLDWRU > @
3URVWDJODQGLQV DUH LQYROYHG LQ SDLQ SHUFHSWLRQ WKHUHIRUH DJHQWV W

, E L U R Q N $ M L E R \ H   .   6 \ X G L H L Q - R D Q P D O D W H R U \