

, PPXQH 5HVSQRQVH DJDLQVW %DFWHULDQ /LSR

%R\*HQD )XWRPD .RáRFK

'HSUWPHQW RI OLFURELRORJ\ ,QVWLWXWH RI \*HQHWLFV DQG OLFURELRORJ\ 8QLYHUVLW\ RI :URFáDZ 3  
&RUUHVSRQGLQJ DXWKRU

& L W D W L%RQ H Q D ) X W R P D . R O R F K  
H

,PPXQH 5HVS RQVH DJDLQVW %DFWHULDGRISRSR OAPDF

3 DJH RI

DNVKPLNDQWDXFRE 63 & KDLWKUD 9+ GH & \$DD/FVKIRX L/DHULD, \$1 H WDRJ D& - \$ ) R QWDQD 0) & DPS  
0DUDWKH \*. 6HSVLVQ LDP5HNDUFK RI FXU & DVSDVH SURWHFWV DJDLQVW EDFWHULD V  
9DQ \$PHUVIRRUW (6 9DQ %HUNHO 7-& .XLSHU - 5HFHSWRUV PHGLDWURV  
DQG PHFKDQLVPV LQYROYHG LQ EDFWHUL DDWMDHSR/L9/ & HQNGLFV & SWDIE WLQR BN & KIOQQRQ 30  
0LFURELRO 5HY H YDFFLQH DGMXYDQW PRQRSKRVSKRU\O OLS  
)LGOHU -0H LQGXFWID & W HRQ /S PFKQ RFORJLFDO WFO HOFD-QHOFH  
DQG LPPXQLW\ LQ %'LOAHSIKQARVODHODQF, H V XV F & KSHQL E L QDVOHQQLQH - / + XDJQ & - (QGLFRWW  
DGXOW VSOHHQ DV D IXQFWLRQ RI % FHO Q2 XPDHWLX BIBWE BQQH HYHHOLF O H VSGQWSOD\ LQJ HQJ  
D QWLERGLHV 3URF 1DWO \$FDG 6FL  
5KHH 6+ /LSRSRO\VDFFKDULGH EDVLFLW\B6KBR DVSU UAL WLRQEWU-D F. IRQOIX QFRW W H VHMHD  
VLJQDOLQJ DQG SKVLRORJLFDO LPSDFWV LYDWFVILHQJX W D QQWLBW\H5HZLWK RXWHLK PHPEUD  
\$QGU/\*XWVPDQQ 7 0%OOHU 0 6FKURPP % 6KLJ H QVPHU D R VGLL-R QWVWHPW\H1QFFLQH  
OLSLG \$ DQG VHUXP SURWHLQV /LSLG \$ LQ 5FDRQVFLH D W&HEURDSL 06 S1HSQJHESU SHWZ HDPFKNL ) 7R  
SS a UHFHSWRU DFWLYDWLRQ E\ JHQHUDOL]HG PR  
+DJDU -\$ 3RZHOO '\$ \$DFKRXL < (UQVW 5. QLQH(\$ PXW & QWRS RD V B D P PRQHOOD HQWHU  
/36 DFWLYDWLV FDVSDVH LPSOLFDWLRQVQWQUL/WLQEQUH&AQC HQWF 4QH GRPVXQFO  
VKRFN 6FLHQFH  
1DKRQSL )RXUQL« \$PD]RX] ( 4XH \*HZLUWK 16 %DOOR\ 9 & KLIQDUG 0  
HW DO 'LvhuhQW5LDUHFRJQLWLRQ RI OHSWRVSLUDO OLSLG \$ DQG  
OLSRSPRO\VDFFKDULGH LQ PXULQH DQG KXPDQ FHOOV -, PPXQRO

- 0 R O , P P X Q R O  
, 6 6 1 - 0 , D Q R S H Q D F F H V V M R X U Q D O

9ROXPH k .VVXH k