

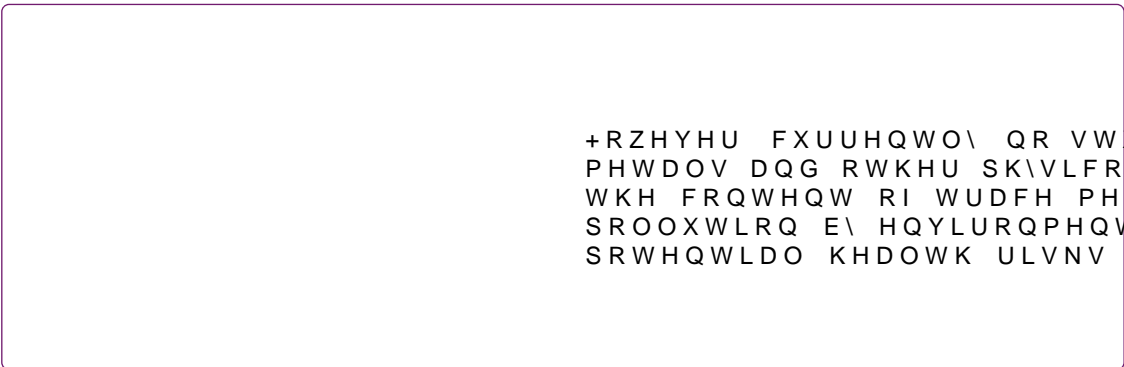
-RXUQDO RI \$QDO\WLFDO QJLGDZHWDC - \$QDO %LRDQDO
7HFKQLTXHV '2,

5HVHDFK \$UWLFQH

2SHQ \$F

Detection of the Concentration of Some Metals in the Honey Product in Dawuro Zone, SNNPR, Ethiopia

'HVWDZ (QJLGDZHPD \$OHPD\HKX DQG 6HLG 0XVWRID
'HSDUWPHQW RI &KHPLVWU\ &ROOHJH6RLHOFKUR:ROIDLQGD&FFGRWQWLRQDLO\ :RODLWD 6RGR (WKLRSLD
&RUUHVSRRQLQ'HWVZKQJLGDZ 'HSDUWPHQW RI &KHPLVWU\ &ROOHJH RI 1DWXUDO DQG &RPSXWDWLRQ
7HO (PDLO GHVWDZWDNHOH#JPDLO FRP
5HFHLYHGODUWK \$FFHSWHG GDWH 0DUFK \$SUXEOLVKHG GDWH
&RS\ULJKW 7S€D°



+RZHYHU FXUUHQWO\ QR VWXG\ KDV EHHQ
PHWDOV DQG RWKHU SK\VLFRFKHPLFDO SD
WKH FRQWHQW RI WUDFH PHWDOV LQ KR
SROOXWLRQ E\ HQYLURQPHQWDO VRXUFHV
SRWHQWLDO KHDOWK ULNVV DVVRFLDWHG

.H\ZRUGV 'DZXUR +RQH\ 0HWDO FRQFHQWUDWLRQ 6HDVRQ

,QWURGXFWRQ

+RQH\ LV D WKLFN JROGHQ OLETHG DQG XFHG E\ LQGXVWULRXV
LV PDGH XVLQJIRVXHUHQWV WKUJL\DLXLG
DQG LV VDYHG LQVLGH WKH EHFULWFLWRU HDQVLQJ GXULQJ WLPHV RI

+RQH\ XVXDOO\ FRQWDLQV D YDULHW\ RI PLQHDO HOHPHQWV QDWXUDO\
ZKLFK PRVWO\ LQGLFDWHV WKH ERWDQLFDO RULJLQ RU FRQWDLQDWLRQ E\
HQYLURQPHQWDO VRXUFHV > @ (QYLURQPHQWDO JHRJUDSKLFDO DQG
ERWDQLFDO IDFWRUV KDYH DQ LPSDFW RQ WKH WUDFH HOHPHQW FRQWHQW RI KR
DQG LW LV EHWWHU WR FRQVLGHU DOO RI WKHVH IDFWRUV ZKHQ VWXG\LQJ KRQ
PHWDO FRPSRVLWLRQ

DQG TXDOLW\ RI KRQH\ VDPSONV EXW LQ WKLW VWXG\ WKH GHWHUPLQDWLRQ RI
DVK FRQWHQW DQG HOHPHQWDO FRQFHQWUDWLRQ KDV EHHQ SHUIRUPHG WR DVV
WKH OHYHOV RI HVVHQWLDO DQG WUDFH HOHPHQWV > @ OLOHUDO FROWHQW
KRQH\ LV KLJKO\ GHSHQGHQW RQZKHUHQWV DQG WKH FRQWHQW RI (WKLRSLD Z
E\ EHHV IRU QHFWDU DQG DVK FROWHQW RI KRQH\ LV VDWLQJ RI (WKLRSLD Z
WKH GHWHUPLQDWLRQ RI WKH ERWDQLFDO RULJLQ FROWHQW > @
i WR i QRUWK ODWLWXGHV DQDQi

,Q 'DZXUR JROGHQWV DQWZKHUHQWV DUHDWZLWKGWKH KLJKR FKHWHUHQWV
SRWHQWLDO RI KRQH\ SURGXFWLWVFRQWDLQVSHRQXHQWV IRXU ZRUHGDV QDP
YDULDWLRQ HVSHFLDOO\ GXULQJ 2FWRFRQWDLQVSHRQXHQWV
ZKHUH WKH KLJK KRQH\ SURGXFW LV DYDL

6DPSOH FROOHFWLRQ

H KRQH\ VDPSONV ZHUH FROOHFWHG
SURGXFWLRQ VHDVRQV LQ D \HDU 'HFHP
IRU HDFKHZRUHQWVWKH KRQH\ VDPSONV
WUDQVSRUWHG WR :RODLWD 6RGR 8QLY
WHPHUDWXUH IRU PRQWKV XQWLO VDP

\$QDO\VLV RI KRQH\ VDPSOHV

0LQHUI

7DØH

5HIHUFHV

%DJOLR (&KHPLVWU\ DQG WHFKQRORJ\ RI KRQH\ SURGXFWRQ
6SULQJHU
.DVNRQLHQÙ 9 9HQVNXWRQLV 35 ÎHNVWHU\WÙ 9 &RPSRVLWRQ RI