

Influence of Type of Planting Material, Plant Density and Method of Planting on the Yield and Quality of Turmeric (*Curcuma domestica* L.) at Tepi Southwestern Ethiopia

7HSL 1DWLRQDO 6SLFH 5HVHDFK &HQWHU 7HSL (WKLRSLD
'HSDUWPHQW RI +RUWLFXOWXUH DQG 3ODQW 6FLHQFHV -LPPD 8QLYHUVLW\ &ROOHJH RI \$JULFXOWXUH D
(WKLRSLDQ ,QVWLWXWH RI \$JULFXOWXUDO 5HVHDFK \$GGLV \$EHED (WKLRSLD
(VXXEDOHZ *HWDFKHZ 'HSDUWPHQW RI +RUWLFXOWXUH DQG 3ODQW 6FLHQFHV -LPPD 8Q
%R[-LPPD (WKLRSLD 7HO (PDLO JHVX #JPDLO FRP
\$XJXVW \$XJXVW 6HSHWPEHU

7HPWHPHW DO 7KLP 0 H H p ° Å @ Å Å € 0 p o 10 ° Å u P 007KLP p ° Å Å H KLP p ° 0 ° € Å ••07KSPD GL 00
RSWLPXP SODQWLQJ PDWHULDO SRSXODWLRQ GHQVLW\ DQG PHWKRG RI SODQWLQJ WR
VRXWKZHVWHUQ (WKLRSLD 7ZHQW\ IRXU WUHDWPHQW FRPELQDWLRQV FRQVLVW RI OHY
3ULPDU\ 5KLRPH DQG 6HFRQGDU\ 5KLRPH OHYHOV RI SRSXODWLRQ SODQW KD S
SODQW DQG SODQW WZR SODQWLQJ PHWKRGV 5LGJHG DQG)ODW
WZR \HDUV GDWD PRWKHU UKLRPH SODQWLQJ PDWHULDO KLJKHU SRSXODWLRQ
\LHOG 0RWKHU UKLRPH DSSHUHG WKH EHVV SODQWLQJ PDWHULDO IRU SUR
3ODQW GHQVLW\ SODQW DQWLQJ PHWKRGV 3ODQW DQWLQJ PHWKRGV RRUO\ XQG GHQVLW\
JPHULF 4XDOLW\ DQG YIELD ZH REVEALED THAT THE BEST TREATMENT FOR YIELD AND QUALITY
GHQVLW\ RI SODQW KD SURGXFHG WKH KLJKHVW IUHVK WXUPHULF \LHOG
\HDU RI DQG SODQWLQJ PHWKRGV LV YRDO SODQWLQJ PHWKRGV
KLJKHVW IUHVK UKLRPH \LHOG RI WXURHU KL FIRU @ FFLUW GL DU WR KLQR
XUPHULF XPD GRPHEFDJ PDWHULDOV
YDOXH IRU LWV ZDORU YRDO SODQWLQJ PHWKRGV DQWLQJ PHWKRGV RRUO\ XQG GHQVLW\
WXUDO FRORULQJ DQWLQJ PHWKRGV RI KWXP (H D G) LRPL WKLV QLVWPHQW DQWLQJ PHWKRGV
UFXPQLRGV WKH (WKLRSLD S K L0@pe v y b s . . .

2SWLPXP SODQW GHQVLW\ RI FURS YDULHV FRQVLVW
FOLPDWLF FRQGLWLRQV RI WKH JURZLQJ DUHD DQ
3ODQW GLVWDQFH LV DQ LPSRUWDQW IDFWRU IRU
HTXDO RSSRUWXQLW\ WR WKH SODQW IRU WKHLU
LQSRUWXOO \LHOG SRWHQWLDO RI DQ LQGLYLGXDO
VRZQ DW ZLGHU VSDFLQJ ZKHUHDV \LHOG SHU XQ
LQGLYLGXDO SODQW DUH VXEMHFWHG WR VHYHU
KDQG .DXU > @ UHSRQH WZR VSDFLQJdV TM
FP DQG TM FP RQ JURZWK \LHOG DQG TXDC
/XGKLDQD

7XUPHULF LV SURSDJDWHG YHJHWDWLYHO\ XVLQJ
{JHUKLRPH \SH DQG ZHLJKW RI SODQWLQJ PDWHULDO
WKH YLJRU RI WKH SODQW DQG FURS \LHOG SHU X
SURGXFWLRQ > @)URP WKH RYHYHU LVDM LRQ RI
WXUPHULF 5DQGDZD DQG 0LVKHU > @ UHSRU

UKLJRP H ZHLJKLQJ DSSUVIUEBYHEDWIKOU J LHOCG
TKDWKDQ VPDOO VLJHG URLJRP HZHLJKWTKZQ
WKH RWKHU KDQG WKH UHSRUWV RI VHYHUDO ZRUNV IURP ,QGLD %DQJODGHVK
%UDJDDODQGNLVWDQ DQG ODXRQWLKWLQJH UDWKHU
LQFRQFOXVLYH :KLOH VRPH ZRUNHUV REWDLQH RSWLPXP \LHOG IURP WKH

F	E	D	F
EF	DE	E	F
DE	DE	F	E
D	D	F	D

6(P “

/6’

3ODQWLQJ PDWHULDOV

ORWKHU UKL]RPF p%Ëöyf

3ODQWLQJ PDWHULDOV						
0RWKHU UKLJ RPH	D	D	D			
3ULPDU\ UKLJ RPH	D	D	E			
6HFRQGDU\ UKLJ RPH	E	E	E			
6(P "						
/6'						

7DEOH HFW

/6'		16				1V		
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7DEQHHRW SODQWLQJ PHWKRGV SODQWLQJ GHQVLW\ DQG SODQWLQJ PDWHULDO
DQG

6XPPHU\ DQG &RQFOXVLRQ

7XUPHULF EHORQJV WR IDPLO\ =LQJLEUDFHDH DQG LW LV YDOXHG IRU LWV
XQGHUJURXQG RUDQJH FRORUHG UKLJRPK ZKLFK LV XVHG DV QDWXUDO FRORULQJ
DJHQW IRU IRRG EHYHUDJHV FRVPHWLFV DQG G\H ,W DOVR KDV JRRG
HFRQRPLFDO PHGLFLQDO DQG VRFLDO LPSRUWDQFH LQ (WKLRSLD ,Q (WKLRSLD
SURGXFWLRQ DQG SURGXFWLYLW\ RI WXUPHULF LV YHU\ ORZ DV FRPSDUHG WR
RWKHU FRXQWULHV GXH WR VHYHUDO SUREOHPV RXW RI WKLV SRRU DJURQRPLF
SUDFWLFHV LV WKH PDMRU RQH 3ODQWLQJ PHWKRQ LV VRLO PDQDJHPHQW WR